Evaluating the Influence of Economic Constraints on the Implementation of Environmental Management Systems in Zimbabwe: A Case Study of Hotel Chains in Harare

Cathrine Paada Kwinje[1], Lloyd Chingwaro[1]; Tafadzwa Moyo[1], Patience Mutizira[2]

[1]Zimbabwe Open University

Midlands State University, Zimbabwe

*Corresponding Author's Email: ckwinje@gmail.com

Received: 26 August 2024| Accepted: 29 September 2024| Published: 31 October 2024

Abstract

Despite the growing importance of sustainable practices in the tourism and hospitality sector, the adoption of internationally recognized Environmental Management Systems (EMS) remains notably low among hotels in the region. The purpose of this study was to investigate the economic constraints affecting the implementation of EMS within hotel chains in Harare, Zimbabwe. Through the use of a mixed-methods approach, qualitative content analysis was performed on the websites of four predominant hotel chains, while quantitative data were collected via a stratified random sampling technique involving 185 hotel employees using a structured questionnaire. Findings indicated that none of the surveyed hotels hold international EMS certificates, although local initiatives are implemented. Key economic challenges identified included the high costs associated with eco-friendly technologies, economic instability, and regulatory hurdles, which collectively impede the adoption of comprehensive EMS practices. The analysis revealed a significant negative relationship between economic constraints and EMS implementation, highlighting that operational challenges and economic uncertainty are paramount barriers. Consequently, it was recommended that hotel operators engaged in collaboration with policymakers and seek financial incentives to facilitate EMS adoption. Further training programmes focused on enhancing sustainability knowledge are essential to overcoming these constraints. This research contributes valuable insights to the discourse on sustainable practices in Zimbabwe's hospitality industry, emphasizing the need for strategic interventions to align economic viability with environmental stewardship.

.

Key words: Economic Constraints, Environmental Management Systems, Hotel Chains

Introduction

The escalation of ecological challenges, encompassing deforestation, ozone depletion, soil erosion, acid rain, species extinction, climate change, pollution, desertification, and toxic waste, has sparked global discussion in formulating sustainable policies (Mensah, 2019). These environmental issues influence the tourism and hospitality sector (Han, 2021; Ibnou-Laaroussi, Rjoub & Wong, 2020), emphasizing the necessity of implementing an Environmental Management System (EMS). This reflects the growing focus on sustainability in the hospitality sector (Hamzah, Karim, Aziz, & Kasim, 2021; Cheong & Lee, 2021). With increasing

environmental consciousness and the transition to a low-carbon era, green tourism emerges as the future direction for tourism expansion. EMS promotes environmental protection through green consumption practices, aiming to achieve social responsibility, economic growth, and ecological sustainability (Yousaf, Radulescu, Nassani, Aldakhil, & Jianu, 2021; Kwinje, 2024).

The implementation of EMS in hotels is influenced by various factors. Stakeholder interests and economic capacity directly impact EMP adoption (Latip, Sharkawi, Mohamed & Kasron, 2022). While external and internal constraints do not significantly affect green practices implementation, external and internal drivers do have a significant impact (Hussain, Abbass, Usman, Rehan & Asif, 2022; Lutfi, Alqudah, Alrawad et al., 2023). Operational environment plays a crucial role in EMP implementation and positively affects hotel business sustainability (Mbise & Mungure, 2023; Naiman & Mungure, n.d.). For instance, ISO 14001 certification provides guidelines for setting up environmental management systems, with energy conservation being a primary focus. The adoption of green practices mediates the relationship between drivers and hotels' environmental performance and competitive advantages.

Global literature shows that economic constraints limit the implementation of environmental management systems in hotels, with most hotels being internally driven and ad hoc in their decision-making Hamzah et al., 2021). According to Gunawardena and Dissanayake (2021) economic constraints can drive hotels to implement environmental management systems and accounting practices. Environmental management decision-making in Greek hotels is being affected by economic conditions. Sardianou, Gkaragkani and Kostakis (2022) opine that economic constraints are a key barrier to implementing environmental management systems in Greek hotels. The barriers to the adoption of environmental management practices in the hotel industry were also revealed Malaysian hotels KamalulAriffin, Khalid and Wahid (2013) discovered that economic constraints, such as regulation, customer demand, and organizational factors, only weakly influence the adoption of environmental management practices in Malaysian hotels.

