SUSTAINABLE TOURISM PRACTICES AMONG HOTELS IN MALAYSIA: FINANCIAL AND NON-FINANCIAL BENEFITS

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Abstract: The Sustainable Tourism Practice (STP) is one of the more recent practices within the hotel sector. One of the major reasons for hotels' involvement in Sustainable Tourism Practices is to achieve some form of benefit. This paper attempts to highlight the significant benefits of STP for the hotel industry in Malaysia. It is believed that studies related to the contributing role of STP to the hotel industry in a developing country like Malaysia are relatively scarce. Therefore, this paper intends to bridge this knowledge gap by uncovering the benefits (i.e. financial and non-financial) hotels stand to reap in adopting various programmes which safeguard the environment. The study utilized the survey questionnaire method involving 60 hotel organisations in Kuala Lumpur and the state of Selangor. The study findings indicate the benefits of improved public image and the provision of safe and healthy environments to the hotel guests as the major benefit of hotels adopting STP. Unlike previous studies which identified financial contributions to the STP among hotels in developed countries, it appears that Malaysian hotels project their image to the guests after which it is expected that they will attract large patronage leading to financial gains. In conclusion, the results of this study have the potential of contributing to the knowledge as well as the hotel organisations.

Keywords: Sustainable tourism practices, hotel industry, financial benefits, non-financial benefits, Malaysia.

Introduction

Sustainable Tourism Practices (STP) is believed to be one of the vital practices among hotels in every country of the world for sustainability. Mensah (2006) asserted that a sustainable tourism practice for hotels has now become more important and become the main focus of many hotels, the world over. He indicated that perceived benefits is the most important issue in STP which many studies have given due considerations. The benefits of STP include financial benefits (Sloan, Legrand & Chen, 2004; Griffin & DeLacey, 2002), and non-financial benefits (Hobson & Essex, 2001).

Like any other developing country, hotels in Malaysia consume huge amounts of energy and water, hence discharge a lot of waste into the environment (Kasim, 2009). Waste afflicts the environment in the form of water pollution, air pollution and energy induced emissions (Chan, Wong & Lo, 2009; Shanklin, 1993). As environmental resources constitute a major part of tourism development, it is important to address the waste and pollution problem. Ustad (2010) and Park (2009) asserted that hotels in the country have now begun to adopt environmental management practices in three main areas (i.e. energy management, waste management and water conservation). Furthermore, hotels that adopt and implement these practices tend to achieve financial and non-financial gains in terms of cost-savings for the hotel, improves the hotels' image with the general public, and above all, safeguards environmental resources (Mensah, 2006; Kirk, 1998).

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It was therefore necessary to explore the benefits of adopting STP among hotels in the country. This paper identify the benefits of STP adoption and the factors that motivate

the managers to implement STP. Previous studies in Virginia and some other countries in the world provide a detailed explanation on the contributing factors of these practices in hotels (Mensah, 2006). Thus, this paper will showcase how Malaysian hotels can improve environmental management practices in order to promote green practices and safeguard the environment.

Literature Review

Tourism Practice Sustainable subscribed largely to environmental conservation and protection for the future survival of the tourism industry (Park, 2009). As the industry grows and become more complex, it has become necessary for hotels to monitor their activities and to implement appropriate programmes in order to safeguard the environment. Therefore, hotels have begun to adopt various STP programmes of which the most prominent ones include, 1) energy management, 2) waste management, and 3) water conservation (Chan, Wong & Lo, 2009; Park, 2009; Bohdanowicz, 2006; Mensah, 2006). These practices not only promote the quality of the environment, but helps hotels reduce their operation costs as well. Hence, hotels now initiate some of these practices in all the major sections of the hotel such as the housekeeping department, guest rooms, conference and meeting facilities (Kasim, 2009). Therefore, knowledge of these three key areas involving energy management, waste management and water conservation will provide the much needed information on how to improve hotels' involvement in STP.

