

# A Study of Barriers to Environmentally Sustainable Practices in Hotel Businesses in Punjab, India: Preliminary Findings

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This primary study was aimed at exploring the critical barriers to environmentally sustainable practices (ESPs) and suggestions to overcome them in the context of hotel businesses. The study used a quantitative research technique, and the questionnaire was developed with the help of a thorough literature review, content analysis, and pilot study. A total of 221 responses were collected from the managers and executives of 88 classified hotels in Punjab. The 202 usable responses were analysed by descriptive analysis and Kendall's W test. The results indicated that initial implementation cost, high cost of certification, complicated certification process, lack of awareness of the concept, weak legislation, change of routines and management style, existing non-supportive structure, and low top-management commitment significantly affect the adoption and implementation of ESPs. Kendall's W test found a statistically significant agreement among the respondents. This study recommended some practical implications to overcome the barriers to ESPs, such as hotel companies starting with small initiatives that require low initial investment, hotels lobbying with regional hotel associations and government to get financial support, disseminating environmental communications to employees, firm environmental monitoring methods and reward schemes by the government. This study is conducted in a small geographical area that is otherwise a well-known tourist destination worldwide and results are consistent with the findings of previous studies that were conducted globally. Future studies are suggested in larger geographical areas with a comparison of two or more states.

**Keywords:** hotel businesses, environmentally sustainable practices, barriers, suggestions, Punjab, India



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## Introduction

The tourism business is termed as 'resource hungry' (Sharpley, 2009) as it requires a significant amount of natural resources both at the developmental and operational levels (Knowles et al., 1999; Michailidou et al., 2015). Hotels and other accommodation sectors are the main components of the tourism sector and they leave a visible impact on the surrounding envi-

ronment due to their distinct operating characteristics and functions. Hotels are often accused of environmental malpractices (Weaver, 2006).

The growth of hotel businesses is associated with many adverse effects on destinations, such as excessive use of energy, water, and local commodities, huge waste production, exhausting the natural environment, etc. (Hsieh, 2012; Jones et al., 2014). These ef-

fects are producing challenges to natural environmental conditions at the destination.

Besides being associated with the above-mentioned negative impacts, the hotel industry is considered important by states for economic purposes and the development of the quality of life of their peoples. However, developed nations have restricted the expansion of hotel businesses, keeping in view the growing consumption of water and energy and restricted natural resources. Meanwhile, in developing countries, this growth is enormous because of the abundant availability of human resources and natural wealth, in addition to less strict environmental laws (Ganiyusu-foglu, 2013). The need to get economic benefits along with reducing the negative environmental effect has introduced the concept of environmental sustainability in hotel businesses. The main motivational factors behind the environmental initiatives of hoteliers are financial benefits (Musavengane, 2019), environmental concern, legislation, competitiveness, and demand from green customers as mentioned by Nair and Anantharajah (2012). Previous studies have reported the legislation and financial benefits as the most critical motivational factors for hoteliers (Rahman et al., 2012). This concept of greening is not as successful as eventually expected and is adversely affected by many barriers (Jabbour et al., 2016). Many studies have focused on barriers to operations and green operations.

However, no research study has addressed the barriers to green operations in the current study area of Punjab, India. It is important to mention that Punjab is a famous tourist destination for domestic as well as international tourists. In 2019, the total tourist arrival in the state was 48,486,730, which included 47,385,387 domestic tourists and 1,101,343 international tourists (Punjab Tourism, n.d.). However, the hotel industry in Punjab is responding significantly slowly even after recognizing the proven benefits of going green. Therefore, this study was conducted to study the barriers to environmentally sustainable practices in the hotel industry of Punjab.

The study contributes to earlier research in three ways. First, it provides theoretical and empirical transparency about the critical barriers that hinder the growth of ESPs in hotel businesses. Second, the study

area of Punjab is understudied by researchers in relation to the dull growth of ESPs in the region. The knowledge of barriers that are pre-shaping environmental behaviour in the state will help in environmentally sustainable decision-making while contributing theoretical suggestions required for the strong and fundamental basis of individual decisions (Lawhon et al., 2013; Vagias et al., 2014 as cited by Van Riper et al., 2020). Finally, this study discloses a significant concern of the environmental research area by finding the reasons behind the gap in the intentions of pro-environmental organizations and the actual adoption and implementation of environmentally friendly activities in their operations (Kollmuss & Julian, 2002; Schultz, 2011 as cited by Van Riper et al., 2020, and Aragon-Correa et al., 2015; Law et al., 2014; Kim et al., 2015, as cited in Chan et al., 2018).

The findings of this study also contribute ideas for stakeholders to find a way past these barriers.