In Africa, Mudzungairi (2018) opines that there is a need for the continent to embrace the key principles of green tourism practices, for it is not just about being altruistic but it makes economic and environmental sense. Green tourism dates as far back as 16 years ago in some African countries. African Development Bank (2003) revealed how the Island (Zanzibar, Tanzania) was adopting environmental initiatives through recycling of water, water harvesting of rain water for daily use, the use of solar energy and waste management and the measures they put in place for green tourism on the Island. Studies show how management commitment influenced the Implementation of Hotel Environmental Management Practices in Hotels in Tanzania (Naiman, Mbise & Mungure, 2023)

Sucheran (2015) discovered that economic constraints, including a lack of resources and high costs, are major barriers to implementing environmental management systems in hotels in KwaZulu-Natal, South Africa. Omune, Kambona, Wadongo and Wekesa (2021) argued that hotels in Kenya have implemented more low-cost environmental management practices, but economic constraints limit adoption of higher-cost practices. Omune (2021) further argued that there is a linkage between Environmental Management Practices and the financial performance of three to five-star hotels in Kenya. Nyahuna (2022) discovered that financial performance and meeting international customers' expectations are key factors influencing the choice of environmental management accounting practices adopted by 5-star hotels in South Africa. The above studies in the African context underscore that the adoption and

implementation of environmental management systems in hotels in developing nations is below average, with various barrier limiting their adoption.

The literature review in the Zimbabwean context suggests that economic constraints pose a significant barrier to the adoption of green management initiatives in hotels (Mbasera, du Plessis, Saayman, & Kruger, 2017). While some studies have focused on sustainable practices and benefits within the hospitality sector of Zimbabwe (Shereni, Saarinen, & Rogerson, 2022) and environmentally friendly waste management initiatives in hotels (Mbasera & Matana, 2014), the reluctance of most hotels in Zimbabwe to implement international Environmental Management Systems, such as ISO 14001 certification, due to resource limitations remains a critical issue (Massoud et al., 2010).

Despite existing research on the barriers to implementing green operation practices, there is a gap in the literature regarding the specific challenges faced by hotels operating in resource-constrained economies (Shereni, Saarinen & Rogerson, 2023) like Zimbabwe. The existing studies did not fully capture the unique circumstances and constraints that hotels in Zimbabwe encounter in their efforts to adopt Environmental Management Systems (Mbasera et al., 2017; Mbasera & Mutana, 2014). Therefore, there is a need for further research to investigate the specific economic impediments and opportunities for implementing Environmental Management Systems in Zimbabwean hotels, considering the economic challenges and limited resources that are prevalent in the country. Therefore, the study was guided by the following specific objectives:

1. To establish current Environmental Management Systems adopted by chain hotels in Harare
2. Assess the economic challenges faced by chain hotels in Harare on Environmental Management Systems (EMS) implementation.

Research Methodology

The study adopted a mixed methods research methodology. To achieve the first objective, the study used qualitative content analysis. Data were collected from the hotel websites during the period 5-9 August 2024. The researcher started by developing a criterion based on previous studies (Cheong & Lee, 2021; Yousaf et al., 2021). Data collection from website visits was conducted between 5 August and 9 August 2024, to analyse the EMSs implemented by hotels. Table 1 presents the hotel websites.

Table 1: Chain hotels and their websites

Name of hotel chain	Website
African Sun Limited	https://www.africansunhotels.com/
Cresta Hotels	https://www.crestahotels.com/hotels/zimbabwe
Rainbow Tourism Group	https://rtgafrica.com/
Hyatt Regency Hotel	https://www.hyatt.com/hyatt-regency/en-US/hrerh-hyatt-regency-harare-the-meikles

To achieve the second objective, the study adopted a quantitative research methodology. The study adopted stratified random sampling, a probability sampling technique which is utilized when the population on which sampling is applied is heterogeneous as a whole but can be divided into homogenous strata (Pirzadeh, Hamou-Lhadj, Shaman, Shafiee, 2011). Thus, the sample size was 185 (see Table 2).

Table 2: Sample size

No.	Name of Hotel	No. of Employees/Managers	Proportion	Sample
1	Meikles	101	0.13	37
2	Rainbow Towers	95	0.12	34
3	Crown Plaza	84	0.11	30
4	Holiday Inn	81	0.10	29
6	Cresta	77	0.10	28
7	New Ambassador	75	0.09	27
Total Sample				**185**

A questionnaire was used to collect data. Questions on a 5-point Likert scale were developed guided by previous studies (Cheong & Lee, 2022). The study used online platform to administer questionnaires. Direct link of Google form crafted questionnaire was send to manager through email, WhatsApp and Messenger. Communication with participants was done prior to the distribution of the link to the questionnaire. The collected data was inputted into SPSS software to generate datasets. Subsequently, the entered data underwent thorough verification to identify and rectify any errors or gaps. Initial analysis included the use of descriptive statistics to characterize the central tendencies and variations of both dependent and independent variables in the research (Singh & Singh, 2015).

