

Factors Influencing the Adoption of Green Practices in Indian Hotels

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Abstract—The Indian hospitality sector is getting booming fast, and this is contributing to the growth of tourism as well as the economy of India. Nonetheless, hotels have a high energy, water and other natural resource use which makes their operation to have significant environmental effects. Hotels are slowly being environmentally responsible in response to the growing environmental impacts and a high demand on sustainable tourism. This paper discusses the major issues that impact the implementation of green practices of Indian hotels. The study has a quantitative descriptive and analytic design with survey data being gathered on the hotel managers and employees. The results indicate that regulatory pressure, customer demand, cost savings potential, management commitment has a big impact on the adoption of green practices whereas high initial investment cost, poor technical expertise, and employee awareness are obstacles. The paper concludes that there is a need to increase the policy support, training and financial incentives to ensure sustainable practices of hospitality in India.

Index Terms—Green hotels, Sustainable hospitality, Environmental management, Hotel industry, India, Green practices adoption.

I. INTRODUCTION

The hospitality business has been well known as being one of the fastest-growing sectors of the international economy. The industry has recorded a high growth in the last several decades owing to the increased international and domestic tourism. Hotel industry in India is critical in facilitating the tourism process and it helps a lot in national economic development. The industry provides jobs to people, funds local enterprises as well as providing foreign exchange earnings. As more and more tourists visit India annually, hotel accommodation, and the accompanying hospitality services in this regard have

increased in demand consistently, and this has seen hotels of all classes including luxury hotels, budget and mid-scale hotels grow in number.

Although the hotel industry contributes to the economy, it is also associated with the heavy consumption of the natural resources. Hotel operations demand substantial energy in lighting, heating, cooling and other activities of the operation. On the same note, the amount of water consumed in housekeeping, laundry, landscaping, and guest services are high. Moreover, hotels produce large volumes of wastes in the form of food services, packaging materials, and other operating procedures. Such activities may have significant effects on the environment, such as carbon emission, water loss, and wastes.

Due to the rising environmental issues and the increased awareness of the sustainability concern, most hotels in the world have started to implement environmentally responsible operation methods. These are what are commonly known as green practices. Green practices mean the application of measures and technologies which are oriented to reducing the environmental impact of hotel operation and do not lower the level of service quality and operational efficiency. Some of these practices are energy saving practices, water management system, waste reduction and recycling, use of renewable energy and sustainable procurement of materials and supplies.

Over the past few years, sustainability has been taken into account by the hospitality industry in India. Most hotels are slowly integrating eco-friendly programs within their operations due to the environmental policies, growing consumer awareness, and the prospective cost-saving over the long term. The adoption of these practices however differs greatly

among the industry. International hotel chains with large size usually possess more financial means, use of high-level technologies, and developed sustainability policies, which allow them to introduce holistic environmental management programs. Contrarily, small and medium-sized hotels are often at the receiving end of a myriad of challenges, among them being the financial constraints, the ability to operate technically and the general ignorance of sustainable practices.

With such differences, it is of interest to discuss the factors that determine the age based on which the green practices are adopted within the Indian hospitality industry. The knowledge of such factors can assist the hotel managers, policymakers, and the industry stakeholders to come up with effective strategies to encourage sustainable practices and minimize the negative effects of hotel activities on the environment. Thus, the present study will analyze the main factors and obstacles that can affect the introduction of green practices in Indian hotels and deliver the information that would allow fostering the creation of a more sustainable hotel industry.

II. LITERATURE REVIEW

Nowadays, the aspect of sustainability has come to the fore in the hospitality sector over the last few years. With the ever-increasing concerns over environmental degradation, climate change and depletion in resources, the world is urging the hotels to embrace environmental responsive in their operations. Sustainability in hospitality is an idea that aims at reducing the adverse effects on the environment and ensuring that the facility remains profitable to the economy and offering quality service to its visitors. Consequently, there has been a huge literature on green practice usage in hotels and the different factors that contribute to the implementation of such practices.

A number of researches have been conducted on environmental and operational sustainable hotel operations. Hotel green practices are usually comprised of energy use, water use, waste recycling, recycling programs, use of renewable energy, and sustainable purchasing policies. These activities seek to minimize the environmental impact of the hotel activities, increase operational efficiency and cost management. Besides adding value to the

environment, green practices may also contribute to the reputation of the hotel, bring in the eco-friendly customers and provide a competitive edge within the market.

Bonilla-Priego et al. (2022) carried out a complete review of over 600 scholarly papers on the topics of green hotels and sustainability in the hotel industry. The research had determined a few important aspects which determine the adoption of environmental responsible practices in hotels. They can be external forces that are government regulations, environmental policies and expectations of stakeholders and internal driving forces which can include cost-cutting and corporate social responsibility. Another issue that was identified in the review is that there are a number of problems that hotels encounter in the process of implementing sustainability initiatives. High initial costs of investment, financial constraints, complicated operation, and insufficient technical experience to execute sophisticated environmental technologies are among these challenges.