## Literature Review

Efforts to save the environment started in 1970, but were formally recognized during the Earth Summit in Rio De Janeiro, Brazil, in 1992. During this summit, 172 countries decided to work with an environmentally sound framework to reduce the negative impact of businesses on the environment (Grubb et al., 2019). The concept of sustainability is defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their demands' (Butlin, 1989). The concept of sustainability was introduced in the hospitality industry in later stages, as initially this industry was considered harmless to the environment. The pressure of customers and stakeholders has encouraged hotels to adopt green practices in context to save the environment. Green Hotels Association (n.d.) has defined green hotels as, 'Environmentally-friendly properties whose managers are eager to institute programs that save water, save energy and reduce solid waste, while saving money to help protect our only earth!' Initially, these green practices were associated with energy, water, and waste reduction but now hoteliers have expanded their initiatives in the area of sustainable site planning, green construction, green purchasing, in-

door air quality, green transportation, noise control, and community involvement.

Previous studies have reported that the environmental initiatives of hotels are self-regulatory and voluntary to sustain the environment, energy conservation, water management, recycling, waste reduction, and social welfare (Hsiao et al., 2014; Hoogendoorn et al., 2015). However, Sharma and Mathur (2020) stated that there is a gap between hoteliers' environmental good intentions and actual action. Hotels are found to face difficulties in adopting environmentally sustainable initiatives due to some barriers (Chan et al., 2018; Chan, 2020; Kaur, 2020).

#### Advantages of Environmentally Sustainable Practices

As adoption and implementation of environmentally sustainable practices are considered as the most important recent practices in all types of businesses, their influence on efficiency needs to be investigated. The key reason behind participation in a sustainable approach is to attract some sort of benefits to the organization. A study of hotels in Kuala Lumpur in Malaysia reported enhanced brand image and providing a healthy and safe ambiance to the guests as the major advantage of ESPs (Zaiton et al., 2016). This study observed that Malaysian hotels emphasize the developing positive image of the company among customers to attract financial gains. The study of hotel businesses in developing countries shows a direct link between the implementation of environmentally sustainable practices and enhanced energy efficiency and waste management techniques, environmental sustainability, and competitive advantage by cost differentiation of services (Aragon-Correa et al., 2015; Molina-Azorín et al., 2015; Singjai et al., 2018; Kularatne et al., 2019).

Studies of sustainable practices in construction, clothing, and leather companies by Resta et al. (2018) and Shurrab et al. (2019) also reported similar benefits such as enhanced business image, competitive edge, and increased fit to customers' demands. Indian pharmaceutical companies reported some other additional benefits such as the satisfaction of stakeholders, a drop in employees' turnover rate, positive feedback of customers, etc. (Gujar & Attarwala, 2020).

#### The Gap in the Study

The barriers to ESPs are studied by Chan (2008), Jauhari and Rishi (2012), Kamalul Ariffin et al. (2013), Van Riper et al. (2020) and many more. However, no study tried to explore the barriers to ESPs in the context of the Punjab hotel industry. Researchers and academicians never paid attention to the slow progress of ESPs in the survey state of Punjab. The concept of ESPs in the hotel businesses is flourishing in other states of India, while Punjab is crawling with only one Ecotel certified hotel in the state. Therefore, this study was conducted to fill this existing gap by exploring the aspects that negatively affect the implementation of ESPs among the hotels in Punjab.

#### Theoretical Background: Barriers to ESPs in the Hotel Industry

Previous researchers have classified the barriers as external and internal under the implementation of ESPs (Oelze, 2017; Álvarez Jaramillo et al., 2019). According to Hillary (1998), the deficiency of knowledge of environmental issues in association with lack of information and backing from government and management are a major hurdle in the implementation of ESPs, mainly in small and medium-sized organizations. Graci and Dodds (2008) stated in their study that, hotels being different in size and category, cases of going green are not readily shared among the industry. Further, this study stressed the need to share information on environmental issues and best environmental practices among different categories of hotels.

The high initial implementation cost of ESPs was found to be a major barrier in implementing the ESPs in hotels in addition to an existing non-supportive building structure that makes it difficult to implement ESPs because of the need for major infrastructural changes (McNamara & Gibson, 2008). Also, Micioni (2009) reported that this initial high implementation cost provides financial benefits in the long run. He suggests starting with small changes initially and gradually incorporating larger changes. He further stated that these changes should be incorporated to make the environment better at the destination where the hotels exist. Hotels also face barriers such as a lack of engineers, vendors, housekeepers, landscapers, and

managers who are familiar with the green concept.