The reliability of the scales was assessed through Cronbach's alpha statistic to ensure internal consistency. Normality tests, such as Kolmogorov-Smirnov (K-O) and Shapiro-Wilk tests, were performed to determine the distribution nature and guide the selection of appropriate statistical methods for the study (Creswell, 2014). Factor analysis and regression analysis were subsequently conducted to derive inferential statistics and draw meaningful conclusions from the data.

Results and Discussion

Findings of the study were as follows:

Current EMS Implemented by Hotel Chains in Harare

There are several types of Environmental Management Systems (EMS) that hotels can implement to enhance their sustainability practices and reduce their impact on the environment.

Table 3 presents the findings.

Table 3: EMS types

Types of EMS	ASL	CH	RTG	HRH
ISO 14001	No	No	No	No
Green Key	No	No	No	No
EarthCheck	No	No	No	No
LEED Certification	No	No	No	No
Global Sustainable Tourism Council (GSTC	No	No	No	No
BREEAM	No	No	No	No

Trevellife	No	No	No	No
Local Initiatives and Custom Programs				
1. Biodiversity protection	Yes	No	Yes	Yes
2. Waste management initiatives	Yes	Yes	No	Yes
3. Green purchasing	Yes	No	Yes	
4. Energy conservation	Yes	Yes	No	Yes
5. Water consumption	Yes	No	No	Yes
6. Reduction in greenhouse gas emissions	Yes	No	Yes	Yes

The findings indicate that the hotel chains in Harare, specifically African Sun Limited (ASL), Cresta Hotels (CR), Rainbow Tourism Group (RTG), and Hyatt Regency Hotel (HRH), do not currently hold certifications such as ISO 14001, Green Key, EarthCheck, LEED Certification, Global Sustainable Tourism Council, BREEAM, or Trevellife. This suggests a lack of formal recognition for their environmental management systems (EMS) at an international level.

However, the data revealed that all four hotel chains have implemented local initiatives and custom programs focusing on environmental sustainability. These included biodiversity protection, waste management initiatives, green purchasing, energy conservation, water consumption practices, and efforts to reduce greenhouse gas emissions. Notably, while there was consistency in following local environmental programs among the hotels, there remained a gap in adopting globally recognized EMS standards. Findings corroborates with Cheong and Lee (2021) who discovered that the discrepancy in implementation of EMSs in hotels could be attributed to various factors such as resource constraints, economic challenges, lack of awareness about international EMS standards, or differing priorities in allocating resources for sustainable practices.

The Economic Challenges Faced by Chain Hotels in Harare on Environmental Management Systems (EMS) Implementation

This section was aimed at examining the barriers to EMS implementation in hotel chains in Harare. Factor analysis for the independent variable items was performed to explore the data structure. The final solution with 14 items spread across 3 components was accepted. Varimax Rotation was used in factor extraction. The next step was to find out the relationship between barriers and implementation of EMS in hotels. Therefore, a multiple linear regression was carried out using factor score of dependent variable item (EMS implementation) and factor scores of the 3 extracted independent factors as independent variables. Findings of the study revealed four major barriers to implementation of EMS. Looking at the overall responses, the most important barriers according to the majority of the respondents were knowledge, skills and professional advice, uncertainty of outcomes and excessive implementation costs.

Kaiser-Mayer-Olkin (KMO) Test

The need to test sampling adequacy prior to any application of Factor Analysis, as well as the testing of the homogeneity of variance between the test and identity matrices of the data (Pallant, 2013). In order to attain this, Kaiser-Mayor-Olkin (KMO) test of sampling adequacy as well as the Bartlett's test for sphericity were computed. It is recommended that the optimal KMO statistic should be greater than 0.5, while the Bartlett's test must be significant at $p<0.05$(Pallant, 2013). These assumptions were tested, and the results are presented in Table 4.

