

EXTENDED ABSTRACT

GREEN TOURISM INITIATIVES IN NUWARA ELIYA: RESPONSE FROM HOTEL INDUSTRY

Vinoja Sridharan^{*} and Kamalakumari Karunaanithy

University of Jaffna, Sri Lanka

*sridharanvinoja23@gmail.com;kkamal@univ.jfn.ac.lk

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Abstract

This study intends to find out factors, their levels and the association they have with green tourism initiatives of N'Eliya hotel industry. Three hotels were selected to tackle the research problem, why hotels are not finding out ways and means to save water, energy and manage waste in line with SDG goals, via the adoption of green tourism initiatives. The interrelationship between factors and green tourism initiatives is analyzed through employee perceptions and direct observation by applying descriptive statistics, ANOVA test, Chi-square test, Spearman's Correlation. The findings highlight that environmental factors and social factors significantly positively ($p < .05$) associated with green initiatives in N'Eliya hotel industry, but each hotel has different level of adoption in green initiatives towards environmental sustainable development goals. The findings of this study suggest the need for new green techniques to enhance green initiative in hotel industry and thereby to reach the SDGs, which can also promote social entrepreneurship.

Keywords: Environmental practices, green tourism initiative, sustainable development goals

1. Introduction

1.1 Background of the study

Sri Lanka, a country in South Asia, is popular for an incredible tourist destination for its ecosystem diversity and cultural background. End of the thirty years' civil war made its hotel sector more competitive. Greening Sri Lankan hotels means improving energy, water utilization efficiencies and waste management. The Sri Lankan hotel industry can save 20% in energy & water consumption, and there is a chance of reducing waste generation by 20% (EU SWITCH – ASIA, 2013). This is another form of social entrepreneurship, as it is defined by Alexander (2002) as, "Putting something back into society", though hotels are profit oriented. Since achieving environmental related SDGs are linked with social entrepreneurship, this study analyzes, how greening the hotels could pave the way to achieve the above-mentioned goals.

1.2 Problem Statement

SDGs insists to find out ways and means to save water, energy and manage waste in day today practices, not all hotels are adhering to that though the need for change is urgent. There is a gap in literature, to explain how green tourism initiatives are adopted by the hotels and what factors that influence those initiatives are. Therefore, to enjoy the benefits of Sri Lankan green tourism initiatives of hotels, this research tries to highlight such initiatives with determining factors of hotel

industry in N'Eliya and links with sustainable environmental goals by identifying perceptions of employees who are designing and implementing green tourism initiatives in hotels.

1.3 Research Questions

- What are the factors and how they are associate with green tourism initiatives in N'Eliya hotel industry?
- What are the challenges, the hotels face when implementing the green tourism initiatives?
- What are the new green technologies that could be implemented?

1.4 Research Objectives

- To find out the factors, their levels and their association with green tourism initiatives
- To distinguish the challenges faced by N'Eliya hotel industry when implementing the green tourism initiative

1.5 Significance of the study

As world tourism mode is moving from general tourism to green tourism due to high profit and huge social upsides, it is essential to encourage, promote and support ecological awareness, use ecofriendly products, to adopt green tourism initiatives in the hotel industry in N'Eliya. The findings can be helpful inputs in arranging and enlargement of eco-tourism implementations in Sri Lankan hotel sector.

2. Literature review

Fabricia Silva da Rosa & Luana Caroline Silva (2016) investigated the environmental sustainability in hotels, through theoretical and methodological contribution. They searched the database Web of Science from 1996 to 2016 and found that the topic has gained importance in 2014 & 2015; and concluded that environmental sustainability in hotels is directly related to the global concerns with the survival of the planet itself. Chan et al. (2017) examined the use of environmental technologies in the hotel industry via a qualitative approach in Hong Kong; in-depth interviews were conducted with senior executives. He concluded that the most commonly used environmental technologies were LED lights, T5 fluorescent tubes, motion sensors, key-card systems and water-cooled chillers.

