
ENVIRONMENTAL MANAGEMENT AND OPERATIONAL COST: THE CASE OF HOTEL SECTOR IN SRI LANKA

M.L.A.N. Liyanage¹, Mubarak Kaldeen² and M. S. Ishar Ali³

¹South Eastern University of Sri Lanka, ashininavoda1996@gmail.com

²Department of Management, South Eastern University of Sri Lanka, kmmubarak@seu.ac.lk

³Department of Business and Management Studies, Trincomalee Campus, Eastern University, Sri Lanka, ishar.ali@gmail.com

Abstract

The goal of this study was to determine the effect of environmental management on hotels' operational costs. To determine the strength of the relationship between operational cost and environmental management, Environmental management constructs of energy management, waste reduction and recycling, water conservation, green procurement, and organizational system control as an independent variable were used. Additionally, data were collected from ten selected hotels in Sri Lanka to investigate the influence of environmental management on operational costs. This study elicited responses from 150 individuals. The data were gathered using a five-point Likert structured questionnaire produced by the lodging firms. The measuring scales are based on the available literature. The collected data were evaluated for dependability in order to determine their suitability for further investigation. According to the analysis's findings, the was determined to be fit. Following that, correlation and multiple regression analyses were conducted. The correlation coefficient of spearman was used to test the hypothesis. Multiple linear regression analysis was used to determine the relationship between independent and dependent variables. The multicollinearity test was used to ensure the data set's normality. Correlation analysis revealed a positive significant correlation between energy management and green procurement and operational costs, and a negative significant correlation between waste reduction and recycling, water conservation, and organizational systems. Additionally, regression analysis was used to determine the effect of independent variables on dependent variables. The final finding indicates that operating costs have a significant link with environmental management components at a level of 0.004 (P0.05). The study's final findings indicate that there is a considerable relationship between operational cost and environmental management components, and that environmental management was a significant determinant of operational cost for hotel enterprises.

Keywords: *Environmental Management, Energy Management, Waste Reduction and Recycling, Water Conservation, Green Procurement, Organizational System Control, Operational Cost.*

1.0 Introduction

Sri Lanka's tourism business has grown since the country's independence from the British in 1948. Sri Lanka has continued to entice global investors and tourists. The country's strategic location also allows it to attract tourists (Erdogana & Baris, 2007).

The hotel industry, as a critical component of the tourism industry, plays a critical role in social responsibility and environmental challenges. Thus, environmental management is a critical principle in Sri Lanka's hotel sector. Currently, the hotel business is adapting best practices in environmental management on a voluntary basis. It is critical to understand what motivates hotels to embrace sound environmental management practices and what industry impediments exist to their adoption in order to support such activities. Hotel management that is environmentally friendly has become a trend in the tourism industry (Olsen, West, & Tse, 1998).

Environmental management is defined as a continuous process initiated by management decisions that involves monitoring a hotel's operations and developing appropriate plans and actions to mitigate negative environmental consequences (Mensah, 2006). The hotels' commitments to environmental management foster a certain perception of environmental management among its staff. This notion may have an effect on employee attitudes about their jobs. Because the majority of employees have favorable opinions toward a given organization when they believe they are contributing to the greater welfare of society. Employees are more likely to believe they are working in a socially responsible organization if they are convinced. Environmental management strategies may have an effect on the operational costs of hotel firms. Thus, the quality of the work environment, working conditions, and other involvements in social activities such as environmental management have an effect on employee performance and may have an effect on operational costs in hotel firms.

Several academics conducted their own research in various global contexts to determine the relationship between environmental management and operating costs of hotel firms, but their conclusions varied significantly. As far as the Sri Lankan setting is concerned, no research has been conducted in this field. As a result, there was considerable concern about the trustworthiness of generalizing the sample's findings to the population. As a result, this research will bridge the divide between them. As such, the study's objective is to conduct an empirical study on environmental management and operational costs in order to ascertain the relationship between various components of environmental management measurements and operational costs for hotels in Sri Lanka.