Another major barrier to going green is the lack of demand from the customer side. The customer demand for green services can directly influence the hoteliers' intention to go green (Satchapappichit et al., 2020). Most of the customers are not conscious of the green initiatives of hotels (Han et al., 2010). Many customers associate green hotels with a lack of luxury services (Ginsberg & Bloom, 2004; Nadia et al., 2020). The green initiative of linen reuse is often linked to the cost-cutting tool of concerned organizations and affects guests' experience, and they might select to stay in another hotel next time. The studies of environmental management in hotels and customers' attitudes towards these green practices by Amazonas et al. (2018) and Jauhari and Manaktola (2007) reported that hotel organizations are afraid to implement these practices as they believe that the initial high operational cost could not be charged to customers. A study of barriers and drivers of environmental management systems in the Lebanese food industry states that the main barrier behind the implementation of ESPs is the absence of government support and stakeholders' demand. The other reason is that ISO 14001 and other such accreditations are not a legal requirement to run a food business (Massoud et al., 2009).

In conclusion, many previous studies have recognized common items of barriers as deficiency of environmental knowledge (Saleh & Jawabreh, 2020), lack of government support (Nyide & Lekhanya, 2016; Tan & Teo, 2000), deficiency of pro-environmental attitude (Kaur, 2020), deficiency of experienced human resources (Chan, 2008), initial high implementation cost and non-supporting infrastructure (McNamara & Gibson, 2008; Chan, 2020), lack of customer demand for green services (Jauhari & Manaktola, 2007), employees' resistance to change, weak legislation (Bhal, 2014) and the high cost and complicated procedure of green accreditation (Chan, 2020).

### Research Methodology

The main objective of this study was to discover the barriers to ESPs in the hotel industry of Punjab, India. A total of 88 classified hotels were selected to meet the objective. This study used a quantitative method. The

official letter about the objective of this survey was sent to all the concerned hotels in the survey area. This research paper has adopted the survey technique to collect firsthand information from the hoteliers.

### Research Questionnaire Development

The research questionnaire was developed in four stages. Firstly, the researcher developed the draft of a questionnaire with 16 items to measure the construct of barriers, keeping in view the items applied in previous studies (Ayuso, 2006; Park & Kim, 2014; Mittal, 2014). Secondly, the questionnaire was pretested in two stages to check the content validity. In the first stage, the questionnaire was evaluated by three doctorate academicians. In the second stage, the questionnaire was evaluated by two managers from the hotel industry. The researcher took prior appointments from managers according to their convenience so that feedback could be gathered. The respondents were encouraged to put remarks against the variables that were not clear to them. Most of the experts mentioned that the research questionnaire is easy to understand, but some recommended a few modifications in some questions. Overall, some problems were identified in common in both stages. Therefore, some changes were made in the wording of some questions.

In the third stage, the research instrument was pilot tested with 25 respondents. The reliability test was applied to these responses to ensure the reliability of statements and the Cronbach alpha coefficient value of 0.864 indicated satisfactory reliability for all items. A value above 0.7 is considered reliable (Pallant, 2005) and acceptable (Sekaran & Bougie, 2016). Based on Veal (2018), the purpose of the pilot study was to test the questionnaire wording, questionnaire sequencing, questionnaire layout, understanding of questions by respondents, response rate, response time, test survey arrangements, and test analysis methods. Finally, the researcher developed the final version of the research questionnaire with 14 items to measure the barriers.

### Study Area and Sample

The research study selected Punjab in India as a study area. Punjab is a famous tourist destination for religious and business purposes. This state has a range

of hotel establishments, ranging from basic economy class to luxury class.

Thorough consideration was given to decide that the sample for the study as the selection of the entire population of all classified hotels was not feasible. The current authentic list of classified hotels was not available for the state.

At first, it was decided to select the hotels that were formally classified by the Hotel and Restaurant Approval and Classification Committee (HRACC), but in India, hotels enjoy the voluntary decision to get a classification from HRACC, Ministry of Tourism. Most of the hotels classify themselves according to facilities and services provided to customers. In Punjab, there are only eight hotels that are classified by HRACC (as of 10th March 2019). The data from eight hotels was not enough to develop the generalization of the result.

Finally, a list of hotels was taken from the Hotel & Restaurant Association of North India (HRANI) website by including as the sample all the 49 classified hotels that were registered with the organization in 2018. In addition to the census of these hotels, 39 additional hotels (having more than 10 rooms) were selected on the judgmental sample technique to collect more responses for generalizing the results.

HRANI is the north wing of the Federation of Hotel & Restaurant Associations of India (FHRAI).