Ahmed Hassan, Abodu Hassan & Mohammed Moustafa (2020) found that implementation of green hotel practices in the certified four & five green star hotels in Egypt contributed positively to achieving SDG 6, SDG 7, SDG 12 and SDG 13 respectively. A quantitative survey based on a questionnaire was provided to environmental manager, maintenance engineer, housekeepers and rooms division manager in the investigated hotels. This research indicated that, there were statistically significant differences between four & five green star hotels in all SDGs addressed. Christina Wilson Micioni (2009) revealed whether guest data is needed to support hotels to become green establishments; qualitative method was used, especially experience surveys and the type of sample was a purposive, convenience sample. Research revealed that most admitted not making a decision to choose a hotel because of the greening options. Miriam Mbasera et al. (2016) expressed their concern to determine the environmentally friendly practices in Zimbabwe & South Africa hotels. Multiple case studies were used to collect data from eight hotels and semi-structured interviews were used to collect data. The study revealed that the hotels participated in the study, have no green management policies, but they have implemented some green initiatives.

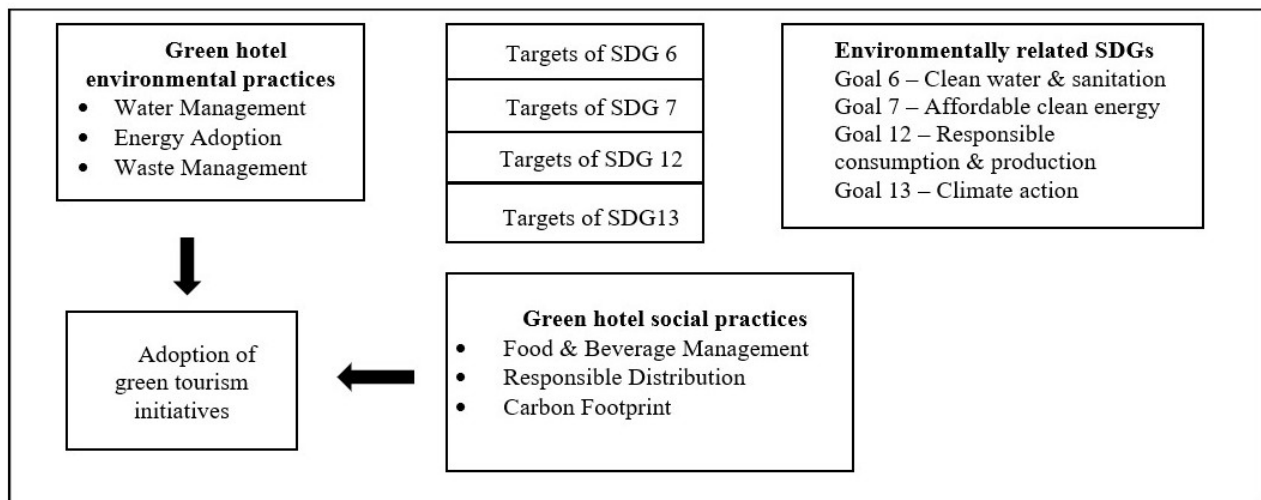
Vivek Kumar Varma & Bibhas Chandra (2018) examined the sustainability dimension through the managerial intention to implement green hotel practices evidence from Indian Hotel Industry. Data were collected using structured questionnaire from the sample of 285 hotel managers from four & five star deluxe hotels of Mumbai, Delhi, Kolkata and Chennai. Top management attitude, cost

consideration, environmental legislations, customer attitude, environmental concern and intention to implement were the six variables used in this study. The model was analyzed by software SPSS V.20 & AMOS V.21. Study revealed that, top management attitude, environmental legislations, customer attitude and environment concern have a significant positive relationship intention to implement green hotel practices and cost considerations have a significant negative relationship intention to implement green hotel practices. Leal Londono & Hernandez Maskivkey (2016) analyzed the eco-friendly practices developed by hotels within the Green Leaders Programs from TripAdvisor in Boston, Chicago, Berlin, Copenhagen, Paris and Toronto. The data based on customer reviews, published on Trip Advisor and hotel websites. The case studies were made from a selection of six cities linked with sustainability and proved that there was a lack of recognition of those practices by customers. In case of Sri Lanka, Moramudali et al. emphasize that lack of awareness and interest, high cost and seasonality in Colombo city keep greening the hotels at a lower level.

