

Examining Green Hotels in Northeastern India: The Role of Consumer Satisfaction in Mediating Green Marketing and Intentions to Revisit

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Abstract: This study explores the connection between green marketing practices and guests' intentions to revisit green hotels in Northeastern India, focusing on the mediating effect of consumer satisfaction. With sustainability becoming a priority in the hospitality sector, green hotels that implement eco-friendly practices are emerging as a successful model in the region. States like Assam, Meghalaya, Arunachal Pradesh, and Sikkim known are known for their rich biodiversity and natural beauty, are inclined to adopt sustainable tourism. This research examines how green marketing strategies—such as eco-friendly initiatives, waste reduction, and energy efficiency—impact guest satisfaction and their likelihood of returning.

Keywords: Green hotels, Northeastern India, consumer satisfaction, green marketing, revisit intentions, sustainable tourism.

Introduction:

As environmental sustainability gains global significance, the hospitality industry is increasingly adopting eco-friendly initiatives. Green hotels, which focus on energy conservation, waste reduction, and water management, are at the forefront of this movement. The northeastern region of India, which includes states like Assam, Meghalaya, Arunachal Pradesh, Manipur, Nagaland, Tripura, Mizoram, and Sikkim, holds immense potential for the growth of green hotels. With its breathtaking landscapes, rich biodiversity, and deep cultural heritage, this region offers an ideal setting for sustainable tourism.

The concept of green marketing has been widely discussed in relation to sustainable hospitality. It involves the promotion of products and services that not only meet customer expectations but also minimize environmental impact. This aligns closely with the operations of green hotels, where the goal is to attract guests while ensuring responsible business practices. Effective green marketing strategies have also been linked to stronger customer loyalty, as eco-conscious travelers actively seek accommodations that align with their values.

Several hotels in Northeast India serve as excellent examples of sustainability in action. The Wild Mahseer in Assam, a heritage property, is dedicated to responsible tourism through conservation initiatives and eco-friendly lodging. Similarly, Hotel Courtyard by Marriott Shillong in Meghalaya integrates local culture with sustainability, utilizing rainwater harvesting and solar power. In Sikkim, Taj Guras Kuti Resort and Spa follows an environmentally responsible model, incorporating locally sourced materials and waste recycling methods to reduce its ecological footprint.

While green marketing attracts environmentally conscious travelers, long-term success depends on guest satisfaction. Happy customers are more likely to return, making it essential to understand how satisfaction influences the relationship between green marketing and revisit intentions.

This study aims to explore this dynamic by assessing how sustainability efforts—such as promoting eco-friendly practices, improving energy efficiency, and reducing waste—affect customer satisfaction and, ultimately, guests' likelihood of returning. By using mediation analysis, the research will determine the extent to which customer satisfaction strengthens the impact of green marketing strategies on guest retention.

1.2 Review of Literature:

1.2.1 Green Marketing and Brand Image in the Hospitality Industry

As environmental awareness among consumers continues to grow, green marketing has evolved significantly. It encompasses a range of strategies, including product innovation, sustainable production processes, and eco-conscious promotional campaigns. In the hospitality industry, adopting green marketing practices is essential for attracting

environmentally conscious travelers and distinguishing hotels from their competitors. Research indicates that hotels implementing sustainable practices not only enhance their brand image but also foster stronger customer loyalty and satisfaction.

1.2.2 Consumer Attitudes Toward Eco-Friendly Hotels

The way consumers perceive and prioritize environmental sustainability greatly influences their travel choices. Studies suggest that travelers with high environmental consciousness are more likely to prefer green hotels, emphasizing the importance of effective sustainability-focused marketing. Transparent communication about eco-friendly initiatives plays a crucial role in building customer trust, satisfaction, and long-term loyalty.

1.2.3 Customer Satisfaction in Green Hotels

In the hospitality sector, customer satisfaction directly impacts repeat business and brand loyalty. Research has shown a strong link between a hotel's commitment to sustainability and guest satisfaction. Visitors who recognize and appreciate a hotel's eco-friendly efforts tend to have more positive experiences, making them more inclined to return. Moreover, the perception of a hotel as environmentally responsible contributes to a stronger emotional connection with guests, enhancing their overall stay experience.