FHRAI is a very reputable association of the hospitality industry in India. It was established in 1955 with the commitment to the progress of the hospitality industry through education, training, professional help, research, and publications. It provides an interface between industry, government, and stakeholders.

#### Data Collection

The responses were collected on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The respondents were asked to rate their agreement or disagreement with the item based on the significance they assign to an item (Veal, 2018), to explore the positive or negative trend towards the proposition. Responses were collected from managerial level personnel only. Following the purposive sampling techniques suggested by Creswell (2016), these respondents were selected because of their high level of par-

ticipation in policy formulation and strategy planning and their awareness of ESPs. A total of 350 questionnaires were distributed in 88 classified hotels, 221 responses were obtained, and 202 responses were found usable for conducting the data analysis.

The data collected was edited, coded, and evaluated with the help of Statistical Package for Social Scientists (SPSS) 22.0 for Windows.

#### Potential Items to Measure the Barriers

Many previous researchers (Levy, 2000; Bohdanowicz, 2006; Tzschentke, 2008; Bergin, 2010; Ustad, 2010; Mittal, 2014; Chan et al., 2018; Chan, 2020) have reported barriers to ESPs that are hindering the adoption and implementation of ESPs in hotel businesses. The barriers mentioned in previous studies have reported the obstructing of the execution of ESPs in the hotel business.

The identification of the final items to measure the barrier was a careful and difficult task as the identification of well-adopted variables from previous studies was observed to be helpful for the respondents in replying more conveniently (Rowlinson, 1988).

After the literature review, content validity, pilot study, and reliability check, 14 possible barriers to ESPs were identified for this study that are listed in Table 1.

#### The Result Analysis and Discussions

The statistical outputs and analysis of this research study are presented in the tables on the next pages.

#### Profile of Respondents of Punjab Hotel Businesses

The 88 hotels that were selected for the collection of data include hotels having varying types of ownership, category, sizes, and age of the property. The response rate according to the profile of hotels has been presented in Table 2.

The small size hotels with rooms between 10 and 50 responded in great number and contributed 64.8% of responses. The two-star, three-star and four-star properties contributed 81.7% of responses. In the category of the type of ownership, locally owned and operated contributed 42.6% of responses. In the category of the

Table 1 List of Potential Items for Barriers

Barrier Factors	References
Initial implementation cost	Levy (2000); Tzschentke (2008); McNamara and Gibson (2008); Ustad (2010)
Certification is costly	Ustad (2010)
Complicated certification process	Ustad (2010)
Lack of awareness of the concept	Levy (2000); Bohdanowicz (2006); McNamara and Gibson (2008); Bergin (2010); Mittal (2014)
Weak legislation	Doody (2010); Mittal (2014)
Change of routines and management style	Ayuso (2006)
Existing non-supportive structure	McNamara and Gibson (2008); Ustad (2010)
Low top-management commitment	Mittal (2014)
Little guest concern	Hillary (2017)
Guests are uncooperative	McNamara and Gibson (2008)
Lack of professional help	Barnes (2007); Ustad (2010); Mittal (2014)
Limited green technology	Ustad (2010)
Uncertain and/or insignificant economic advantage; slow return on investment	Revell and Blackburn (2007); Ustad (2010)
Ineffective and/or non-enforcement of laws; corruption; inadequate monitoring mechanism	Mittal (2014)

Table 2 Response Rate According to Profile of Hotel Businesses

Category	Item	f	f (%)
Number of rooms in respondent hotels	10–25	73	36.1
	26–50	58	28.7
	51–75	39	19.3
	76–100	11	5.4
	>100	21	10.4
Total		202	100
Category of respondent hotels	One star	2	1.0
	Two Star	49	24.3
	Three Star	61	30.2
	Four Star	55	27.2
	Five Star	29	14.4
	Five Star Deluxe	6	3.0
Total		202	100
Type of ownership of respondent hotels	Part of an international chain or group	67	33.2
	Part of a locally operated chain or group	49	24.3
	Locally owned and operated	86	42.6
	Total	202	100
Age of respondent hotels	2 years or less	23	11.38
	3 to 5 years	46	22.77
	6 to 10 years	78	38.61
	11 to 15 years	28	13.86
	16 to 20 years	13	6.43
	21 to 25 years	2	0.99
	26 years or more	12	5.94
Total		202	100

age of respondent hotels, the properties aged between 3–10 years contributed 61.38% of responses.

In conclusion, it is found that locally owned, small, and medium sized hotel businesses from two to four-star categories in the age group of three to ten years contributed maximum responses to the data.

#### Ranking of Barriers

Each item is evaluated by combing the responses of hoteliers on a 5-point Likert scale where 1 = strongly

disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. Each result is evaluated by the mean and normalized values that represent the respondents' view of each item.