In terms of energy management, the hotel sector has been identified as one which consumes huge amounts of energy (Stipanuk, 2002; Becken, Frampton & Simmons, 2001). The industry requires and uses energy in all the operational areas everyday. Both electrical and fossil fuels are needed in the hotel for lighting, laundry, ventilation, cooling, hot water and other miscellaneous uses (Stipanuk, 2002). Gossling (2002) discovered that electricity (75%) is the main source of energy among

hotels in New Zealand. Other sources of energy, according to the researcher include coal (12%), Liquefied Petroleum Gas (LPG) (9%), petroleum fuel (3%), and natural gas and wood (1%). Bohdanowicz (2006) asserted that these high rates of energy consumption result in the discharge of toxic chemicals of sulphur dioxide and nitrogen oxide. It also contributes to the high cost of running hotels (Stipanuk, 2002). For instance, the accumulated cost of energy in the American hospitality industry revolves around USD 3.7 billion (Sloan *et al.*, 2009).

In order to safeguard the environment and also to reduce the high cost of operating hotel businesses, various energy management practices have been implemented. Some of these energy management practices include the use of compact fluorescent bulbs, the use of occupancy sensor key-card control systems, the shutting down of unused appliances, and the display of leaflets in all hotel rooms requesting guests to switch-off lights and other appliances when leaving the room (Mensah, 2006; Bohdanowicz, 2006; Hobson & Essex, 2001; Faulk, 2000).

Previous studies by Bohdanowicz (2006) and Chan et al. (2009) have shown that the hotel sector is one of the largest consumer of goods as well as a major sewage producer. Waste is generated from various functional zones in the kitchen, laundry, rooms, restaurant and swimming pools depending on the size and function in the hotel (Kasim, 2007). On average, it has been estimated that 1 kg of waste is generated by a typical hotel guest everyday (Sloan et al., 2009). Most of these waste generated contained various forms of chemical substances which affects the quality of the environment. Hence, the need to design and implement waste management practices in the hotel in order to reduce the volume of toxicity and garbage. This is necessary because effective waste management will enable hotels to reduce their operational costs and to also protect the environmental resources. Among the various practices in waste management include the use of refillable soap and shampoo

dispenser, the provision of reusable items of cloth napkins and glass cups, the use of recycle bins in front and back-of-the house areas among others (Baker, 2005; Erdogan & Baris, 2007; Bohdanowicz, 2006).

The importance of water as an important resource for the hotel industry has long been established (Chan & Lam, 2001). The hotel sector consumes water for various activities in the laundry, food production, bathrooms, and other outdoor activities. It was reported that the hotel industry consumes about 209 gallons of water per occupied room every day (Park, 2009). According to Dodds and International Tourism Partnership (ITP) (2005), water consumption in most hotels accumulates to 15% of total utility bills, while 95% of fresh water is released to the environment as sewage. Bohdanowicz (2006) asserted that the rate of water consumption is dependent upon several factors which include the type and size of the hotel, as well as the services offered together with irrigational needs. Realizing the huge amount of water expenditures in the hotels, various practices in water management are now implemented. For instance, hotels in Sydney have succeeded in reducing their water consumption by 50% through the use of a dual-piping system (Hotel Online, 2002). The Marriot International hotel provides leaflets in all their hotel rooms encouraging guests to reuse their linens and towels as water-saving measures (Marriot International, 2007). This practice has enabled the hotel to save 11% to 17% of hot water, and to also reduce the use of detergent. The overall result is the reduction of the impact of waste water on the environment.

Various literature related to STP among hotels indicate that hotels adopts and implements STP in order to achieve some form of benefits (Mensah, 2006; Griffin & DeLacey, 2002). As mentioned earlier, hotels are beginning to adopt and implement STP involving energy management, waste management and water conservation. The benefits of these programmes indicate the reduction in operational costs, improves public

image, enhances relationship with the local community, increases profitability, and above all, contributes to environmental protection (Meade & Pringle, 2001). Kirk's (1998) study in the UK identified the perceived benefits in STP to include: increased profit, improved customer and employee satisfaction, and marketing advantage among others; while Mensah's (2006) study in Ghana discovered the benefits of providing a safe and healthy environment, quality service in a clean environment, as well as the reduction of operating cost in the hotel business. Therefore, this paper discusses the benefits of STP under two broad headings which include financial and non-financial benefits

Most previous studies indicate economic gain as the major reason for hotels' participation in sustainable tourism practices (Kasim, 2009; Sloan, Legrand & Chen, 2004; Griffin & DeLacey, 2002). According to Sloan et al. (2004), hotels in Germany have adopted various environmental management practices in energy conservation because of financial gains. The same reason was attributed to energy management in Hilton Hotel Corporation which resulted to the reduction of 43 million Kwh of electricity thereby saving of about USD 2.5 million in 2000 (El Dief & Font, 2010). With the rising cost of using electricity and fossil fuels, STP in hotels has become necessary. As for water management, it was reported that the linen and towel reuse programme in hotels with an average of 150 rooms tend to save 22,700 litres of water every month (Griffin & DeLacey, 2002). This will enable hotels to save USD 6.50 per occupied room per day. Therefore, hotels which adopt STP benefits from reduced operating cost.

