Environmental Management Outcomes in the Accommodations Sector in the Anglophone Caribbean

Follow this and additional works at: https://scholarworks.umass.edu/ttra

https://scholarworks.umass.edu/ttra/2009/Abstracts/4

This is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Travel and Tourism Research Association: Advancing Tourism Research Globally by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
Environmental Management Outcomes in the Accommodations Sector in the Anglophone Caribbean

Introduction

The Caribbean has become ‘the most tourism intensive region in the world’ in terms of the economic dependence of tourism which has remained unchanged in recent years (World Travel & Tourism Council [WTTC] 2007). In 2007, the region hosted approximately 17.8 million land-based international tourists (Caribbean Tourism Organization 2008) and contributed substantially to the region’s economy (WTTC 2007). Tourism is the single largest employer in the region as well as the leading industry for capital investment. Further, tourism contribution to the region’s gross domestic product is projected to be about 15% in 2008 (WTTC 2008).

Caribbean tourism relies heavily on the natural resources with minimal regards to conservation and protection (Patullo 1999). Environmental impacts attributed to tourism development include beach erosion, deforestation, loss of vegetation, soil erosion, pollution of coastal waters, and coral reef loss (de Albuquerque and McElroy 1995; McElroy and de Albuquerque 1998). Reforms to reduce these impacts have been legislated in some destinations, while the industry has made various initiatives to decrease its impact on the natural environment (Mycoo 2006). In recent years, the Caribbean tourism industry have undertaken environmental management and implemented actions to improve their impact on the environment. Such initiatives have to a greater extent been implemented by the accommodations sector and the phenomenon has become known as the ‘greening’ of the industry. Across the region, these efforts have been spearheaded by the Caribbean Alliance for Sustainable Tourism (CAST), the environmental body of the Caribbean Hotel Association. Since 1997, different levels of environmental management have emerged in the accommodations sector and range from the implementation of a few basic initiatives such as the replacement of inefficient lighting to a full scale environmental management system (EMS) that has been benchmarked and certified against an international standard such as Green Globe (GG) or the International Organization for Standardization (ISO) (Best 2004; Blanchard and Lorde 2004; Brown-Thompson and Cresser 2004).

However, given the adoption of such initiatives in the last decade, there is a paucity of research with respect to environmental management (EM)\(^1\) in the Caribbean hospitality industry. While some research exists with regards to understanding the motives for greening and the respective challenges encountered by interested parties, limited work has examined the outcomes/benefits that result from implementation. Outcomes are the realization of expectations and potential benefits of implementation. Outcomes are related to cost reductions and increased efficiencies achieved through better management of resources, material consumption, and waste generation. The Scandic Hotel chain has credited its environmental management program for the chain’s financial recovery (Goodman 2000), while hotels in Vermont’s Green Hotels have reported reduced consumption of water, electricity, and detergent as well as increased waste recycling which have also resulted in financial savings (Green Hotels in the Green Mountain State 2008).

Additional outcomes relate to human resources, organizational change (both cultural and structural), marketing and competitive advantages, and community-based outcomes (Bramwell

---

1 For the purpose of this paper environmental management refers to the management of policy or actions which impact the biophysical environment.
and Alletorp 2001; Kirk 1995). Hotels that were recognized as ‘environmental best-practice champions’ cited increased marketing opportunities, high guest satisfaction, increased corporate business, improved employee morale and pride as a direct outcomes of their environmental programs (Enz and Siguaw 1999). Implementing an environmental program also resulted in modifications to the company culture in terms of new communication and training for employees, new feedback channels, greater employee participation in decision-making and reporting on the environmental program in the company’s annual report (Enz and Siguaw 1999; Goodman 2000).

The purpose of this study was to examine the outcomes of EM in Caribbean hotels based on the level of EM implemented. Diffusion of innovations theory was employed as the lens through which EM in the accommodations sector was examined. In defining diffusion of innovations, Strang and Soule (1998, 266) noted that diffusion is “the spread of something within a social system,” where ‘spread’ refers to movement from originator to adopter by way of influence and communication. Further, Rogers (2003) suggested that investigating the outcomes of adopting innovations is one of the areas of research that is significantly lacking in the body of research on diffusion of innovations theory. This particular study was aimed at adding to that body of knowledge.

Methods

Data were collected through an online survey from December 2007 to March 2008 among various types of accommodations in 19 countries within the Anglophone Caribbean. The study targeted general managers or owners since these individuals are generally responsible for strategic decision making. Hotels were invited to participate based on their membership in either the Caribbean Hotel Association (CHA) or the individual country’s national hotel association.