In sum, previous researchers found that, green practices implemented by hotels are creating a new relationship with customers; green services and products are driving force of sustainability within the hospitality industry and means to achieve SDGs in the end, but hotels have problems of their own during implementation.

3. Methodology

3.1 Conceptualization



3.2 Research Design

Research data is collected through structured questionnaires and interviews were conducted in a convenient national language; open questions were asked to know the experience of employees about the green tourism initiatives, in addition to five point Likert type scale statements that were used to get the perception level of disagreement and agreement. Three hotels, which are registered under the Sri Lanka Tourism and Development Authority representing star validity, namely, Grand hotel (four star), Jetwing St.Andrew’s hotel (four star), and Araliya Green city hotel (five star), are selected. In early 2021, from the population of 300 hotels in N’Eliya, the above three were selected due to the lock down during the time of this research under purposive and convenient sampling methods. The data analysis is structured using descriptive statistics and applying ANOVA, Chi-Square and correlation to find out the difference and association between variables. The SPSS statistics version 22 was used to derive the descriptive & inferential statistics of the output.

3.3 Research Hypotheses

H1: The environmental factors are associated with green tourism initiatives in N’Eliya hotel industry.

H2: The social factors are associated with green tourism initiatives in N’Eliya hotel industry.

4. Findings & Discussion

The demographic characteristics of the sample participants show that most of them are males, belongs to the age group of 26-30 that is 53% of the total respondents. Most of the respondents are from administration department which mainly carryout and manage environmental friendly practices. Naturalist, sustainability manager and hotel engineer were the key persons with degree or diploma in hospitality industry, keenly engaged in green practices.

ANOVA test proved that there is a statistically significant difference between mean scores of the perception of employees regarding water management, energy adoption, food & beverage management, responsible distribution, carbon footprint among three hotels. Chi-Square test shows that there is a statistically significant association between water management, energy adoption, food & beverage management, carbon footprint and the adoption of green initiatives in each hotel. Moreover, there is no difference in mean value of waste management between three hotels.

Table 1.ANOVA & Chi-Square test

Variables	ANOVA Test		Chi-square Test	
	F Value	Sig.Value	Value	Sig.Value
Water Management	27	0.003	15.600 ^a	0.002
Energy Adoption	27	0.027	15.600 ^a	0.002
Food & Beverage	13.5	0.001	10.278 ^a	0.006
Responsible Distribution	46.9	0.028	21.613 ^a	0.005
Carbon Footprint	38.6	0.027	19.364 ^a	0.001

Table 2.Correlation Statistics

Variables	Correlation	P-Value
Water Management	.850 ^{**}	.002
Energy Adoption	.830 ^{**}	.008
Waste Management	.720 ^{**}	.045
Food Management	.755 ^{**}	.026
Responsible distribution	.827 ^{**}	.008
Carbon Footprint	.772 ^{**}	.044

^{**}. Correlation is significant at the 1% level (2-tailed)

According to the Spearman’s correlation coefficients shown in Table 2, there is a strong, positive & significant correlation is existing between environmental factors and adoption of green initiatives. Coefficients of water management, energy adoption and waste management are above 0.7 with p value < .05, proves the important association of environmental factors. Similarly, there is a strong, positive & significant correlation exists between social factors and adoption of green initiatives; that is coefficients of food & beverage management, responsible distribution and carbon footprint are above 0.75 with p value < .05. That means, as perceived by respondents increase/decrease in aforementioned

six independent variables significantly relate to increase/decrease in adoption of green initiatives in hotel industry.