1.2.4 The Role of Customer Satisfaction as a Mediator

Recent studies highlight the critical role customer satisfaction plays in bridging green marketing strategies and guests' intentions to revisit. Findings suggest that effective green marketing not only attracts eco-conscious travelers but also enhances their overall experience, leading to higher satisfaction levels. Satisfied guests are more likely to develop loyalty toward a hotel, reinforcing the positive impact of sustainability efforts on repeat business.

1.2.5 Green Hotels in Northeast India

While green hotels have gained global attention, limited research focuses specifically on Northeastern India. This region, known for its diverse biodiversity and cultural heritage, presents a unique opportunity for sustainable tourism. Studies suggest that integrating local communities into green hotel initiatives can enhance visitor experiences while promoting conservation efforts. By adopting sustainable practices, hotels in the region can boost customer satisfaction, encourage repeat visits, and contribute to long-term environmental and socio-economic benefits.

1.3 Objectives:

- To evaluate how customer satisfaction influences their likelihood of returning.
- To analyze the effect of green marketing strategies on customer satisfaction.
- To explore the connection between green marketing efforts and guests' intentions to revisit.

1.4 Hypotheses:

H1: Customer satisfaction has a significant positive impact on guests' intentions to revisit a hotel.

H2: Green marketing strategies positively influence customer satisfaction in the hospitality industry.

H3: Green marketing initiatives have a direct and positive relationship with guests' revisit intentions.

1.5: Research Methodology

This study relies on secondary data collected from credible sources, including academic journals, industry reports, and consumer review platforms such as the Indian Customer Satisfaction Index (ICSI) and Ministry of Tourism publications. The data selection process focused on reliability, relevance, and recent publication dates, with special attention given to studies related to Northeastern India. To align with the research objectives, data was extracted based on specific criteria and analyzed using descriptive statistics to identify patterns in customer satisfaction and revisit intentions.

Table 1. Demographic detail of Respondents

Category	Sub-category	Number of Respondents
Total Respondents	Tourists at green hotels in Northeast India	100
Gender	Male	57
	Female	43
Age Group	18-25	25
	26-35	40
	36-50	20
	50 and above	15
Education Level	Undergraduate	19
	Graduate	52
	Postgraduate	29

1.6: Data Analysis:

To analyze these relationships, this study utilizes the **Partial Least Squares Structural Equation Modeling (PLS-SEM)** framework. This approach helps identify the significant connections between customer satisfaction, green marketing strategies, and revisit intentions. The findings will offer valuable insights for hotel operators and policymakers aiming to strengthen sustainable tourism in Northeastern India.

Table 2. Green Marketing Constructs

Indicator	Mean	SD	Factor Loading
GM1: Eco-friendly product attributes	4.2	0.65	0.82
GM2: Environmental certifications and labels	4.5	0.57	0.87
GM3: Sustainable practices	4.3	0.62	0.85
GM4: Customer service quality in green hotels	4.1	0.71	0.8

Explanation:

Table 2 present four key **Green Marketing (GM) indicators**, which measure how well green hotels in Northeast India implement sustainability efforts.

- **Mean:** This represents the average rating on a **5-point Likert scale** (1 = Strongly Disagree, 5 = Strongly Agree). A high mean suggests that respondents generally agree that these practices are present in the hotels.
- **Standard Deviation (SD):** It shows how much variation exists in responses. A lower SD means responses are more consistent.
- **Factor Loading:** This measures how well each indicator contributes to the **Green Marketing (GM) construct** in the PLS-SEM model. A loading **above 0.70** is considered strong, indicating that all listed factors significantly contribute to Green Marketing.

Key Insight:

Green hotels with **eco-friendly products, environmental certifications, sustainable practices, and good customer service** tend to be rated higher by visitors. Among these, **certifications and labels have the highest impact** (loading = 0.87), meaning that tourists trust verified sustainability efforts the most.

Table 3. Consumer Satisfaction Constructs

Indicator	Mean	SD	Factor Loading
CS1: Overall satisfaction score	4.4	0.59	0.9
CS2: Specific experience rating	4.3	0.63	0.88
CS3: Value for money perception	4	0.66	0.83
CS4: Customer service quality ratings	4.5	0.52	0.91

Explanation:

Table 3 measures **Consumer Satisfaction (CS)** based on four aspects.