Non-financial benefits are another reason which motivates hotel managers to adopt and implement STP in their hotels. Most previous studies mentioned the benefits of improved public image, environmental protection and the provision of a safe and healthy environment as non-financial benefits in sustainable tourism practices (Mensah, 2006; Hobson & Essex,

2001). With the recent increase in environmental knowledge among the travelling public, hotels now adopt STP in order to enhance their public image. For example, in an effort to reduce CO, emission into the atmosphere, hotels now implement the practices of recovering heat from refrigeration equipment, thereby also creating a safe and healthy environment for their patrons (Sloan, Legrand & Chen, 2004). Other practices include the reuse of linens and towels which reduces the impacts of waste water on the environment. As a case-point example, it was reported that King Fisher Bay Resort in Australia has recorded greater patronage because of its design and operational initiatives in STP (Masau & Prideaux, 2003).

Methodology

Population and Sample Size

The population of this study comprises 156 hotels in Kuala Lumpur and the State of Selangor which were drawn from the Malaysian Association Hotels (MAH) website (2010). As Kuala Lumpur and Selangor are major tourist attraction spots to both domestic and foreign tourists, it is assumed that there will be an increasing demand for hotels to cater for the accommodation needs for tourists. The MAH website was chosen as the source for hotel data since it provides up-to-date and comprehensive information on all 156 hotels in Kuala Lumpur and Selangor, especially information on hotels type, star-rating, location and the contact addresses of all the hotels. To obtain a sufficient sample for the study, all 156 hotels listed in the MAH website (2010) were utilised. All 156 hotels were contacted and a total of 104 hotel managers agreed to participate in the study. Hence, questionnaires were personally distributed to these hotels from November, 2010 to January, 2011. A total of 62 (59.6%) questionnaires were returned back, with two rejection, leaving only 60 (58.8%) valid samples for analysis.

Instrument

The instrument for this study was a questionnaire which was adapted and modified from a study by Park (2009) and Ustad (2010). The questionnaire is divided into four sections. Section A consists of nineteen items measuring STP, while section B with ten items was designed to illicit information on the factors related to STP Section C involved fourteen items used to measure the benefits of STP. Responses for these three sections were based on the seven-point Likert scale (i.e. 1=strongly disagree, 2=disagree, 3=partially disagree, 4=neutral, 5=partially agree, 6=agree, 7=strongly agree). The last section (Section D) consists of demographic variables such as gender, education level and current position in the hotel organisation.

Prior to data collection, a face and content validity were established by academic experts in the Faculty of Economics and Management, Universiti Putra Malaysia. Revisions and amendments were made based on their recommendations. A pilot study was also conducted with ten hotel managers that were randomly selected with varying star ratings. The construct reliability recorded, a Cronbach's alpha reliability of 0.756 for section A, 0.762 for section B and 0.903 for section C.

Results and Discussion

Demographic Characteristics of the Respondents

As mentioned, respondents for this study comprised top management staff from hotels in Kuala Lumpur and the state of Selangor as listed in the MAH website (2010). Out of the 60 valid responses from top management staff, 41 of them were males (68.3%), while the remaining 19 were females which represent 31.7% (Table 1). Out of all the 60 responses, 19 of the respondents were between the ages of 31-40 years representing a frequency of (31.7%) followed by 17 respondents (28.3%) whose ages fall between 41-45 years. The survey found that majority of the respondents (N=24, 40.0%) were Chinese, followed by the

Malay (N=20, 33.3%). The Indian ethnic group constitute 13.3% of the sample (N=8), while those from 'other' ethnic groups were two or 3.3% of the respondent.

terms of highest educational achievement, nearly half of the respondents had Bachelor degree (N=29, 48.3%), while twenty four of the respondents (40.0%) had diploma. The survey result indicates six respondents (10.0%) with post graduate diploma. The result indicates a relatively high educational attainment of the respondents. All the 60 respondents had many years of working experience either with their current employers or with different hotel organisations. As presented in Table 1, a significant number of hotels top managers in Malaysia (N=45, 75.0%) had spent most of their working experience in the administrative departments.