Table 0: KMO's and Bartlett's Test

Table 4.6: KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.853
Bartlett's Test of Sphericity	Approx. Chi-Square	1486.330
	Df	185
	Sig.	.000

The KMO statistic was 0.853>0.50, and for the Bartlett's test, the p-value was 0.00<0.05. this indicate that, the outcome for KMO was greater than 0.5 and the outcome for the Bartlett p-values was less than 0.05, thus, the significant level is small enough to reject the null hypotheses.

Rotated Component Matrix

The rotated component matrix was extracted. The resultant rotated component matrix is presented in Table 5.

Table 5 Rotated Component Matrix

Rotated Component Matrix[a]			
	Component		
	1	2	3
Operational Challenges			
Rising costs of utilities (electricity, water).	.520		
Maintenance and upgrade costs for eco-friendly technologies.	.682		
High initial investment costs for adopting green technologies.	.750		
Economic Uncertainty			
Currency instability leading to unpredictable costs for imported goods and services.		.656	
Hyperinflation affecting pricing strategies and operational budgets.		.901	
Risk of economic downturns reducing consumer spending on luxury services.		.600	
Seasonal fluctuations in tourism affecting revenue and economic viability of investments in sustainability.		.682	
The economic impact of global events (pandemics, travel bans) leading to decreased tourist arrivals.		.709	
Regulatory and Market Constraints			
Lack of supportive policies or incentives for implementing sustainable practices.			.848
Inconsistent regulatory frameworks affecting long-term sustainability investments.			.534
Limited governmental support for research and development in sustainable practices.			.780
Competing with budget accommodation providers who may not prioritize sustainability.			.600
Difficulty accessing loans or investment for sustainable projects.			.754
Poor water management systems impacting water sustainability initiatives.			.521

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Rotation reduces the number of factors on which variables under investigation have high loadings (Chetty, 2015). Rotation makes the interpretation of analysis easier. From Table 5 it can be deduced that 3 factors loaded on component 1 (operational constraints). The first component emphasizes financial factors that impose constraints on the adoption of eco-friendly practices. Specifically, rising costs of utilities, maintenance and upgrade costs associated with green technologies, and the high initial investment required to transition to such technologies are all identified as critical barriers. The relatively high factor loadings indicate that these economic constraints are influencing decision-making in the hospitality sector, deterring investments that could enhance their sustainability profiles.

The second component revealed the profound impact of economic uncertainty on the hospitality industry. Factors like currency instability and hyperinflation not only led to unpredictable costs for imported goods and services, but they also affect operational budgets, raising overall risks for hotel chains. The risk of economic downturns and decreased consumer spending on luxury services further compounds these uncertainties, as does seasonal tourism fluctuations that impact revenue streams. Moreover, global events, such as pandemics or travel restrictions, underscore the hotels' vulnerabilities and their hesitance to invest in sustainability amidst such instability.

Finally, the third component highlighted the regulatory and market factors that hinder the implementation of environmental management systems. There is a clear indication of structural deficiencies in the support for sustainable practices, as evidenced by the lack of supportive policies, inconsistent regulatory frameworks, and limited government support for research and development in sustainability. Additionally, the challenge of competing with budget accommodations that did not prioritize sustainability further complicates the landscape for hotel chains aiming to implement greener practices. Access to financing for sustainable projects remained an issue, along with fundamental infrastructure challenges, such as poor water management systems, which collectively paint a picture of the significant obstacles rooted in regulatory and market dynamics that hotel chains in Harare must navigate.

For further analysis, a simple linear regression was conducted to predict the barriers to implementation of EMS in hotels. The regression analysis output was presented using 3 tables which are: Model Summary, ANOVA and Coefficients.

Table 6 Model Summary

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.843	.623	.661	.751
Predictors: (Constant), Operational Constraints, Economic Uncertainty, Regulatory and Market Constraints				

The model of summary of regression analysis is indicated in Table 6. In this case, R indicates relationship between EMS and regressed variables (operational constraints, economic uncertainty, regulatory and market constraints). The results indicate that, R is 0.843 which implies that there is a relationship between barriers and implantation of EMS in hotels. Results show that, R Square is 0.623; this means that the linear regression explains 62.3% of the variance in data.

Table 7 ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87.270	3	45.130	85.364	.000
	Residual	81.744	158	.611		
	Total	169.014	160			
a. Dependent Variable: Implementation of EMS in hotels						
b. Predictors: (Constant), Operational Constraints, Economic Uncertainty, Regulatory and Market Constraints						

Table 7 presents the results of the F-test associated with the linear regressions conducted in this study. The null hypothesis (H_0) of the F-test posits that the model accounts for no variance in the data (i.e., $R^2 = 0$). The results indicate that the F-test is statistically significant, suggesting that the model is capable of explaining a considerable portion of the variance related to economic constraints in the implementation of Environmental Management Systems (EMS) within hotels in Harare. Thus, it can be inferred that the present regression equation effectively characterizes the relationship between barriers and the adoption of EMS in the hotel sector.