Those hotels that were following ESPs in operations as well as those that had yet to implement them reported the following significant barriers. The initial implementation cost was reported as the most significant barrier with a mean value of 4.40 and SD = 0.65, followed by the cost of certification with a mean

**Table 3** Ranking of Barriers Concerning the Implementation of ESPS

Barriers	(1)	(2)	(3)	(4)
Initial implementation cost	4.4010	0.65608	1	1.00*
Certification is costly	4.2723	0.79808	2	0.85*
Complicated certification process	4.2574	0.74183	3	0.83*
Lack of awareness of the concept	4.2426	0.80147	4	0.81*
Weak legislation	4.1733	0.81934	5	0.73*
Change of routines and management style	4.1287	0.80004	6	0.68*
Existing non-supportive structure	4.1188	0.88421	7	0.67*
Low top-management commitment	4.0594	0.82041	8	0.60*
Little guest concern	3.9356	0.78596	9	0.45
Guests are uncooperative	3.7970	0.84841	10	0.29
Lack of professional help	3.7525	0.94533	11	0.23
Limited green technology	3.6931	0.97473	12	0.16
Uncertain and/or insignificant economic advantage; slow return on investment	3.6931	0.85510	13	0.16
Ineffective and/or non-enforcement of laws; corruption; inadequate monitoring mechanism	3.5545	0.91939	14	0.00

*Notes* Column headings are as follows: (1) mean, (2) standard deviation, (3) Rank, (4) normalized value.

value of 4.27 and  $SD = 0.79$ . The third most influential barrier was the complicated certification process with a mean value of 4.25 and  $SD = 0.74$ . Lack of awareness of concept remained in 4th place with a mean value of 4.24 and  $SD = 0.80$ . The following four barriers remained in 5th, 6th, 7th, and 8th place respectively: weak legislation with mean value 4.17 and  $SD = 0.81$  (place 5), change of routine and management style with mean value 4.12 and  $SD = 0.80$  (place 6), existing non-supportive structure with mean value 4.11 and  $SD = 0.88$  (place 7) and low top-management commitment with mean value 4.05 and  $SD = 0.82$  (place 8). The remaining barriers were not found to be sig-

**Table 4** Kendall's W Test Statistics

N	202
Kendall's W*	0.101
Chi-square	264.864
Degrees of freedom	13
Asymp. significance	0.000

*Notes* \* Kendall's coefficient of concordance.

nificantly important in hindering the implementation of ESPS in the survey area.

#### Kendall's W Test

Kendall's W test is a normalization of the statistic of the Friedman test and is applied to evaluate the tendency of agreement between the respondents. Kendall's W ranges from value 0 to value 1 where value 1 represents complete agreement among the respondents and value 0 denotes complete disagreement. Intermediate values indicate the greater or lesser degree of agreement among the respondents. The Kendall's W value 0.101 and the significance level of Kendall's W at 0.000 indicate statistically significant agreement between respondents about the barrier items to ESPS. The Kendall W test and mean ranking of barriers to ESPS yielded some very interesting results in context of the actual adoption and execution of ESPS in the hotel businesses of Punjab. Some barriers were not found to be critical in the actual implementation process of ESPS while others played a vital role behind it, as per the reporting of respondent hoteliers.

#### Discussion

The identified critical barriers consistent with previous studies are discussed below.

##### Initial Implementation Cost

The result of this study reported the initial high implementation cost as the most influential barrier behind the implementation of ESPS. According to Ann et al. (2006), the implementation cost includes document completion, the process of modification, adoption, and implementation of the concept, hiring of professional staff, training of existing staff, procuring of related computer software, etc. It is difficult to go green

without a sound financial foundation. Thus, the initial implementation cost was ranked among the top eight barriers. The findings are consistent with a previous study (Rowe, 2018) that also reported a high implementation cost as a significant barrier to ESPs.

Chan (2008 as cited by Calvache & Evra, 2008) reported the opinion of hoteliers about the cost related to greening the organizations as follows:

- 'It is too expensive to install energy and water efficient equipment.'
- 'Our financial resources have a significant influence on the type and scale of pro-ecological initiatives undertaken.'
- 'Pro ecological initiatives are too expensive, although profitable in the long run. That is, in well-organized countries there are special finance schemes available, such as grants, loans, tax reductions, and other economic incentives. These are economic aspects that play decisive roles in the decision-making process concerning environmentally oriented solutions.'

The adoption and implementation of ESPs were found to be associated with the availability of financial resources. According to previous studies as discussed in earlier chapters, the infrastructure cost goes up by 10 to 15% if the building is to be made green to meet the accreditation guidelines of certifying agencies.

