

Managers' Perception of Voluntary Approaches to Green Practices at Four and Five Star Hotels in the Kenyan Coast

Chege, Peninah Wanjiku*

Dedan Kimathi University of Technology,
Kenya

Email: peninahwchege@gmail.com

Irungu, Robert

School of Hospitality, Travel and Tourism,
Mount Kenya University,
Kenya

***Corresponding Author**

Abstract

Kenya's Vision 2030 economic pillar recognizes the important role of natural resource-based sectors. The promotion of these has a direct link with the protection and enhancement of the environment and its resources. Whereas Kenya stands to gain enormously from tourism by the year 2030, policies and strategies must be put in place to mitigate unintended adverse outcomes such as environmental degradation. Managerial influence on environmental management is rarely investigated. In Kenya greening in hotels is a recent concept that managers are yearning to embrace. This study sought to determine managers' perception of the green practices at 4 and 5 star hotels in the Kenyan Coast. An exploratory descriptive study design was adopted. Using a structured questionnaire, data was collected from the managers of a convenience sample of 11 hotels that were randomly picked. A descriptive analysis of the data revealed that the majority of the hotel managers at the Kenyan Coast had a positive perception of the voluntary approaches to green practices adopted by their hotels. The study further outlines the managerial implications of the findings and suggests future research areas.

Key Words: Management Voluntary Approaches, Green Practices, Kenya Star-Rated Hotels

1. Introduction

The natural environment of a destination is a key asset for the hotel sector (Chan, 2008). Hotels are large consumers of energy and water and also generate large amounts of waste (Bohdanwicz, 2008). Hotels are currently striving to embrace green practices (Harris and Crane, 2007). It is important to ensure that measures are taken to mitigate the impact on the environment by adopting environmental friendly practices within an organization (Claver, 2007).

Voluntary approaches have been considered important initiatives since the 1990s to improve the environmental performance of industries that have direct or indirect effects on the environment from their operations (Paton, 2005). The term voluntary approach means that the initiative is developed and implemented by the organization or sector that causes pollution and is directed at improving their environmental performance (Higley and Convery, 2007).

Voluntary approaches adopted by firms help them to achieve the environmental goals of the firm and also help to improve internal actions to minimize adverse impact effects on the external environment. Ayuso (2007) states that the most common voluntary instruments used by the hospitality industry are codes of conduct, environmental management systems, best environmental practices, eco-labels and environmental performance indicators.

The voluntary approaches can play two significant roles in environmental policy area. First of all, it can be used as a transitional policy instrument for the hotel to prepare for the introduction of a new or more stringent regulation, as well as to encourage leadership and innovation. Such include external relationships as well as organizational system and control (Sullivan, 2008).

External relationships include establishing a formal channel to cooperate with NGO's, establishing customer education programs, supporting local communities to enhance local environment. Organizational system and control includes monitoring environmental performance and reporting, providing employee environmental training, having a written environmental policy, having a manager or a team in charge of environmental management, top management involvement in environmental management and pursuing green certifications (Sullivan, 2008).

Secondly, voluntary approach might be used as a mechanism to address some of the limitations of the corporate cost-benefit assessments, for example, to turn the focus of investments to long-term business sustainability instead of short-run returns (Sullivan, 2008). According to Arimura, Hibiki and Katayama (2008), voluntary environmental actions are meant to improve the impact of business operations on the environment but this also provides other benefits to the participating firm by improving cost effectiveness, improving flexibility and promoting technology innovation.

2. Literature Review on Voluntary Approaches to Green Practices

The key voluntary approaches to green practices within hotel industry settings are on energy consumption and water consumption as well as waste generation, reduction and recycling.

2.1 Energy Consumption in Hotels

A hotel operation requires and uses energy on a daily basis for 24 hours, irrespective of seasonality, number of guests and its location (Kasim, 2007; Deng, 2005). Hotel operations are made up of small operations which provide goods and services to satisfy guest needs. Energy is required to maintain the tools which are used to carry out the functions efficiently to maintain the flow of guests (Gossling, 2006). The energy consumed by hotels is used for space heating, cooling, ventilation, hot water, lighting, laundry, kitchen, recreation and miscellaneous uses (Dascalaki and Balaras, 2007).

According to a recent study which compared energy consumption in hotels in Europe and America Dascalaki and Balaras, (2007), European hotels consume 39 billion Kilowatts of energy annually, half of which is consumed in the form of electricity. Bohdanowicz (2008) reveals that the use and consumption of different forms of energy by hotels leads to the release of harmful gases into the atmosphere and leads to air pollution.