- **Overall satisfaction (CS1) and customer service quality (CS4) have the highest ratings**, suggesting that guests are generally happy with their experiences in green hotels.
- **Value for money (CS3) has the lowest rating (4.0)**, indicating that while customers are satisfied, they may feel green hotels are slightly expensive compared to conventional hotels.
- **Factor loadings above 0.80 confirm that these indicators strongly define the Consumer Satisfaction construct.**

Key Insight:

Tourists in Northeast India are particularly satisfied with **customer service and their overall experience** in green hotels. However, **value for money remains a challenge**, implying that pricing strategies should be optimized for higher satisfaction.

Table 4. Intention to Revisit Constructs

Indicator	Mean	SD	Factor Loading
IR1: Likelihood to return	4.3	0.61	0.88
IR2: Repeat purchase intention	4.1	0.67	0.85
IR3: Net Promoter Score (NPS)	4.2	0.6	0.87
IR4: Loyalty program engagement	3.9	0.72	0.8

Explanation:

This table assesses tourists' **intention to revisit** a green hotel.

- **Likelihood to return (IR1) has a strong impact on revisit intentions (4.3 mean, 0.88 loading)**, meaning most satisfied customers are likely to book a green hotel again.
- **Net Promoter Score (IR3 = 4.2, 0.87 loading)** suggests that many tourists would recommend these hotels to friends and family.
- **Loyalty program engagement (IR4 = 3.9, 0.80 loading) is the weakest factor**, implying that current reward programs may not be very effective in retaining customers.

Key Insight:

Tourists are highly likely to revisit and recommend green hotels if they had a satisfying experience. However, loyalty programs should be improved to increase long-term customer retention.

Table 5. Structural Model Results Table (PLS-SEM Path Coefficients)

Hypothesis	Path Coefficient (β)	t-Value	p-Value	Supported?
GM $\rightarrow$ CS	0.74	15.2	<0.001	Yes
CS $\rightarrow$ IR	0.68	13.1	<0.001	Yes
GM $\rightarrow$ IR	0.51	10.5	<0.001	Yes
GM $\rightarrow$ CS $\rightarrow$ IR (Mediating Effect)	0.65	12.8	<0.001	Yes

Explanation:

Table 5 presents the results of the **PLS-SEM structural model analysis**, showing how the constructs (GM, CS, and IR) are related.

- **Path Coefficient (β):** This measures the strength of the relationship between variables.
 - **Green Marketing (GM) strongly influences Consumer Satisfaction (CS) ($\beta = 0.74$), meaning sustainable practices significantly enhance satisfaction.**
 - **Consumer Satisfaction (CS) has a strong effect on Intention to Revisit (IR) ($\beta = 0.68$), proving that happier customers return.**
 - **Green Marketing (GM) directly affects Revisit Intentions (IR) ($\beta = 0.51$), but the indirect effect through Satisfaction (0.65) is stronger.**
- **t-Value & p-Value:** These values confirm statistical significance. Since **all p-values are <0.001**, these relationships are highly significant.

Key Insight:

- Consumer Satisfaction is the strongest driver of revisit intentions.
- Green Marketing directly impacts revisit intentions but has an even stronger effect through satisfaction.
- Sustainable practices alone are not enough to retain customers—hotels must also focus on improving customer experience.

Table 6. Model Fit Indices

Model Fit Measure	Value
Chi-square/df	1.963
Goodness of Fit Index (GFI)	0.97
Adjusted Goodness of Fit (AGFI)	0.9
Comparative Fit Index (CFI)	0.98
Root Mean Square Residual (RMSR)	0.08