For the purpose of this paper, only two constructs were analyzed: level of EM and outcomes. The predictor variable, level of environmental management was operationalized as a single question which asked respondents to select one description which was most applicable to EM at their property. Descriptions were: (1) some environmental best practices in place (e.g. aerators, energy saving lights, towel/linen reuse program, solid waste separation for reuse or recycling), (2) an environmental policy and planned actions throughout the property (involving all or most departments) to reduce consumption of resources and generation of waste, (3) an environmental policy and a comprehensive program to reduce consumption of resources and generation of waste. Program includes objectives, targets, and action plan, performance monitoring and feedback, participation at all staff levels, documentation of all environmental and social initiatives, and (4) certification against a recognized standard (e.g. local authority or environmental agency, Green Globe, ISO 14001).

The dependent variable, outcomes of environmental management, was assessed through a sixteen item scale whereby respondents could indicate whether the outcome was not observed at all, or observed ‘a little,’ ‘somewhat’ or ‘a lot’. The sixteen items included: decrease in resource consumption (e.g. water, energy); change in organizational structure and culture; decrease in operating costs; increase in room occupancy; increase in guest satisfaction; and overall improvement in property management. An open ended question also encouraged respondents to indicate any outcomes experienced that were not represented in the scale. Linear regression was used to determine the relationship between level of environmental management and outcomes.

Findings
Respondents represented 197 hotels in 19 countries, giving a 27% response rate. Most participants were either general managers, owners, or owner/general managers (77%), while 4% were environmental managers or officers. Approximately 67% of the hotels had implemented some form of environmental management: 44% were in the basic category of properties that had implemented environmental best practices, 25% had an environmental policy and a planned approach to their environmental initiatives, 15% had implemented an environmental management system and 17% indicated that their property’s EMS was certified against a recognized standard (e.g. Green Globe, Certificate for Sustainable Tourism). These four groups were reduced to two for further analysis: basic EM (44%) and advanced EM (57%).

Each item on the outcome scale was experienced by a majority of the hotels, though ‘decrease in resource consumption’ was cited most frequently. Other popular outcomes included: decrease in solid waste generation, decrease in operating costs, and increase in guest satisfaction. To assess the relationship between level of environmental management (EM) and outcomes, outcomes was regressed on level of EM. The regression model was significant (F(1,107)=9.54; p<0.1) and explained 8% of the variance in total outcomes. Level of EM was a significant predictor of total outcomes (β=6.20; p<.01); as level of EM changes from basic EM to advanced EM, total outcomes increase by 6.20. Hotels with advanced EM are more likely to experience more total and advanced outcomes than hotels with basic EM.

**Application of Results**

While the survival of the Caribbean accommodations sector depends to a large extent on the quality of the natural environment, its economic sustainability is also critical. The outcomes of EM reported in this study emphasize that adoption of this innovation makes sound business sense. Increased efficiencies and corollary cost savings are often used to persuade hotels to adopt environmental management and expectedly, these outcomes were realized by most hotels in this study. However, such benefits extend beyond individual hotels to encompass the wider community. Since hotel guests in the Caribbean have been seen to use significantly more energy and water resources than residents (Burke 2007; Dixon et al. 2001), a decrease in resource consumption would free up scarce resources for use by the local community. These results should be used to encourage more hotels to implement EM and the benefits could also reduce the strain on resources needed by the local community.

Decreased resource consumption was the number one outcome, but surprisingly, improvement in overall management rather than increased cost savings was the second most experienced outcome. This is an important outcome because it emphasizes that EM can have a far reaching impacts on a property. This result could be used to show owners and general managers that an advantage of EM results in improved operations management. Properties with advanced EM were more likely to experience a greater number of outcomes and to rate their experience of those outcomes higher than properties with basic EM. The potential for more extensive benefits should be used to encourage hotels to adopt the policy changes and actions needed to broaden their EM program beyond basic eco-techniques. This study can be used by the hotel industry in several ways: as a tool for national associations and the CHA to persuade more of their members to implement EM; as a tool to develop partnerships with tourism support

---

2 Approximately one third of the sample did not have any type of environmental management in place. Such respondents were directed to the section of the questionnaire dealing with challenges to environmental management, the findings of which are reported elsewhere (e.g. Best, 2008).
services; and to encourage policy makers and statutory agencies to support hoteliers in their efforts to improve.

**Conclusions**

This study has helped to improve understanding of environmental management outcomes experienced by the Caribbean accommodations sector. For hotels considering implementing EM, it provides evidence that potential benefits can be realized. For industry associations and agencies it may be used as a tool to encourage more companies to implement EM and to do so on a more comprehensive scale.

**References**