The harmful gases said to be emitted due to consumption of different energy resources by hotels is estimated at 160 and 200 kg of carbon dioxide per square meter of room floor area, depending on the type of fuel used to generate electricity (Bohdanowicz, 2008; Kirk, 2008; Bohdanowicz and Martinac, 2008). The emission of such harmful gases results in the alteration of biogeochemical cycles and also release of carbon dioxide leading into global warming (Gossling, 2006).

Kenya's electric power supply is unreliable and expensive impacting negatively on quality and competitiveness of its goods in the regional and international markets. Despite the past reforms, the quality of electricity services has not improved as evidenced by the frequent unplanned power failures. Hotels should therefore adopt alternative sources of energy such as wind, biomass and solar power, (Theuri, 2010). One area in which Kenya has made impressive gains is in the recycling of organic waste to provide an alternative source of fuel for water heating and cooking. With the growing bans on fuel wood particularly in the national parks fuel briquettes are being made from an increasing variety of waste materials. Such practices will help to save the remaining forests in the country's main reserve, which have been ravaged by tree-felling and charcoal burning (Theuri, 2010).

Hotel sector could make a major positive contribution to the environment by taking some measures to reduce energy consumption which will, in turn, reduce pollution and resource depletion. Thus while the hotel sector consumes a big proportion of electricity as compared to other tourism sectors, hotel operators still have a chance to implement energy saving campaigns and environmental management systems (Saini (2007)).

Saini (2007) reported that Kenyan businesses and industries are always among the first to complain about the ever rising cost of energy. According to him many surveys indicate that potential for energy conservation and efficiency remains largely untapped in Kenya's industrial and commercial sectors with achievable savings estimated at between 15 to 20 percent of the current usage. According to the United States Environmental Protection Agency reducing energy use by 10 percent across the hospitality industry would save 285 million dollars (Mensah, 2007).

It is reported that the potential for energy saving through green practices such as replacing old equipment with energy efficient ones has been estimated at 10 – 25 percent depending on the age and size of the hotel (Bohdanowicz, 2008). Marriot international (2007), reported some of the programs implemented and their performance such as replacement of light bulbs with fluorescent lighting which saved 65 percent of the lighting costs, smoke free policy which improves indoor air quality saving 30 percent of energy used in air treatment systems and replacement of 4,500 outdoor signs with Light Emitting Diode and fiber optic technology saved 40 percent of outdoor advertising energy use in the first year.

2.2 Water Consumption in Hotels

Fresh water consumption is important for all living species and necessary for food production (Kirk, 2008). Hotels may have high water consumption depending on each hotel's accommodation capacity, standard and the type of facilities and services provided (Bohdanowicz, 2008).

Globally, there is a lot of pressure on these water sources because of the high demands on rivers, dams, reservoirs, and lakes for household consumption, agriculture, manufacturing, leisure, development of

tourism and other purposes (Kasim, 2007). For example, the increase in tourism created a demand for more hotels in Goa, India. Several hotels were built and the effect was seen on water consumption, as 66,000 gallons (249,837 litres) of water per day was drawn from wells and other sources. This resulted to many wells and rivers drying up (Alexander, 2008).

Kasim (2007) noted that luxury hotels in particular require large amounts of water for leisure purposes such as swimming pools, spas and golf course irrigation. As reported by Kirk (2008), the use of water in a hotel is extensive and it is used in many different ways, such as cold water for kitchen, laundry, drinking, circulation for air conditioning, hot water for guest bathrooms and circulation for space heating. It has been estimated that the consumption of water by guests in a hotel per night will depend on several factors like the hotel standard and facilities that are provided for the guest.

Alexander (2008) found that in a luxurious hotel setting, the hotel room would require 1,499 litres of water per day, which is enough to support 14 local people. It is further estimated by Bodanowicz (2008) that the standard consumption pattern of hotel guests would range between 170 and 360 litres of water use per night. According to Alexander (2008), water use in hotels will increase to 1,798 litres per day for each guest room in a luxury hotel by 2010. Water consumption at these rates, and without monitoring or control, will likely lead to water shortages.

Contamination of water is also a critical factor. The amount of water consumed by hotels is more than the normal household consumption, thus larger consumption means a larger quantity of contaminated water will be released in the environment, thus polluting the water bodies and harming the environment (Kirk, 2008; Kasim, 2007).