The above findings indicate that there are significant costs associated with start-up as well as maintenance of the Environmental Management System (EMS) and this is the most significant barrier behind the application process. To overcome this barrier, financial institutions and banks should provide easy and flexible grants and loans for implementing sustainable technologies in the business. For example, in Hong Kong, the banks are providing easy loans for the development of green projects (Gou et al., 2013). It is also necessary to intimate here that the initial cost of implementation of ESPs must be compared against the tangible and intangible payback in the future.

#### Certification is Costly

The certification cost is found to be the second most influential barrier by the managerial responses. The

respondents were guided to mark the answers on a Likert scale and most respondents agreed that getting the green accreditation certificate is a costly affair. The studies of Ayuso (2006) and Verma and Chandra (2018) reported that different green certifying agencies have different processes and fees for getting the accreditation and there is a lack of standardized process. In addition to this, recertifying is also very costly and some certifications need to be renewed every year. In conclusion, it is found that getting the green certification is a costly affair and even the renewal cost is so significantly high that it is beyond the limit of medium and small organizations. In Punjab, most of the hotels are under the category of medium and small businesses and face a lack of financial resources in the context of getting the green certification.

#### Complicated Certification Process

In this study, the third most reported barrier was the complicated process of getting a green certification. The green concept is a continuous process that needs regular management and evaluation for the effective implementation and actual environmental sustainability at the destination. The research studies of Chan and Wong (2006) and Ann et al. (2006) stated five basic principles for the effective implementation of ESPs in the organization: (1) commitment towards environment and policy formulation, (2) planning the environmental actions, (3) adoption and practicing of environmental actions, (4) evaluation and correction of action, (5) management review. All the above-mentioned principles require lots of paperwork, time devotion, and commitment of top management for effective working. Thus, it is concluded that getting the certification and maintaining its effective working is a complicated and difficult process that requires extra time devotion of management and other concerned staff, making it difficult to adopt and implement in addition to routine working.

#### Lack of Awareness of the Concept

According to the result of this study, less awareness of the green concept and the benefits associated with its implementation was the fourth most reported barrier. Inconsistent with this result, Chan (2008) and Graci



and Dodds (2008), in their studies, found a lack of knowledge of the green concept to be a critical barrier. As the concept of environmental sustainability is at a growing stage in India, most of the hotels' managers reported a lack of knowledge of the concept.

Educating customers and industry people about the environmental issues and benefits of implementing ESPs in business would help to boost the acceptance and actual execution of environmental sustainability in the companies. For achieving this purpose there is a requirement of disseminating the environmental information among the stakeholders employing research literature, seminars, conferences, and print media, etc.

#### Weak Legislation

In this study, weak legislation is found to hinder the implementation of ESPs. The findings reported that hotel managers observe weak legislation to be an important barrier behind the implementation of ESPs. Most of the respondents reported that hotel businesses do not take environmentally sustainable initiatives because of the lack of environmental legislation and regular environmental inspection by government agencies. This observation is consistent with the results of Mittal (2014), who reported weak legislation as the most important barrier behind the implementation of ESPs. According to Chan et al. (2018), the hotel businesses would meet the terms of expectations regarding environmental sustainability if well defined in the form of legislation requirement.

The findings suggest that government agencies, through legislation and power to pressurize the hotels to implement the ESPs, can stimulate the environmental decisions of organizations. Hotel businesses that are lacking in the effective implementation of ESPs should be suitably punished by imposing penalties for the same.

#### Change of Routine and Management Style

Another significant barrier behind ESPs' implementation is the resistance to change of deep-rooted old-style routine and management. This barrier is found to have a close association with other barriers such as initial implementation cost, the lack of awareness of the

concept, lack of professional experts, etc. In the context of this study, this factor is considered as a moderately critical (not the utmost critical) barrier. This factor received an average response from managers, and the reason may be associated with the fact that respondents were not willing to accept this factor to be associated with them. Most hotel managers work in conventional ways and are not comfortable in changing their way of working. Moreover, the hotel industry is a completely commercial sector and managers are paid to earn profits for the organizations. Therefore, managers do not propose changes to top management that require huge investments and change in conventional routine work. The findings are consistent with the previous studies of Köseoglu et al. (2018) and Okumus et al. (2017) which stated that change-resistance is a significant barrier in the environmental sustainability process.