Table 8 Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.313	.871		60.892	.000
	Operational constraints	0.374	.067	.323	5.781	.000
	Economic uncertainty	0.466	.067	.546	11.622	.000
	Regulatory and market constraints	0.473	.056	.439	5.774	.000
a. ***Dependent Variable: implementation of EMS in hotels***						

The model's coefficient table demonstrated that considering operational constraints, economic uncertainty, and regulatory and market factors is crucial for effectively implementing EMS in hotels. The coefficients obtained from the analysis show that the regression coefficients are as follows: β_0= 1.313, β_1=0.374, β_2=0466, and β_3=0475. The findings highlighted a statistically significant connection between EMS implementation and operational constraints (p=0.000). Consequently, operational challenges are shown to have a negative impact on EMS implementation in hotels, with a 31% increased likelihood of ineffective or no implementation at all.

Field findings also revealed that there is a significant correlation between EMS implementation in hotels and economic uncertainty (p=0000). This implies that uncertainty of outcomes has a negative impact on EMS implementation with a 46% decrease in implementation chances. Additionally, research findings revealed that there is a significant correlation between hotel EMS implementation and implementation costs (p=000). This shows that hotel implementation costs negatively lead to poor implementation by hotels with 47% decrease in participation.

The results of this research revealed three primary obstacles to implementing EMS in the hotel sector. The findings resonated well with Sardianou et al. (2022) who discovered that that economic constraints are a key barrier to implementing environmental management systems in Greek hotels. These findings suggested that hotels in Zimbabwe face internal and external economic constraints that impede their adoption of EMS practices. Internal barriers, such as knowledge, skills, resources, and costs, play a critical role for hotels based on the study's outcomes. Additionally, the research findings aligned with the findings of Omune et al. (2021) who discovered that hotels in Kenya tend to implement more affordable environmental management practices due to economic constraints limiting the uptake of higher-cost practices.

Conclusion and recommendations

In conclusion, this study provided valuable insights into the economic constraints impeding the implementation of Environmental Management Systems (EMS) in chain hotels in Harare, Zimbabwe. The findings revealed a stark absence of globally recognized EMS certifications among the major hotel chains, including African Sun Limited (ASL), Cresta Hotels (CR), Rainbow Tourism Group (RTG), and Hyatt Regency Hotel (HRH). While these establishments adopted local environmental initiatives such as biodiversity protection and waste management, the lack of formal EMS certification suggested a significant gap in their commitment to internationally accepted sustainable practices.

The research identified various economic challenges that hindered the effective adoption of EMS. Key barriers include operational constraints, economic uncertainty, and regulatory and market factors. High costs associated with eco-friendly technologies, coupled with currency instability and fluctuating consumer demand, create a complex landscape for hotel management. From the analysis, it is evident that knowledge gaps and uncertainties regarding the outcomes of sustainability initiatives significantly impede the willingness of hotels to invest in EMS. The study's quantitative assessments highlight that, for every additional factor of operational and economic constraint, the likelihood of successful EMS implementation decreases markedly. Therefore, it is important for hotel chains in Zimbabwe to not only recognize these barriers but to also seek strategic interventions that alleviate the financial pressure associated with EMS adoption.

It is recommended that hotel chains in Zimbabwe should increase the collaboration between hotel operators, policymakers, and environmental organizations to create supportive frameworks that encourage the uptake of sustainable practices. It is also recommended that financial incentives, simpler regulatory pathways, and training programs aimed at enhancing knowledge and skills related to EMS should be provided. The future of the hospitality industry in Zimbabwe hinges on its ability to balance economic viability with environmental stewardship and overcoming these constraints will be vital for achieving a sustainable tourism that thrives amidst economic challenges. This research contributes to a deeper understanding of the barriers faced by hotels in Harare, ultimately paving the way for more robust environmental management strategies in Zimbabwe’s hospitality landscape.

References

Cheong, F., & Lee, Y. H. (2021). *Developing an environmental management system for evaluating green casino hotels.* Sustainability, 13(14), 7825.

Gunawardena, Y., & Dissanayake, K. (2021). *Environmental management accounting as a perspective for hotel sustainability a case study from a Sri Lankan hotel*.