2.0 Literature Review

2.1 Environmental Management

Environmental management is an entirely new and dynamic field of study. Environmental management is concerned with the management of an organization's environmental impact. It outlines the organizational structure, responsibility sequences, processes, and pre-requisites for implementing an environmental business policy. The environment encompasses all inanimate

organisms and natural forces, including man. Goal setting, communication, decision support, organizing and planning environmental management, environmental management programs, information management, piloting, implementation and control, and internal and external audits are all fundamental components of good environmental management (Darnall, Jolley, & Handfield, 2006).

Environmental management is a nebulous phrase that receives regular, but frequently imprecise, application. Additionally, it has evolved swiftly, in comparison to other management disciplines and allied scientific subjects, during a very short period of time. Environmental management can imply a variety of things to various people, particularly depending on the context and purpose or target for which it is utilized. The authors believe that the concept is deeply ingrained in the legal sciences and that it is also a management or governance technique aiming at modifying or changing people's behavior in their environment. Environmental management is not environmental management; it is a management or governance technique that is authorized by a well-defined legislative mandate. Its fundamental purpose is to regulate the environmental impact of human activities, products, and services (Nel & Kotze, 2009).

2.2 Environmental Management in Hotels

It is critical for businesses in the tourism industry to balance their usage of natural resources with their conservation. A feedback process is at work, in which excessive use now has a negative effect on future tourism consumption (Gonzalez & Leon, 2001). Thus, environmental management is inextricably tied to the product's quality characteristics, and is thus a vital aspect in hotel enterprises' competitiveness. Despite this, environmental management is still in its infancy at the moment (Skalpe & Sandvik, 2002).

To the majority of hotel managers, environmental management meant maintaining a green and appealing atmosphere filled with flowers and other aesthetic plants. This is an extremely limited understanding of environmental management, as it should be a process involving the gathering of rules, structures, resources, and systems for specific tasks. Sanitation and flower planting are only a few of the efforts (Mensah, 2006). Hotel and resort owners who are unaware of the benefits of environmental management methods may obstruct their implementation, as well as the systematic measurement and documenting of utility consumption rates and costs. The study discovered that additional education is necessary to raise hotel and resort owners' understanding of environmental management initiatives (Scanlon, 2007).

Environmental management is a systematic strategy to identifying and implementing effective strategies for conserving water, energy, and resources, as well as minimizing adverse environmental impacts. A proactive environmental management program benefits all parties involved since it enables a property to save money, get recognition for environmental leadership, and maintain and protect unique places (Gossling, Hall, & Weaver, 2009). Environmental concerns have become critical to hotels' competitive performance. To remain competitive on both a general and environmental level in the global tourism business, hotels must improve their environmental performance to meet the environmental standards of their target markets (Han, Hsu, & Lee, 2009). As environmental challenges become more serious, it is necessary to engage management, operators, the broader corporate community, and other

bodies at various levels. A high level of awareness on the part of the manager or operator regarding the impact of their actions on the environment was displayed. Additionally, the factors impeding the execution of environmental programs were highlighted. Additionally, business demands or increased prices create obstacles to properly implementing an operator's ecologically sustainable practices, particularly with regard to water use in the service area (Alonso & Ogle, 2010). In the hospitality literature, it is recognized that hotels that are proactive in both quality and environmental management outperform those that are reactive solely in quality management (e.g. gross operating profits, competitive performance and stakeholder satisfaction). Additionally, their findings indicate that a hotel's commitment to an advanced environmental management system, and specifically to long-term environmental goals, results in better profitability than a hotel's commitment to a basic environmental management system or to short-term environmental goals (Bousquet, et al., 2010).

2.3 Operational Cost in Hotels

Due to the fact that cost control in the hotel business is a continuing field of research, several types of investigations have been conducted into operating expenses and hotel management, as well as how to control costs without sacrificing the quality of service provided to consumers. There are both theoretical and empirical research on the cost-cutting measures employed by various hotels. Researchers have attempted to study various ways and approaches for effectively controlling operational costs. We will examine the literature on economics' cost theory and how hotel management has applied it to cost control. In this branch of research, "heerkens" discusses cost and budget management in businesses. He defines the concept 'cost' and shows why it is critical for every sector. Similarly, he asserts the importance of developing a budget. A budget is a quantifiable depiction of a business's projected course of action (Kadam, 2015).