Some of the beach hotels only have water treatment plants for strategic purposes but they are not functional furthermore only a few hotels along the beach recycle their waste water or treat it before discharge. National Environment Management Authority has directed beach hotels to acquire technology to ensure they treat their waste. According to NEMA Sun n Sand Hotel and Severin Lodge are some of the hotels that treat their waste water, (Ondiege and Nzioka, 2011). The environmentalists reported that pollution of the Indian Ocean might lead to serious effects including the extinction of species of fish and other marine life.

Technology, knowledge and sustainability programmes are needed for organizations to consume water more efficiently and to minimize contamination of water supplies. Water conservation is a necessary step taken by hotels to control and minimize waste. Effective first steps include necessary modifications such as fitting low-flow shower heads and replacing toilet flush tanks with ultra-flow toilet tanks and many more such activities. Alexander (2008) cites an example of a San Antonio based hotel which adopted water conservation programmes and achieved good results in its first month of operation, where an average of 100 gallon (378 litres) of water was used per guest as compared to previous usage of 396 gallons (1500 litres).

2.3 Waste Generation, Reduction and Recycling in Hotels

The generation of waste by hotels is one of the visible effects that a hotel has on the environment. The generation of solid waste depends upon the size of the hotel. Kasim (2007) states that it is not the size of the hotel that makes the difference but also the type of functions being held at the hotel and any important events taking place at a particular time. Waste created by hotels not only increases the cost of the industry but it is also important to manage that waste to help save resources, energy and money.

Kirk (2008) reported that production and service of food operations generate more waste than other areas of hotel operations. According to Alexander (2008), there is a variety of waste produced by a hotel and it consists of paper, food, various metals, plastics, aluminum and glass. Kasim (2007) estimates that hotel

waste consists of 46% of food waste, 25.3% of paper, 11.7% of cardboard, 6.7% of plastics, 5.6% of glass and 4.5% of metal waste. Food waste makes up nearly 50 percent of all waste production (Alexander, 2008). Programs to reduce food waste have not effectively penetrated the hotel industry (AH&LA, 2008). The Green Assessment Survey (2008) identifies food waste reduction as one of the areas that the industry needs to improve upon. The significant point is that the high percentage of food waste produced by the hotel industry has not decreased even though hospitality organizations are recognizing green practices increasingly. (Okazaki et al., 2008).

In the kitchen, over-preparation, cooking losses or packaging failures lead to the accumulation of food waste (Bohdanowicz, 2007). Food waste reduction activities involve continuous observation and are time-consuming. Reduction efforts for other types of solid waste such as non-waxed paper products, cans or plastic are relatively undemanding as compared to food waste reduction. Unlike the efforts to reduce solid wastes, food waste reduction involves additional time and effort by kitchen staff members because the effectiveness of food wastes reduction efforts requires constant monitoring of the food inventory, food portions and the percentage of waste per meal (Okazaki et al, 2008).

Kasim (2007) reported that hotel waste generation is on a much larger scale as compared to waste generated by households. This indicates that waste management is a serious environmental issue for hotels that are located on island destinations like Mombasa and developing countries such as Kenya, where there are problems of limited land areas to dispose solid waste. According to studies carried out in Maasai Mara it is believed that steady increase in tourist number leads to increased waste generation both solid and liquid,(Otieno,2010).

Pollution from beach hotels through solid wastes, sewerage and detergents is taking a heavy toll on the beaches and fisheries. It is not in the interest of hotel keepers to invest in expensive waste management facilities, while the local authorities lack the capacity to monitor infringements and enforce the law. On Funzi Island for example it is feared by local fisheries experts that sewage from a new hotel will pollute fisheries and threaten the livelihood of fishermen, (Muthini, Tole and Otieno, 2008).

3. Study's Objective

For Kenya to achieve projected economic growth there will be a considerable strain on environment. Hotels use a lot of resources and engage in numerous practices to achieve guest satisfaction. The Hotel sector in Kenya has slowly adapted application of green practices. This study sought to assess the perception of the managers on voluntary approaches to green practices executed by four and five star hotels in the Kenyan coast.

4. Research Methodology

This section focuses on design of the study, target population, sampling procedure and size, data collection procedures, validity and reliability of measures and data analysis.

4.1 Design of the Study

This was an exploratory descriptive study that sought to determine the perception of green practices in Kenyan coastal hotels.

4.2 Target population

The study targeted all the four and five star hotels located along the Kenyan coast.