Hamzah, H., Karim, M. S. A., Aziz, Y. A., & Kasim, A. (2021). Environmental management practices in the SME hospitality industry: Mediating impact of managers' commitment to institutional pressures and EMS implementation. *Journal of Emerging Economies and Islamic Research*, 9(3), 1-39.

Han, H. (2021). *Consumer behaviour and environmental sustainability in tourism and hospitality: A review of theories, concepts, and latest research. Sustainable Consumer Behaviour and the Environment*, 1-22.

Hussain, Y., Abbass, K., Usman, M., Rehan, M., & Asif, M. (2022). *Exploring the mediating role of environmental strategy, green innovations, and transformational leadership: the impact of corporate social responsibility on environmental performance*. Environmental science and pollution research, 29(51), 76864-76880.

Ibnou-Laaroussi, S., Rjoub, H., & Wong, W. K. (2020). *Sustainability of green tourism among international tourists and its influence on the achievement of green environment*: Evidence from North Cyprus. Sustainability, 12(14), 5698.

KamalulAriffin, N. S., Khalid, S. N. A., & Wahid, N. A. (2013). *The barriers to the adoption of environmental management practices in the hotel industry*: a study of Malaysian hotels. Business Strategy Series, 14(4), 106-117.

Kwinje, C. (2024). Unveiling the Nexus between Corporate Social Responsibility and Hotel Financial Performance: Case of Hotel Chains in Zimbabwe. *Zimbabwe Journal of Business, Economics and Management*, 2 (2) , 305-314

Latip, M., Sharkawi, I., Mohamed, Z., & Kasron, N. (2022). The impact of external stakeholders' pressures on the intention to adopt environmental management practices and the moderating effects of firm size. *Journal of Small Business Strategy*, 32(3), 45-66.

Lutfi, A., Alqudah, H., Alrawad, M., Alshira'h, A. F., Alshirah, M. H., Almaiah, M. A., ... & Hassan, M. F. (2023). *Green environmental management system to support environmental performance: what factors influence SMEs to adopt green innovations?* Sustainability, 15(13), 10645.

Mbasera, M., & Mutana, S. (2014). An analysis of environmentally friendly waste management initiatives in hotels in Zimbabwe. *International Journal of Advanced Research in Management and Social Sciences*, 3(8), 37-48.

Mbasera, M., du Plessis, E., Saayman, M., & Kruger, M. (2017). Impeding factors hindering the implementation of green management initiatives in hotels: A developing country perspective. *African Journal of Hospitality, Tourism and Leisure*, 6(2), 1-11.

Mensah, I. (2019). *Environmental management concepts and practices for the hospitality industry*. Cambridge scholars publishing.

Naiman, N., & Mungure, M. J. (n.d.) *Influence of Management Commitment in the Implementation of Hotel Environmental Management Practices and its Effect on Business Sustainability among Hotels in Tanzania.*

Nyahuna, T. (2022). The Choice of Environmental Management Accounting Practices Adopted by Managers: Evidence from the Hotel Sector in KwaZulu Natal, South Africa. *Indonesian Journal of Social and Environmental Issues* (IJSEI), 3(2), 154-158.

Omune, B., Kambona, O., Wadongo, B., & Wekesa, A. (2021). Environmental management practices implemented by the hotel sector in Kenya. *World Leisure Journal*, 63(1), 98-108.

Omune, B. A., 2021. *The Linkage Between Environmental Management Practices and Financial Performance of Three to Five Star Hotels in Kenya* (Doctoral dissertation, Maseno University).

Sardianou, E., Gkaragkani, V., & Kostakis, I. (2022). Environmental management decision-making in Greek hotels: barriers and drivers to sustainability. Progress in Industrial Ecology, *An International Journal*, 15(1), 53-69.

Shereni, N. C., Saarinen, J., & Rogerson, C. M. (2022). *Sustainable practices and benefits in the hospitality sector of Zimbabwe*.

Sucheran, R. E. S. H. M. A. (2015). Barriers to environmental management in hotels in KwaZulu-Natal, South Africa. *African Journal for Physical Health Education, Recreation and Dance*, 21(sup-2), 168-179.

Yousaf, Z., Radulescu, M., Nassani, A., Aldakhil, A. M., & Jianu, E. (2021). *Environmental management system towards environmental performance of hotel industry: does corporate social responsibility authenticity really matter? Engineering Economics, 32(5), 484-498.*