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3.0 Research Methodology

3.1 Conceptual Framework and Hypotheses Development

Conceptualization is a type of idea mapping that can be used by research teams to assist them in defining and mapping out the critical research concerns in a field, as well as operationalizing the programs, interventions, or outcome measures for their study (Trochim, 2003). The paper analyzes an empirical study on environmental management and operational costs in the Sri

Lankan hotel sector, with the goal of establishing a link between environmental management and operational costs in hotels. Thus, to demonstrate the study's primary purpose, a conceptual framework was constructed that was used to conduct a comparative analysis of hotels' environmental management and operational costs. Conceptual frame work which has been used is depicted in figure 3.1.

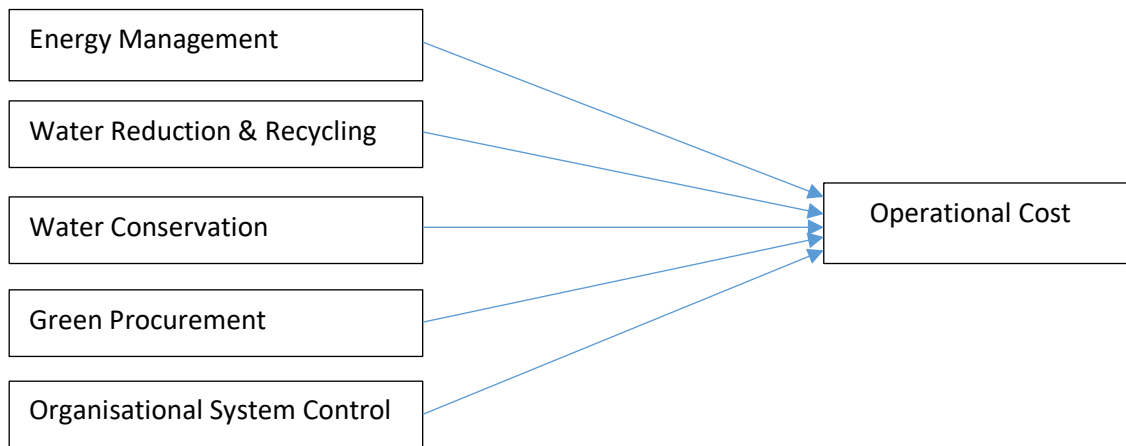


Figure 3.1 Conceptual Framework

According to the above conceptual framework, there are five independent variables in environmental management and one dependent variable. Those independent variables are energy management, waste reduction and recycling, water conservation, green procurement, and organizational system control. And the dependent variable is operational cost. Based on the above literature and conceptual framework, the following hypotheses were developed.

H₁: There is a significant relationship between energy management and operational cost of hotels.

H₂: There is a significant relationship between waste reduction and recycling and operational cost of hotels.

H₃: There is a significant relationship between water conservation and operational cost of hotels.

H₄: There is a significant relationship between green procurement and operational cost of hotels.

H₅: There is a significant relationship between organizational system control and operational cost of hotels.

H₆: There is a significant relationship between environmental management and operational cost of hotels.

3.2 Population and Sample

The term "population" refers to the complete group of individuals; it also refers to an event or subject of interest that the researcher intends to explore (Sekaran, 2010). The population is a collection of data with common features from which a sample is drawn (Bryman, 2012). A sample is a subset of a population that is used to make predictions about the population. The research population is made up of all hotel establishments in Sri Lanka. Due to the enormous population size, it is not possible to test the entire population. The study collected quantitative data using a basic random sampling strategy. Given the constraints, ten selected hotel businesses operating in Sri Lanka were chosen as the target population for this study. The sample is drawn from the complete group of employees at ten selected hotel establishments. The sample consisted of 150 employees from tourist hotels.

3.3 Data Collection and Analysis

This study makes use of both primary and secondary data. The primary data source is the information gathered through the first strategy, while the secondary data source is the information gathered through the second way. The researcher employed solely primary data to complete the data collection process in this study. The study was unique in that the researcher employed an online questionnaire constructed using Google Forms in response to Sri Lanka's pandemic issue with covid-19.