#### Existing Non-Supportive Structure

This factor received an average response, neither too high nor very low by the respondent managers. The implementation of environmentally sustainable actions requires many infrastructural alterations in the existing buildings, such as installation of water and energy conservation fixtures and equipment, solar energy systems, rainwater harvesting, installation of vacuum-sealed double-glazed windows, etc. These infrastructure changes are also associated with significant expenses. In this study, 13 percent of sample hotel properties were more than fifteen years old with conventional infrastructure features. The reason for the average response for this barrier might be the lack of awareness in the respondents about the infrastructure changes required to introduce the ESPs in the organization. The significance of this barrier is also reported by Mak and Chang (2019).

#### Low Top Management Commitment

The item 'low top management commitment' received an average response by the managers of respondent hotels. Respondents do not feel that top management is less devoted to the adoption of ESPs in the organization. The slow progress of the green hotels may be

linked to the non-popularity of the concept in the region rather than associating it with low support of top management.

Summary: To sum up, it is stated that the acceptance and implementation of ESPs in hotel organizations have gained a high level of attention globally. However, the adoption of this concept in Asian countries like India is still at the beginning stages and facing many barriers. These barriers should be overcome to boost the growth of the environmental sustainability concept in the hotel industry. This research study was an attempt to identify the barriers which are hindering the acceptance and actual implementation of the environmental sustainability concept in the region. The study applied a survey method to collect the overall 202 responses. There are two categories of barriers, significant and non-significant. The variables having Normalized Value more than 0.50 were considered significant and variables having Normalized Value lower than 0.50 were considered as non-significant. The findings reported that 8 out of 14 barriers were significantly hindering the acceptance and execution process of ESPs in the hotel businesses. The most significant barriers were identified as initial implementation cost; the cost of certification; complicated certification process; lack of awareness of the concept; weak legislation; change of routine and management style; existing non-supportive structure; and low top management commitment towards the concept.

However, the rest of the barriers such as little guest concern; guests are un-cooperative; lack of professional help; limited green technology; uncertain and/or insignificant economic advantage; slow return on investment; ineffective and/or non-enforcement of laws/corruption/inadequate monitoring mechanism were not found to be significant in hindering the process of adoption and implementation of ESPs.

Suggestions to overcome these barriers are provided in Table 5.

### Managerial Implication

It is clear from the findings that knowledge of critical barriers is important to ensure the effective implementation of ESPs and to sustain the natural environment. The barrier of initial investment and high cost of certi-

fication is important during ESPs' adoption and hotel businesses need to focus on the development of financial resources.

The implication of this study will help the local government and hotel businesses in Punjab to understand the critical barriers that might hinder the process of establishing the actual ESPs. The stakeholders can prepare strategies well in advance to overcome these barriers. It is also necessary to enhance the environmental knowledge of hoteliers. This research can be extended to understand the difficulties faced by different categories of hotels in implementing the ESPs in their organizations.

The findings of this study help to adopt and implement the ESPs more easily in hotel businesses in the small tourist states. This research can be very informative to the businesses that need to change their conventional way of operations to ESPs. However, all the barriers cannot be removed at the same time but should be removed one after another.

### Opportunities for Implementation of Environmentally Sustainable Practices for Hotel Business in Punjab, India

The adoption and implementation of ESPs are understood not only as having high initial cost but potentially associated opportunities also. These results indicate that ESPs' benefits go further beyond the initial high implementation costs. Regulatory compliance is found as the most important benefit in addition to awards and appreciations at different levels and favourable guest behaviour. The reduced health risk and accidents are also reported by Sangle and Shitole (2017). Previous research studies have identified numerous opportunities associated with the implementation of ESPs in organizations, such as competitive edge, cost savings, customer loyalty, employee retention, legal compliance, social responsibility and risk management, etc. Punjab has a huge array of hotels located in the state that cater to the needs of tourists. According to an article of *The Hindustan Times* (a renowned newspaper of India), Punjab holds 12th position in India in the context of overall tourist arrival in the state as cited by Sharma (2017). This sample state earned 224 million USD in 2012 from tourists,

Table 5 Possible Approaches to Overcome the Barriers

Barriers	Possible approaches
Initial implementation cost	Hotel companies can start with small initiatives that require low initial investment such as using energy-efficient lighting, low-pressure taps and showerheads, reduce and reuse waste, etc. The active involvement of the engineering department can also help minimize the implementation cost (Chan et al., 2018).
Certification is costly	Hoteliers to work with hotel associations to lobby with the government to suggest financial support for the adoption and implementation of ESPs (Cheung & Fan, 2013).
Complicated certification process	ESPs consulting is suggested (Miles et al., 1999).
Lack of awareness of the concept	Hotel organizations should share environmental knowledge with counterparts (Chan et al., 2018).
Weak legislation	The government should introduce some effective and firm environmental laws for businesses and offenders should be punished strictly. In India, the Environmental Impact Assessment (EIA) 2006 needs to be more effective (Bhal, 2014).
Change of routines and management style	Develop an environmental vision by disseminating information on environmental issues of non-sustainable behaviour as suggested by Yuriev et al. (2018).
Existing non-supportive structure	The green certification of existing buildings (Indian Green Building Council, n.d.) does not require major infrastructural changes.
Low top-management commitment	Managers can convey the tangible benefits of implementing ESPs to owners/top management (Chan et al., 2018).