4.3 Sampling procedure and size

A convenience random sample of 11 hotels was drawn for the study comprising of 3 five star hotels and 8 four star hotels

4.4 Data collection procedures

A structured questionnaire that was self-administered was used to collect the data from one senior manager from each hotel who served as the respondents for the study. The questionnaire consisted of a 3-point likert scale in which the respondents were asked to rate the extent to which they perceived a list of voluntary approaches to green practices being executed at the hotels.

4.5 Validity and Reliability of Measures

An extensive review of extant literature on voluntary green practices produced the measures adopted for the study thus providing content validity. A further refinement of the measures was conducted through a pre-test of the research instrument with a set of four hotel managers but these managers were not included in the final study.

The reliability of the study measures was ensured through a test-retest reliability whereby the research instrument was administered twice to respondents at intervals of one month under nearly equivalent conditions as possible.

4.6 Data Analysis

The descriptive data was analyzed mainly with frequency distributions to obtain a representation over the 3 likert-point response levels of the manager's perceptions of the voluntary approaches to green practices at the hotels.

5. Results and Discussion

A descriptive analysis of the findings on the voluntary approaches to green practices at the 4 and 5 star hotels in the Kenyan Coast as well as the managers' perception of these practices is discussed as follows.

5.1 Voluntary Approaches to Green Practices in the Kenyan Coastal Hotels

Although there was quite a wide range of voluntary approaches to green practices executed across the hotels, not all the hotels implemented such practices wholesome.

In particular, the most common green practices were observed in re-usage of items such as towels and planting trees, grass and flowers all at 72.7% while the least observed green practice was control of harmful emissions and noise pollution at 45.4%. The complete findings are highlighted in figure 1.

Green Practices in the Hotels	Frequency	Percent
Safe disposal of food waste	7	63.6
Purchase of environmental friendly products	7	63.6
Use of energy saving bulbs	6	54.6
Control of harmful emissions and noise pollution	5	45.4
Recycling plastic bottles	6	54.6
Separation of waste at source	6	54.6
Re-usage of items such as towels	8	72.7
Usage of solar panels	6	54.6
Cleaning the beaches	7	63.6
Good disposing system in the departments	6	54.6
Planting trees, grass and flowers	8	72.7

Figure 1: Green Practices in the Kenya Coastal Hotels

5.2 Managers’ perception of existing green practices in the Kenya Coastal Hotels

Overall, when it comes to managers’ perceptions of the voluntary approaches to green practices executed at their respective hotels, a majority (70%) had positive perception of these practices while only a paltry 8% of the respondents were of the perception that the green practices contributed negatively to the well being of their hotels. These results are depicted in figure 2.

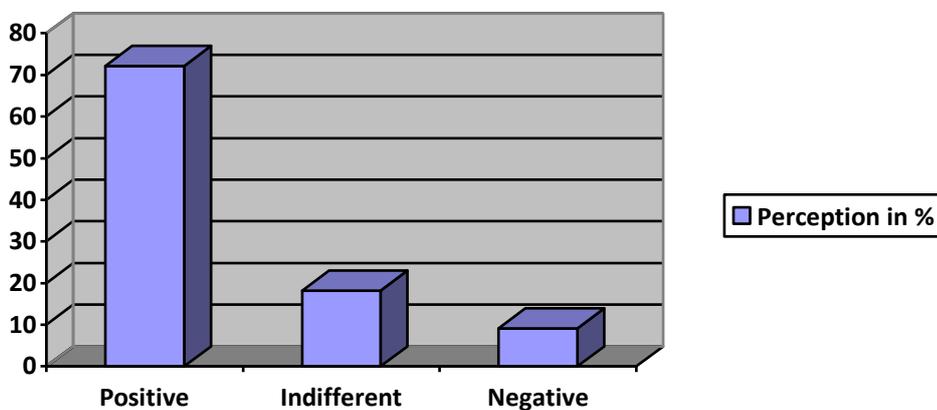


Figure 2: Managers’ perceptions of green practices at the Kenyan coastal hotels.

6. Conclusions

From the results of this study, it is evident that the 4 and 5 star hotels have largely embraced the voluntary approaches to green practices and that the majority of senior managers working in these hotels perceive the execution of these green practices as beneficial to their hotel operations.

6.1 Managerial Implications

Hotel management should promote green practices to mitigate negative impacts on the environment and also because such green practices contribute positively to the operations of the organizations.

6.2 Recommendations for Future Research

Further research is needed in assessing customers' attitudes towards green practices in hotels as well as the role of government in promoting green practices in hotels.

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