To collect data, a self-administered questionnaire was distributed to the sample. The questionnaire is divided into two sections. The first section contains demographic information, while the second section focuses on the environmental management and operational costs of hotel businesses in Sri Lanka. Multiple choice questions were used to elicit demographic and general information from respondents.

The most critical and vital component of the research is the data analysis, as the ultimate judgment, conclusion, and recommendations are all based on the data analysis. To accomplish the research aims, data analysis was conducted utilizing data acquired through primary data collecting. After collecting all primary data, enter all obtained primary and secondary data into the SPSS software. Essentially, the researcher analyzed data using descriptive statistics, reliability analysis, correlation analysis, and regression analysis using the SPSS software.

4 Analysis of Data

4.1 Demographic profile of the respondents

According to the analysis, 108 of the respondents (72%) were male and 42 respondents (28%) were female. Considering the age composition, 100 numbers of the respondents were belonging under the 21-40 years' category (66.7%) and 49 respondents (32.7%) were in 41-60-year category. Under the education level, 14 respondents (9.3%) were up to O/L, 76 respondents (50.7%) who studied up to A/L, 58 respondents (38.7%) who were Graduates, and 2 respondents (1.3%) were Postgraduates. It shows the higher portion of employees in hotel firms

are belonging into the – up to A/L category and it is normal as the nature of the field. There were 10 respondents (6.7%) who have organizational experience which is less than 2 years, 65 respondents (43.3%) were between 2-5 years, 73 respondents (48.7%) were between 6-10 years, and 2 respondents (1.3%) have more than 10 years' organizational experience. Job position of respondents represents 59 managers (39.3%), 43 supervisors (28.7%), 26 front officers (17.3%), and other categories of job position represent 22 respondents (14.7%).

4.2 Descriptive Analysis

Based on the analysis of data, dependent variable operational cost (OC) has mean value of 3.59 was in agree level. Independent variables energy management, waste reduction and recycling, water conservation, green procurement and organizational system control have mean values of 3.44, 3.65, 3.38, 3.58, 3.32 respectively also in an agree level. According to the above data all variables were performing at a satisfactory level since mean value is more than average level. Standard deviation of the both variables were more than 0.5 that means and those were in a satisfactory level.

The skewness value for the energy management, waste reduction and recycling, water conservation, green procurement, organizational system control and operational cost were respectively -0.939, -0.955, -0.868, -0.898, -0.812, -1.022. All the skewness values were within +1 and -1 that means symmetry can be assumed as it is a necessary condition for normality. The kurtosis value for the energy management, waste reduction and recycling, water conservation, green procurement, organizational system control and operational cost were respectively 1.828, 1.916, 1.885, 1.613, 1.468, 1.629. Generally, if the value was within +2 and -2 it can be assumed that the data are in a satisfactory level or normally distributed.

4.3 Reliability of the Instrument

Reliability test was done with the Cronbach's alpha test and compared with the alpha value of 0.7. Reliability of instruments is accepted when the alpha value is equal or greater than 0.7.

Table 1.1 shows the alpha value of each variable and dimension.

Table 1.1 - Cronbach's Reliability Statistics

Variable/Dimension	Cronbach's Alpha Value	N
Environmental Management	0.737	6
• Energy Management	0.708	6
• Waste Reduction and Recycling	0.703	7
• Water Conservation	0.790	3
• Green Procurement	0.703	3
• Organizational System and Control	0.706	5
Operational Cost	0.815	2

The Cronbach's alpha value of the energy management was 0.708, waste reduction and recycling was 0.703, water conservation was 0.790, green procurement was 0.703 and organizational system control was 0.706. The total Cronbach's alpha values were greater than standard value. So that reliability of each dimension is satisfactory.

4.4 Test of Normality

According to park, (2006) mentioned sample size is less than 2,000, so researcher used Shapiro-Wilk statistic method for testing normality. According to hain & falk, (2010) mentioned Shapiro-Wilk value should be 1 or near to one. Table 1.2 shows that data set obtained from the sample has been normally distributed.