In terms of duration of their working experience in the present hotel, 36.7% of the respondents have been working with the present hotel companies for less than five years, while 19 of the respondents had spent 5-9 years with the present hotel organisation. Fifteen of the top management staff spent 10-14 years (25.0%). Only four of the respondents, spent a period of 15 years and above in the present hotel company. Overall, about 92.4% of the respondents had been working with their present employers for 1-14 years. From the analysis, it can be seen that an overwhelming majority of those who participated in this survey (N=38, 63.3%) held the position of general managers in their present companies, while 19 of them are departmental managers (31.7%). Also, two assistant general managers (3.3%) were among those who responded to this survey. Only one of the respondents (1.7%) occupied the position of Group Managing Director. Though an insignificant number, but it is interesting to say that this study not only attracted responses from the major departments of the participating hotels, but including a member of the Board of Directors.

Benefits in STP

As mentioned earlier, this study intends to examine the benefits for hotels in adopting STP. Therefore, descriptive analysis was used to measure all the 14 items in the questionnaire. The data in Table 2 illustrates the mean scores for all the items.

From Table 2, it can be observed that all 14 items registered a mean score that is relatively high, ranging from of 4.50 to 5.95. This revealed that most of these hotels achieved positive benefits from the STP.

For the financial benefits, the results showed that revenue generation due to guests satisfaction scored with the highest mean of 5.45 (SD=1.28). Followed by benefit of increased revenue generation due to better image (M=5.18, SD=1.34), and reduction in ops cost through energy management of 5.02 (SD=1.39). These results are in-line with the findings of Meade and Pringle (2001) in which the practise of STP improves public image, enhances relationship with the local community and increases profitability. It can be stressed here that apart from improving their image in the eyes of the public, Malaysian hotels are also aware of the relevance of revenue generation in STP. After portraying their image to the public, it is expected that guests will be more attracted to the hotel. Thus, the end result is increased patronage leading to revenue generation Therefore, hotels in the country should continue to implement STP in their hotels in order to gain return in their investment

In terms of non-financial benefit, the study found that improving the hotels' image to the guests and the local communities has the highest mean score of 5.95 (SD=1.17). This is followed with the benefit of providing a safe and healthy environment for the hotel guests and employees (M=5.77, SD=1.11). The overall also indicated that, the majority of these hotels have to achieve non-financial benefits from STP. Indeed, this finding are in tandem with similar findings by Park (2009)

Table 1: Demographic characteristics of the respondents (n=60)

Variable	Frequency	%	
Gender			
Males	41	68.3	
Females	19	31.7	
Age (Years)			
Under 35	12	20.0	
35-40	19	31.7	
41-45	17	28.3	
46-50	8	13.3	
51-55	2	3.3	
56 and above	2	3.3	
36 and above	2	3.3	
Ethnicity			
Malay	20	33.3	
Chinese	24	40	
India	8	13.3	
Others	2	3.3	
Educational Background			
Secondary School	1	1.7	
Diploma	24	40	
Bachelor	29	48.3	
Post Graduate Diploma	6	10	
Working Experience according to Departments			
Food and Beverage Department	2	3.3	
Front Office Department	6	10	
Housekeeping Department	4	6.7	
Accounts Department	3	5	
Administrative Department	45	75	
Working Experience in the Present Hotel			
Less than 5 Years	22	36.7	
5-9 Years	19	31.7	
10-14 Years	15	25	
15 Years and above	4	6.7	
Current Position in the Present Hotel			
Group Managing Director	1	1.7	
General Manager	38	63.3	
Assistant General Manager	2	3.3	
Departmental Manager	19	31.7	