while it devoted only 0.19% of the state budget towards tourism activities. The domestic tourist arrival in the state was 2.57 crores in 2015 as compared to 1.05 crores in 2010. Similarly, the international tourist arrival has also seen a rise and was 2.42 lakh as compared to 1.37 lakh in 2010 (Sharma, 2017). The research study of Singh and Singh (2017) observed a significant contribution of the service sector to the Gross State Domestic Product (GSDP) in the state, and hotel and restaurant businesses were found to play an important role within this service sector's contribution. As this sector plays a significant role in the economy of the sample state, its growth cannot be suggested to stop. So, it is found that the implementation of ESPs in hotel businesses in Punjab is of foremost importance for the achievement of both the survival of the industry and maintaining the sustainability of the environment.

### Limitations and Suggestions

This empirical study has some limitations also. Data was collected by a quantitative research questionnaire

from hoteliers in Punjab and thus are not broadly generalizable. The data collected was limited to the hotel managers' views on the barriers to ESPs.

Despite the small size sample, this research study should be seen as a primary step in exploring the observed barriers behind the implementation process of ESPs, and that stimulates the curiosity of other researchers to carry out confirmatory research with larger geographical area and sample size to validate the conclusions of this study.

This study has not explored the effect of the size of hotels, ownership style of hotels, or category of hotels as barriers to ESPs. Further studies can evaluate the effect of these characteristics on the adoption and implementation of ESPs.

The barriers identified in this study have proven influence on the adoption and implementation of ESPs but not on environmental attitudes. Future research is thus suggested to explore whether these barriers affect hoteliers' environmental attitudes and if so, the ways to overcome them should be studied.

The recommendations given in this study to over-

come the various barriers need more details that are possible with additional research. Future research should explore the success rate of these recommendations and build strong execution plans for businesses that want to incorporate ESPs in their organizations.

### Conclusion

The tourism or the hotel industry is a people-oriented industry and thus the impact of the individual hotel is not the direct focus of the environmentalist or researchers and this results in the slow adoption rate of ESPs. Besides this, hotel businesses vary in sizes and star classification, thus business cases of ESPs are not voluntarily shared among businesses. The same problem has been discussed in many international conferences such as The Responsible Travel and Tourism Forum 2008, The International Ecotourism Society Eco and Sustainable Tourism Summit 2008, and The Tourism Industry Association of Canada Sustainability Forum 2008.

To make the Punjab hotel industry more environmentally sustainable, many barriers need to be overcome, such as financial crunches, weak legislation, low top management commitment, existing infrastructure, lack of organized information, and conventional work methods.

There is a need to share information about best green practices by established businesses with small and medium-sized hotel organizations to guide them to move forward towards greening the business. There is a need for a top-down approach starting from strict environmental legislation to involvement of top management to final implementation strategies. The hotel managers need to change their conventional methods of work and realize that some ESPs are practical, easy to implement, and cost-effective, and can reduce environmental impact and attract financial gains to organizations, too. Besides this, because the composition of the Punjab hotel businesses is complex and uneven due to various sizes, clientele, type of ownership, locations, and influences of stakeholders, an action plan of information-sharing regarding best ESPs and benefits associated is required for effective implementation of the green concept. Policymakers, managers, and other operational staff need to develop a positive envi-

ronmental attitude and work collectively to achieve a country-wide environmental commitment. Currently, hotel businesses are self-driven towards environmental sustainability rather than demand-driven. The environmental commitment ensures competitive advantage and improved business performance that leads to reduced costs, improved brand image, and future alignment with customer demand. The hotel businesses need to move forward to sustain the environment and to safeguard the future of the industry itself.

The green issues, sustainability, environmental management, and corporate social responsibility are the key issues of future research in the field of hospitality. Responding to the call for research in these key areas, the results of the current study not only help in filling the research gap by identifying the barriers behind the implementation of ESPs in the developing countries and contributing to theoretical knowledge but also offer a valued foundation for policymakers and stakeholders to take suitable actions to mitigate the barriers related to the implementation of ESPs and subsequently promoting the environmental sustainability concept in the hotel businesses.

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