Table 1.2 - Normality of the Sample

Dimension	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
EM	0.163	150	0.000	0.951	150	0.000
WRR	0.114	150	0.000	0.966	150	0.001
WC	0.291	150	0.000	0.751	150	0.000
GP	0.228	150	0.000	0.916	150	0.000
OSC	0.163	150	0.000	0.924	150	0.000
OC	0.214	150	0.000	0.869	150	0.000

4.5 Correlation Analysis

The magnitude of the correlation coefficient indicates the strength of the association. Pearson correlation for the independent variables environmental management and dependent variable operational cost of hotel firms in Sri Lanka is given in table 1.3.

Table 1.3 - Correlation Statistics

		Result of correlation Analysis						
		EM	WRR	WC	GP	OSC	OC	EnM
EM	Pearson Correlation	1						
	Sig. (2-tailed)	0.000						
WRR	Pearson Correlation	0.688**	1					
	Sig. (2-tailed)	0.000						
WC	Pearson Correlation	0.666**	0.656**	1				
	Sig. (2-tailed)	0.000	0.000					

GP	Pearson Correlation	0.673**	0.670**	0.737**			1	
	Sig. (2-tailed)	0.000	0.000	0.000				
OSC	Pearson Correlation	0.815**	0.740**	0.896**	0.757**		1	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000			
OC	Pearson Correlation	0.640**	-0.795**	-0.696**	0.777**	-0.666**	1	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		
EnM	Pearson Correlation	0.840**	0.895**	0.896**	0.777**	0.873**	0.790**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient of environmental management and operational cost are 0.640(EM), -0.795(WRR), -0.696(WC), 0.777(GP), -0.666(OSC) at the 0.000 significant level and the 95% confident level which describes the positive and strong significant relationship between operational cost and some environmental management components like energy management and green procurement. And also it describes that there is a negative significant relationship between operational cost and other environmental management components like waste reduction and recycling, water conservation and organizational system control. It means energy management(EM), green procurement(GP) and operational cost(OC) have positive and strong significant relationship and waste reduction and recycling(WRR), water conservation (WC), organizational system control(OSC) and operational cost(OC) have negative and strong significant relationship. Because their significant P-value was less than 0.001 ($P < 0.001$).

4.6 Regression Analysis

Regression analysis measures the strength of a relationship between independent variable and dependent variable. In accordance with this research environmental management was identified as independent variable. And also, operational cost is identified as dependent variable. A fixed effect model based on multiple regression analysis was run for all the models in here.

As the study is a panel data analysis, author adopted a fixed effect model to allow for arbitrary correlation between unobserved heterogeneity and the explanatory variables.

Hence the researcher used 95% confidence level to verify the acceptance of each hypothesis in two tail manner. Therefore, to enter into a model, the both independent and dependent variables should have p-statistic value less than to 0.05 ($P < 0.05$) for overall model to be significant. So this was the main theory of regression analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.854 ^a	0.725	0.699	0.34815	1.639

a. Predictors: (Constant), Energy Management, Waste Reduction and Recycling, Water Conservation, Green Procurement, Organizational System Control

b. Dependent Variable: Operational Cost

Table 1.4 shows the model summary of the regression analysis. According to the data mentioned in the table multiple correlation coefficient (R) value of 0.854^a indicates that significance of the prediction of the operational cost by environmental management. In here value of the R square shows the degree to which extent the variance of dependent variable is explained by the independent variables. In here R square value 0.725 that means 72.5% of the variance of operational cost of the hotel firms in Sri Lanka is explained by energy management, waste reduction and recycling, water conservation, green procurement and organizational system control. Only 27.5% of the variance of the operational cost is explained by the other influencing factors which are not covered by the current study. Adjusted R square (R²) value 0.699 indicates that energy management, waste reduction and recycling, water conservation, green procurement and organizational system control together explains 69.9% of the variability of the environmental management performance.

Durbin - Watson estimate is used to test the independency of the data point. According to Chan, (2004) it ranges from 0 – 4 and values which are close to zero (0) is indicate strong positive relationship and close to four (4) is indicate strong negative relationship. Durbin - Watson estimate in this study is 1.639 indicates that, the independency assumption is not violated.