Table 2: Descriptive analysis of benefits in Sustainable Tourism Practices

Constructs (Alpha 0.932)	Mean	SD	Overall Mean	Average
Financial Benefits			25.17	5.03
Our hotel has improved on revenue generation due to a better image	5.18	1.34		
Guest satisfaction has help to improve our revenue generation	5.45	1.28		
Our hotel has reduced its operational cost through energy management	5.02	1.39		
Our hotel has reduced its operational cost through water consumption	4.72	1.49		
Our hotel has reduced its operational cost through waste management	4.80	1.31		
Non-Financial Benefits			46.20	5.13
Sustainable tourism practices also improve our hotel image to the guests and the local communities	5.95	1.17		
Sustainable tourism practices helps to provide a safe and healthy environment for our guests and employees	5.77	1.11		
By adopting various measures of sustainable tourism practices, our hotel ensures a good future for the tourism industry	5.47	1.40		
To our hotel, sustainable tourism practices enhance customer and employee satisfaction and motivation	5.03	1.15		
Sustainable tourism practices have helped to improve the relationship between our hotel and the local communities	5.03	1.39		
Sustainable tourism practices has help our hotel to increase environmental quality enhancement	4.67	1.21		
Sustainable tourism practices is now a major public relations campaigns in our hotel	4.65	0.97		
Involvement in sustainable tourism practices has given us a marketing advantage over our competitors	4.55	1.29		
Our involvement in Sustainable tourism participation has increased our customer loyalty	4.50	1.35		

and Kirk (1995). Malaysian hotels have now recognised the need for guests' satisfaction and the relevance of the community in achieving STP. Thus, we can conclude that hotels in Malaysia, especially within KL and Selangor are now operating in a more responsible manner towards the environment, hence enabling them to attract larger share of the tourist market.

Recommendations

The following discussion outlines the contribution of this study to both knowledge and practice. It believes that the study contributes to the field of knowledge by providing an understanding of the importance of STP to

the hotel. Besides, the study findings provide clear empirical evidence for the adoption and implementation of STP in hotels in Malaysia. In accordance with the results of this study, the following suggestions are hereby put forward.

Government agencies in the country such as the Ministry of Tourism (MOT) and the Malaysian Tourism Promotion Board (MTPB) can utilise the findings of this study to enact legislation which safeguard the environment. Since the MOT and the MTPB are the government agencies responsible for the promotion and development of tourism in the country, they can use this study as a guide to further develop tourism industry in the country. Based on the findings of the study, the use of

mass media by the government can be used to design programmes that will assist Malaysian hotels to further project their image to the public. In Malaysia, tourism is recognised to be one of the major sectors of the economy, therefore, there is a need to portray a positive image to local and foreign tourists to further expand tourism's economic contribution. This study is also important to the hotels because it has provided a clear view of the benefits in STP. Therefore, hotel managers should continue to design and implement STP programmes which will further enhance their image to the guests and the general public. Rather than be concerned with immediate financial benefits, it is believed that image building will encourage guests to be more attracted to the hotels. For academics, this study is relevant because it provides a body of knowledge on STP implemented by the hotels. It is believed that this study has laid a foundation for further exploration of knowledge involving STP among hotels.

Conclusion

The findings of this study contribute to the understanding of some of the major benefits in STP for hotels. The data suggests non-financial benefits as the major benefit in adopting STP and this finding is consistent with previous research. The benefits of image building as well as the relevance of providing safe and healthy environment for the hotel guests are among the non-financial benefits in STP. Thus, this finding is not only relevant to hotels but also to policy makers and those in the academia.

It now appears that most of the participating hotels have recognised the need for customers' satisfaction and the relevance of the community in achieving environmental management objectives. Therefore, this finding suggests that hoteliers should continue to promote green practices in their hotels. This can further be achieved when the government, related organisations and other green bodies focuses more attention on raising their environmental awareness as well as providing information on successful cases of sustainable tourism

practices. With the explanation given above, the researcher posited here that STP among hotels help to safeguard the environment by reducing water pollution, air pollution and other environmental hazards. Therefore, hotel managers in the country should continue to design and implement STP programmes that will conform to environmental efficiency.

References

- Baker, C. (2005). Sustainable Hotel. London: Prince of Wales Business Leadership Forum
- Becken, S., Frampton, C., & Simmons, D. (2001). Energy Consumption Patterns in the Accommodation Sector The New Zealand Case. *Ecological Economics*, 39(3): 371-386.
- Bohdanowicz, P. (2006). European Hoteliers' Environmental Attitudes: Greening the Business. *Cornell Hotel and Restaurant Administration Quarterly*, 46(2): 188.
- Chan, W. W., & Lam, J. C. (2001). "Environmental Accounting of Municipal Solid Waste Originating from Rooms and Restaurants in the Hong Kong Hotel Industry", in Kaye, K.S & Chon (2001). Journal of Hospitality and Tourism Research, 25(4).
- Chan, W., Wong, K., & Lo, J. (2009). Hong Kong Hotels' Sewage: Environmental Cost and Saving Technique. *Journal of Hospitality & Tourism Research*, 33(2): 329-346.
- Dodds, R. & International Tourism Partnership (ITP). (2005). Why Environmental Benchmark Will Help Your Hotel. http://www.tourismpartnership.org/downloads/WWF%20Benchmarking.pdf retrieved on 12 September 2010.
- El Dief, M., & Font, X. (2010). Dererminants of Environmental Management in the Red Sea Hotels: Personal and Organisational Variables. ICRT.
- Erdogan, N., & Baris, E. (2007). Environmental Protection Programs and Conservation