The literature has also extensively covered customer perception and market demand. With the growing environmental sensitivity among the consumer segments, a significant number of travelers are starting to be aware of the environmental impact of their travelling decisions. In a study on the impact of the use of green initiatives on customer satisfaction and brand perception in the hospitality industry, Soni, Hussain, and Kareem (2022) have investigated this topic. The authors of the research discovered that the hotels that make active environmental promotion are usually perceived more favorably by customers. Green conscious buyers are likely to choose hotels that are environmentally responsible by practicing aspects like energy saving, recycling of waste and also use of green products. Such campaigns do not only increase customer satisfaction but also the brand image and loyalty. The study was primarily, however, on the perceptions of the consumers as opposed to the internal organizational processes that drive the adoption of such practices in the hotels.

Besides customer-motivated reasons, the measurement and assessment of the performance of sustainability have also been discussed in recent research. Prakash et al. (2022) proposed sustainability performance metrics in hotels based on Hotel Carbon Measurement Initiative, the framework. This

framework offers tools that are standardized in the measure of carbon emissions and environmental impacts of hotel operations. This is because, as per the study, standardized sustainability metrics are necessary to determine the effectiveness of the environmental initiatives and provide hotel managers with a way of assessing their sustainability endeavors. Proper measurement systems will also enable a hotel to determine areas that can be improved in terms of resource usage and environmental performance.

Researchers have also focused on the relationship between sustainable practices and customer loyalty. Chang et al. (2024) studied the effect of visible environmental programs undertaken by hotels on customer behavioural intention and attitudes. Their analysis revealed that the customers will have more trust and tend to stay in the hotel that has a clear display of their interest in environmental sustainability. Some of these practices are the application of energy efficient lighting systems, recycling centers, eco labels, and guest friendly environmentally friendly amenities. Such visible efforts are beneficial in conveying the information about the hotel being environmentally conscious to the customers which enhances customer loyalty and fosters a desire to visit the hotel again.

Recent research has also talked about strategic sustainability activities in hotel organizations. Semwal et al. (2025) analyzed various measures that can be implemented by hotels to enhance their performance in terms of the environment. These initiatives consist of implementation of renewable energy solutions, sustainable procurement policies, waste management systems and environmentally responsible supply chain practices. These programs may greatly minimize the environmental impact of hotel operations besides enhancing operational efficiency. Nevertheless, the research was more conceptual and not empirical on the issue of practical application of these strategies in hotel organizations.

Besides external factors like the demand by the customers and government, a number of researchers have highlighted the role of internal organizational factors in effective implementation of the sustainability efforts. The willingness of leaders to become environmentally responsible in hotel organizations is important in enhancing such practices. As the top management is seen to be very committed to sustainability, employees would be motivated to

develop environmental initiatives. In the same vein employee training and awareness programs will be necessary in ensuring that sustainability policies are successfully incorporated in the day-to-day operations at the hotel. The organizational culture is also significant, with more green practices being likely to be adopted and continued in the future in hotels that have a strong culture of environmental responsibility. Another issue that serves to affect sustainability adoption in hotels is financial considerations. Although green practices may result in long-term savings by increasing energy and resource efficiency, the initial cost of green technology implementation may be high. Smaller hotels and standalone buildings are usually limited in terms of funds, meaning that they can only afford to implement modern sustainability technology. This puts a disparity between big international hotels chains which tend to have more financial and technological resources and those that are smaller and unable to follow the same initiatives. Although the literature concerning sustainability in hospitality has been increasingly growing, there are still some gaps in the existing literature. Various studies are inclined to pay the main attention to the perception of the customers about green hotels or environmental results of sustainability efforts. Although these factors are critical, there is a comparatively lower number of studies that focus on the internal decision-making process in organizations that determines the adoption of green practices within hotels. Specifically, no empirical studies exist that examine the joint effect of external pressure, organizational, and financial issues on the adoption of sustainability in hotel organizations.

III. RESEARCH OBJECTIVES

The central purpose of the research is to analyze the aspects, which determine the adoption of environmentally sustainable practices in the industry of hotels in India. Due to the increased relevance of sustainability in the hospitality industry, there is need to find out the reasons, organizational factors and difficulties that surround the introduction of green programs in hotels. According to this purpose, the research will be directed to the following objectives:

Primary Objective

The main aim of the study will be to define and investigate the main drivers that determine the issue of adopting green practices in Indian hotels. The research aims at examining internal and external factors which promote or prevent adoption of environmentally friendly operation strategies by hotels. Through these factors, the study tries to give deeper insight on how sustainability initiatives can be well incorporated in the practices of hotel management.

Secondary Objectives

To explore the awareness and practice of green practice of hotels.

This goal aims at identifying the level of awareness of the hotel managers and employees of the concepts of sustainability and environmentally friendly practices. It also aims at determining the level at which the practices have been adopted within the hotel operations.

To determine the main factors that stimulate the implementation of sustainability in hotels.

This goal is to examine both external and internal pressures that are pushing hotels to become green. These can be the pressure of regulation, demand by customers of environmentally friendly services, competitive advantages, and possible cost savings due to effective utilization of resources.