Table 1.5 - Results of Coefficient Analysis

Model	Unstandardized Coefficients			Standardized Coefficients Beta	t	Sig.
	B	Std. Error				
1	(Constant)	0.543	0.224		2.421	0.017
	EM	0.191	0.069	0.224	2.485	0.004
	WRR	-0.242	0.073	-0.238	-2.634	0.000
	WC	-0.287	0.075	-0.337	-2.948	0.001
	GP	0.338	0.081	0.471	3.737	0.002
	OSC	-0.429	0.088	-0.492	-5.352	0.010
	EnM	0.885	0.066	0.777	13.392	0.004

Table 1.5, shows the coefficient table of the regression analysis. B value of the table represents the degree to which extent the dependent variable can be affected by a certain independent variable while other independent variables energy management, waste reduction and recycling, water conservation, green procurement and organizational system control remain constant. These mentioned environmental management variables energy management, waste reduction and recycling, water conservation, green procurement, organizational system control were

being statistically significant because their P values 0.004 less than 0.05. Based on the above results the researcher has developed the following model.

$$OC = 0.543 + 0.191EM - 0.242WRR - 0.287CR + 0.338GP - 0.429OSC$$

4.7 Multicollinearity

Multicollinearity indicates the interrelationship among independent variables in multiple regression analysis. Variance inflation factor (VIF) and tolerance were used to test the multicollinearity. VIF value should be less than 5 means multicollinearity is not serious, VIF value should be more than 5 means multicollinearity is substantial and the VIF value should be more than 10 means multicollinearity is serious. It is recommended that tolerance value should be below 1 and the VIF value is no more than 10 to run regression analysis. VIF otherwise those variables are considered to be highly correlated (Saunders, Lewis, & Thornhill, 2009). Table 4.13 shows the VIF values and tolerance of this study.

Table 1.6 - Collinearity Statistics

Model	Collinearity Statistics	
	Tolerance	VIF
EM	0.724	1.364
WRR	0.659	1.590
WC	0.778	1.187
GP	0.636	1.689
OSC	0.557	1.794

Dependent variable is Operational Cost

According to above table 4.13, the tolerance values are; energy management 0.724, waste reduction and recycling 0.659, water conservation 0.778, green procurement 0.636 and organizational system control 0.557. The VIF values are; energy management 1.364, waste reduction and recycling 1.590, water conservation 1.187, green procurement 1.689 and organizational system control 1.794.

Therefore, the total VIF values were less than 5 and the total tolerance values were less than 1. Therefore, conclusion can be arrived that there is no multicollinearity issue in this scenario.

4.8 Hypotheses Testing

Hypotheses can be tested by using the P- value (significant level) of each b coefficient of independent variables.

Confident interval of accepting hypotheses in social sciences is 95%. To achieve this confident interval, P- value should be equal to or less than 0.05. If it is not equal to or less than 0.05, null hypothesis cannot be rejected. In another way alternate hypothesis is not supported.

Hypotheses	Beta	Sig	Results
H_{a1} : There is a significant relationship between energy management and operational cost of the hotels.	0.224	0.004	Accepted
H_{a2} : There is a significant relationship between waste reduction and recycling and operational cost of the hotels.	-0.238	0.000	Accepted
H_{a3} : There is a significant relationship between water conservation and operational cost of the hotels.	-0.337	0.001	Accepted
H_{a4} : There is a significant relationship between green procurement and operational cost of the hotels.	0.471	0.002	Accepted
H_{a5} : There is a significant relationship between organizational system control and operational cost of the hotels.	-0.492	0.010	Accepted
H_{a6} : There is a significant relationship between environmental management and operational cost of the hotels.	0.777	0.004	Accepted

5 Findings and Conclusions

As a critical component of the tourism economy, the hotel sector contributes significantly to social responsibility and environmental concerns. Thus, environmental management is a critical principle in Sri Lanka's hotel sector. As a result, the effect of environmental management on the operating costs of hotel businesses is critical.