- Practices of Hotels in Ankara, Turkey. *Tourism Management*, 28(2): 604-61.
- Faulk, E. S. (2000). A Survey of Environmental Management by Hotels and Related Tourism Businesses. Le Bouveret, Switzerland: University Center Cesar Ritz.
- Gössling, S. (2002). Global Environmental Consequences of Tourism. *Global Environmental Change*, 12(4): 283-302.
- Griffin, T., & DeLacey, T. (2002). *Green Globe:* Sustainability Accreditation for Tourism. Oxford: Elsevier Butterworth-Heinemann.
- Hobson, K. & Essex, S. (2001). Sustainable Tourism: A View from Accommodation Business. *The Service Industries Journal*, 21(4): 133-146.
- Hotel Online. (2002). Consumer Attitudes towards the Role of Hotels in Environmental Sustainability/ International Hotels Environment Initiative Research. http://www.sciencedirect.com/science?
- Kasim, A. (2007). Corporate Environmentalism in the Hotel Sector: Evidence of Drivers and Barriers in Penang, Malaysia. *Journal of Sustainable Tourism*, 15(6): 680-699.
- Kasim, A. (2009). Managerial Attitudes towards Environmental Management among Small and Medium Hotels in Kuala Lumpur. *Journal of Sustainable Tourism*, 1-17.
- Kirk, D. (1998). Attitudes to Environmental Management Held by a Group of Hotel Managers in Edinburgh. *International Journal of Hospitality Management*, 17: 33-47.
- Kirk, D. (1995). Environmental Management in Hotels. *International Journal of Contemporary Hospitality Management*, 7(6): 3-8.
- Malaysian Association of Hotels. (2010). Malaysian Hotel Directory, Malaysian Association of Hotels, Kuala Lumpur.
- Marriott International. (2007). *Marriott Helps* "*Clean Up the World*". http://www.marriott. com/news/detail.mi?marrArticle=160342 retrieved on November 21, 2010.

- Masau, P., & Prideaux, B. (2003). Sustainable Tourism: A Role for Kenya's Hotel Industry. *Current Issues in Tourism*, 6(3): 197-208.
- Meade, B., & Pringle, J. (2001). Environmental Management Systems for Caribbean Hotels and Resorts: A Case Study of Five Properties in Jamaica. *Journal of Quality Assurance in Hospitality and Tourism*, 2(3/4): 149-159.
- Mensah, I. (2006). Environmental Management Practices among Hotels in the Great Accra Region. *Hospitality Management*, 25: 414-431.
- Park, J. (2009). The Relationship between Top Managers' Environmental Attitudes and Environmental Management in Hotel Companies. Virginia Polytechnic Institute and State University, Virginia.
- Shanklin, C. W. (1993). Ecology Age: Implications for the Hospitality and Tourism Industry. Hospitality Research Journal: The Professional Journal of the Council on Hotel, Restaurant, and Institutional Education, 17(1): 219-229.
- Sloan, P., Legrand, W., & Chen, J. S. (2004). Factors Influencing German Hoteliers' Attitudes towards Environmental Management. *Advances in Hospitality and Leisure*, 1: 179-188.
- Sloan, P., Legrand, W., Tooman, H., & Fendt, J. (2009). Best Practices in Sustainability: German and Estonian Hotels. *Advances in Hospitality and Leisure*, 5: 89-107.
- Stipanuk, D. M. (2002). Hospitality Facilities Management and Design. Lansing, MI: Educational Institute of the American Hotel & Lodging Association.
- Ustad, B. H. (2010). The Adoption and Implementation of Environmental Management Systems in New Zealand Hotels: The Managers' Perspective. Unpublished Master of Science dissertation, Auckland University of Technology.