To examine the contribution of organizational variables like management commitment and involvement of employees in sustainability adoption. In most successful implementation of green practices, internal organizational support is important. The aim of this objective is to study the role of leadership commitment, organizational culture, and employee participation in ensuring the adoption and successful adoption of environmental practices in hotels.

To establish the key obstacles to the sustainability of hotels.

This goal centers on learning about the issues that hotels experience in their effort to adopt green initiatives. Such obstacles can be financial limitations, absence of technical skills, inadequate availability of sustainable technologies, and inadequate employee awareness or knowledge.

By focusing on these, the research will offer useful information on what determines the adoption of sustainability in the hospitality industry and make recommendations that can be useful in advancing environmentally-friendly hotel operations in India.

IV. RESEARCH HYPOTHESES

H1: Government regulations positively influence the adoption of green practices.

H2: Cost-saving expectations encourage hotels to adopt sustainable practices.

H3: Customer demand for eco-friendly services positively affects adoption.

H4: Top management commitment significantly influences sustainability implementation.

H5: Employee awareness positively affects green practice implementation.

H6: Availability of green technology positively influences sustainability adoption.

H7: Financial constraints negatively affect adoption.

H8: Adoption of green practices improves operational efficiency.

V. RESEARCH METHODOLOGY

Research Design: Descriptive and analytical research design.

Research Approach: Quantitative survey method.

Data Sources:

Primary Data – Collected through structured questionnaires from hotel managers and staff.

Secondary Data – Academic journals, tourism reports, and sustainability publications.

Sample Size: 100 hotel employees and managers.

Sampling Technique: Stratified random sampling.

Data Analysis: Descriptive statistical analysis of survey responses.

VI. RESULTS AND DISCUSSION

The results of this research point to the fact that the level of awareness about sustainability and environmentally friendly practices among the staff of hotels is mostly moderate to high. Many respondents identified themselves as aware of the concept of green practices and accepted that they are necessary in mitigating greenness of hotel operations. A significant

number of hotels are already taking the initiative to implement different kinds of sustainability programs that would enhance resource efficiency and reduce environmental degradation. The use of energy-efficient lighting systems, installation of water conservation systems, introduction of waste segregation and recycling programs are some of the practices that have been embraced. All these efforts reflect the fact that sustainability is slowly gaining relevance as an operation factor in the hospitality industry.

The issue of government regulations and environmental policies also became a factor that led to the motivation to embrace green practices by the hotels. Most of the respondents pointed out that environmental strategies embraced by the hotel management are affected by regulatory frameworks and environmental guidelines that are set out by the authorities. Along with the fact that environmental regulations can help hotels to be spared penalties, compliance with them also promotes the implementation of organized sustainability programs by the hotels. Moreover, the regulatory pressure usually encourages the implementation of environmentally friendly technologies and operation processes leading to the environmental sustainability in the long term.

The growing demand of the customers to green services is another important aspect that is affecting the implementation of the green practices. Contemporary travelers are growing environmentally conscious and are demanding accommodation features and services that showcase a sense of sustainability. Hotels that practice green activities proactively tend to have a better perception among the customers, increased brand reputation, and enhanced customer satisfaction. Consequently, sustainability has become a strategic business opportunity to many hotels as well as an environmental responsibility.

Improved resource efficiency that led to cost reduction was also found to be a key contributor to adoption of the sustainable practices. Most hotel administrators understand that energy-saving technologies, water-saving tools, and methods of waste minimization can result into significant operational savings in the long-term perspective. There might be a high cost of setting up such technologies initially, but sustainability initiatives can prove cost effective with time as the

costs of utility can be reduced, and the efficiency of operations also increases.

Although the green practices have increased attention, the study also found some challenges restricting its practices especially among the small and medium hotels. High start-up cost of installing environmentally friendly technologies and infrastructure is considered as one of the greatest obstacles. The smaller hotels have limited financial capacities and might not be able to set up funds to support sustainability efforts.

Besides the financial factor, insufficient technical skills and access to special knowledge were also cited as challenges. The adoption of futuristic sustainability technologies can be both technical and professionally oriented, which is not necessarily easily accessible to the hotel managers. Moreover, the lack of employee education and awareness may decrease sustainability programs efficiency in hotels.

On the whole, the results indicate that the situation in the hospitality sector in India is slowly evolving to implement environmentally friendly methods, but a number of structural and organizational issues should be overcome. Increasing governmental support, financial incentives and encouraging the employee training programs can be a major boost in the adoption of green practices in the hotel industry. Such actions would assist in making sure that sustainability efforts are implemented as well as sustained successfully in the long term.

VII. CONCLUSION

The study concludes that green practices are gradually becoming more common in the Indian hospitality industry. External pressures such as government regulations and customer expectations encourage hotels to adopt sustainable practices.

Internal factors including management commitment and employee involvement also play an important role. Despite the benefits of sustainability, barriers such as financial limitations and lack of technical knowledge continue to affect adoption rates.

Greater government support, training programs, and financial incentives can help accelerate the adoption of green practices across the hotel industry and contribute to sustainable tourism development in India.

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