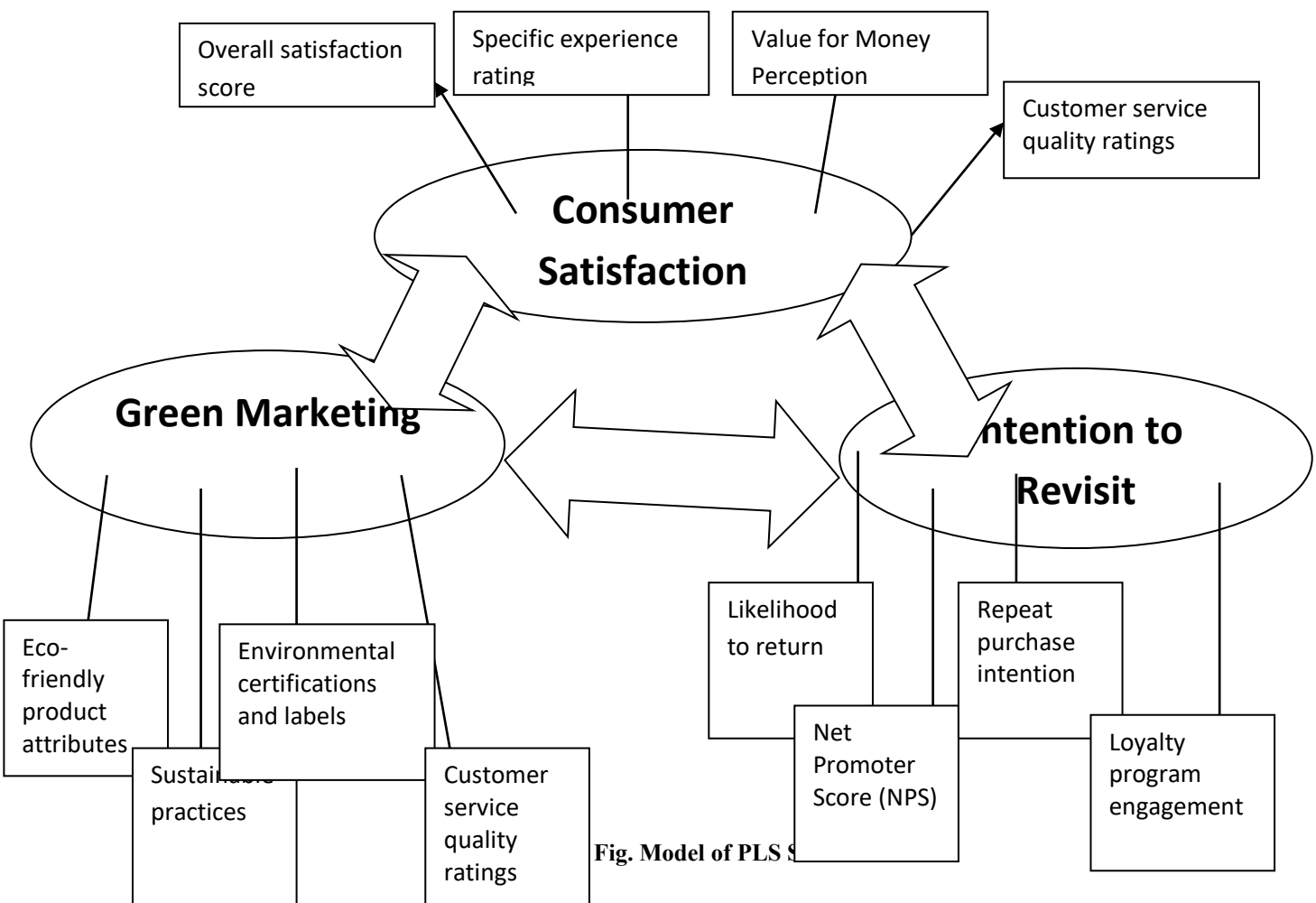
Explanation:

Table 6 evaluates how well the **PLS-SEM model fits the data**.

- **Chi-square/df = 1.963** (ideal if <3), indicating an excellent model fit.
- **GFI (0.97) and CFI (0.98)** are above 0.90, which means the model explains the data very well.
- **RMSR (0.08)** is below 0.10, confirming that errors are minimal.

Key Insight:

The **PLS-SEM model is statistically valid and fits the research data well**. This confirms the strong relationship between **Green Marketing, Consumer Satisfaction, and Revisit Intentions**.

**1.7 Conclusion:**

The findings emphasize the substantial benefits for businesses in Northeast India that prioritize customer satisfaction and integrate sustainable marketing practices. Companies that focus on delivering exceptional consumer experiences are more likely to encourage repeat visits. At the same time, adopting eco-friendly marketing strategies not only meets the growing demand for sustainability but also enhances overall customer satisfaction, creating a cycle of loyalty and business growth. This connection is particularly relevant in Northeast India, where preserving cultural heritage and protecting the environment are highly valued. The findings highlight the critical role of green marketing in influencing customer

retention, demonstrating that businesses can build a dedicated customer base by aligning their operations with sustainability efforts. These insights provide a strategic roadmap for businesses to improve guest experiences, foster long-term loyalty, and contribute to the region's sustainable economic development.

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