The sub objective of this research is to know the challenges faced by N'Eliya hotel industry when implementing the green tourism initiatives. Green services are costly & needs latest technology. Most of the people are not having knowledge about the green services, its usages and its applications. Many of the consumers are not willing to pay premium price for the green services. This idea is new to the customers & customers do not believe on the hotels who are providing them green services; this slow down the adoption of green practices.

4.1 Recommendations

As greening initiatives, inevitably linked with SDGs, hotels could save water, energy and manage waste as a contribution to nature; which could also promote their social entrepreneurs. Since N'Eliya is filled with herbal plants which purify water resources, hotels can avoid chemicals and daily cleaning for a conventional swimming pool. Rainwater collection from roofs, driveways and other areas can be directed into a rainwater storage tank; this water can be used for toilet flushing, air conditioning and for fire protection systems. Micro flush and dry composing toilets are water efficient toilets. (Sloan, Legrand & Chen, 2009). Energy from renewable sources can save fossil fuel combustion and reduce CO₂ emission. Using low power consuming electrical appliances; eco-friendly furniture; vegetarian menu, energy efficient transportation, buying local biological food and recycling waste could save electricity. Similarly, recycling could reduce the residual of waste. Use of eco-friendly, biodegradable waste management system could accelerate the 'greening' of the hotels; Reuse items and refuse inorganic items can save energy as well; organic waste can be used for composting in garden.

5. Conclusion

Hotels that set to reach environmental SDGs focused through the efficient use of water and energy while offering high quality services defines as the green hotels with social responsibility. The findings proved that there is a statistically significant difference between three hotels in all environmental related green initiatives, which could lead to relevant sustainable development goals. According to the results, there is a strong, positive & significant correlation is existing between environmental & social factors and adoption of green initiatives in hotel industry. This revealed that the implementation of green hotel practices can contribute positively to achieve the environmental related sustainable development goals. On the other hand, social factors also play a major role in existing green tourism initiatives.

5.1 Suggestions

This research considered only three hotels in N'Eliya DS, due to lock down and quarantine. In future, researchers can incorporate the other hotels, by extending geographical coverage to district, province, and island. This research was restricted only with environmental and social factors. The future researches can add more factors such as, economic and political factors; the sample size can also be increased to get information from customers that is more reliable.

References

- Abdou, A. H., Hassan, T. H., Dief, E., & Moustafa, M. (2020). A description of green hotel practices and their role in achieving sustainable development. *Sustainability* 12(22): 9624.
- Verma, V. K., & Chandra, B. (2018). Intention to implement green hotel practices: evidence from Indian hotel industry. *International Journal of Management Practice* 11(1): 24-41.

- Chan, E. S., Okumus, F., & Chan, W. (2017). The applications of environmental technologies in hotels. *Journal of Hospitality Marketing & Management* 26(1): 23-47.
- Londoño, M. L., & Hernandez-Maskivker, G. (2016). Green practices in hotels: the case of the Green Leaders Program from TripAdvisor. *WIT Transactions on Ecology and the Environment* 201, 1-13.
- Mbasera, M., Du Plessis, E., Saayman, M., & Kruger, M. (2016). Environmentally-friendly practices in hotels. *Acta Commercii* 16(1), 1-8.
- Micioni, C. W. (2009). Going green in the hospitality industry.
- Moramudali, W. K., & Manawadu, G. M. S. R. G. (2018). Adoption of Green Practices in Hotel Industry in Sri Lanka An Evaluation Based on the Green SL Rating System.
- Silva, F., Rosa, D., & Silva, L. C. (2017). Environmental sustainability in hotels, theoretical and methodological contribution, Paper 40 Rev. *Bras. Pesq. Tur. São Paulo*, 11, 111.
- Legrand, W., Sloan, P., & Chen, J. S. (2013). *Sustainability in the hospitality industry 2nd Ed: principles of sustainable operations*. Routledge.