Given the breadth of the notion of environmental management, the author chose five important components to assess the hotel industry's level of environmental management: energy management, waste reduction and recycling, water conservation, green procurement, and organizational system control. The study's primary objective is to investigate the important relationship between environmental management and the operational costs of hotel businesses. The study collected quantitative data using a basic random sampling strategy. To collect data, a self-administered questionnaire was distributed to the sample. The research population is made up of all hotel establishments in Sri Lanka. Due to the enormous population size, it is not possible to test the entire population. Given the constraints, ten selected hotel enterprises in Sri Lanka were chosen as the target population for this study. The sample consisted of 15 employees from each hotel, for a total sample size of 150. All data was examined and summarized using the SPSS statistical software suite.

According to the findings, environmental management was one of the primary predictors of hotel firms' operational costs. The dependent variable operational cost has a substantial link with environmental management in hotel firms, according to this model. According to the regression study, the environmental management components (energy management, waste

reduction and recycling, water conservation, green procurement, and organizational system control) each had a significant link with operating cost.

According to the correlation coefficient, energy management and green procurement have a positive association with operational costs, implying that investments in energy management and green procurement will result in an increase in the operational costs of hotel firms. Additionally, waste reduction and recycling, water conservation, and organizational system control all have a negative correlation with operational costs, which means that increasing waste reduction and recycling, water conservation, and organizational system control will result in a decrease in operational costs for hotel firms.

Assuming the study is correct and energy management costs increase, it follows that operating costs will increase as well. According to hotel industry standards, they must please both personnel and guests. The reason for this is that the hotel must invest a significant amount of money to establish new energy management systems and energy-efficient equipment. As a result, hotels must occasionally strike a compromise between energy management and operational costs.

And the following finding indicates that waste reduction and recycling will increase, implying that operational costs will decrease. This means that hotel companies' top management implements more effective recycling strategies. These include composting organic kitchen waste, reusing objects, and purchasing products with recycled material. As a result, the hotel can avoid additional costs associated with recycling projects.

Another finding indicates that as water conservation increases, operational costs will decrease. Thus, improved water conservation programs will save money through the installation of water-efficient devices and equipment, as well as the implementation of water-efficient gardening initiatives.

If the finding is that green procurement will increase, then operational costs will increase as well. The hotel sector requires that they satisfy both suppliers and customers. The reason for this is that the hotel must spend more money implementing new green procurement procedures and identifying new ecofriendly suppliers, and hence must suffer additional costs in various situations. As a result, hotels must strike a compromise between green procurement and operational costs.

The final conclusion is that when organizational system management improves, operational costs will decrease as well. Updating to a new organizational system control method will result in a decrease in additional costs for hotel businesses. The entire process is contingent upon the hotel firm's organizational system supervision. As a result, hotels must periodically strike a balance between organizational system management and operational expense.

Finally, we can draw a conclusion for the Sri Lankan hotel industry: increased emphasis on environmental management will increase the operational costs of the hotel, while decreased emphasis on environmental management will decrease the operational costs of the hotel firms; this will depend on the dimensions of environmental management. Thus, environmental control is critical, as is the hotel industry's operational expense. As a result, all enterprises, not just hotels, should have an acceptable environmental management strategy in place. The study's final findings indicate that the operational cost and environmental management components

have a statistically significant positive relationship, and that environmental management is a significant predictor of the operational cost of hotels.

6 Limitations of the Study

There are various limitations to this study. They are as follows: this study examines environmental management and operating costs in the Sri Lankan hotel business. According to environmental management, the researcher focused on only five factors when conducting the study. These included energy management, waste reduction and recycling, water conservation, green procurement, and system control within the firm. However, there were other influencing elements affecting the environmental management in Sri Lanka's hotel industry.

On the other hand, this study was conducted to ascertain the relationship between environmental management and operational costs in Sri Lankan hotel enterprises. This study sampled hotel enterprises in Sri Lanka district, which has a large number of hotel firms. From there, the researcher narrowed the sample size to ten prominent hotel companies. The sample is not representative of the entire Sri Lankan population employed in the hotel business. The data for this study were evaluated using only a few statistical measures, including mean, correlation, and regression analysis. As a result, the sample size is insufficient in this case.

Another constraint in the Sri Lankan context is the scarcity of prior research and studies. As a result, the study is limited to those with limited prior understanding of the subject.

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