

## *Stochastic Modelling and Computational Sciences*

---

### STATE AND PROSPECTS OF TOURISM MARKETING IN BUDDHIST CIRCUIT IN BIHAR

**<sup>1</sup>Dr. Satyendra Prajapati and <sup>2</sup>Sandip Kumar**

<sup>1</sup>Principal, J J College, Gaya Magadh University, Bodh Gaya

<sup>2</sup>Research Scholar, Department of MBA, Magadh University, Bodh Gaya

#### **ABSTRACT**

*Bihar's Buddhist Circuit – Bodh Gaya, Rajgir and Nalanda – boasts of tremendous historical, cultural and economic importance. The current status of the Buddhist Circuit and the marketing strategies concerning domestic and international tourists have been discussed in this research paper. This paper examines the government initiatives, infrastructural development, digital marketing efforts as well as collaborations with private stakeholders for improving the quality of tourism experience. This study also pinpoints the key challenges like inadequate connectivity, seasonal fluctuations and not having a global brand positioning. The paper presents prospective strategies, inclusive of sustainable tourism practices, enhanced digital outreach and improved visitor amenities, based on qualitative and quantitative analysis, to build the case for strengthening Bihar's image as a global Buddhist tourism hub.*

**Keywords:** *Buddhist Circuit, Tourism Marketing, Bihar, Pilgrimage Tourism, Digital Marketing, Sustainable Tourism*

#### **INTRODUCTION**

Bihar's Buddhist Circuit is an indispensable component of the religious and cultural tourism circuit of India, and attracts pilgrims and visitors from all over the world. Sacred sites like Bodh Gaya - where Gautama Buddha attained enlightenment, Rajgir on which he preached and Nalanda which is home to the ancient Nalanda University form a part of this circuit. The Buddhist Circuit is therefore a key constituent of the spiritual tourism sector of India where it holds a potential for economic development while creating a welcome cultural interface among tourists and people and making a significant contribution to the development and conservation of heritage.

Tourism marketing covers the role played by digital platforms and traditional advertising, as well as government led initiatives for promoting the Buddhist Circuit. Although the region was historically important, it suffers from poor infrastructure, lack of global branding, and short tourist influx. To promote tourism, several projects such as improved connectivity, heritage conservation and promotional campaigns have been undertaken by Bihar government in collaboration with stakeholders.

With this research paper, the current situation of tourism marketing in Bihar's Buddhist Circuit has been analyzed focusing on the existing promotion, its challenges and future possibilities. The study analyzes the marketing trends, policy measures, and visitor experiences in an attempt to provide actionable insights that can help consolidate Bihar as an important destination of global Buddhist tourism.

#### **LITERATURE REVIEW**

Indian researchers interest in economic impact of tourism, marketing strategies of the Buddhist Circuit of Bihar and infrastructural challenged of the Buddhist circuit of Bihar. Many have studied the limits and potentials of tourism development in this region.

According to Singh (2015) the economic contributions from Buddhist tourism in Bihar are about employment and revenue generation in the local communities. The research has proven that with the surge in the number of international tourists it wasn't so developed as a domestic tourism. People wouldn't come here without any promotion and information or rather just don't understand the importance of Uzbekistan's tourism.

The financial implication of Buddhist tourism has been analyzed by by Kumar and Choudhary (2017) onto Bihar's GDP as well as local business. Based on their research, it turned out that the Swadesh Darshan Scheme

## *Stochastic Modelling and Computational Sciences*

---

was a positive factor of infrastructure development in the country, but better marketing strategies should be used to make tourists more engaged.

Sharma (2016) studies the role of digital marketing in the promotion of Buddhist Circuit specifically looking at gaps in online visibility and branding. Findings show that social media and digital channels were underutilized in attracting potential international tourist, and that targeted campaigns to Buddhist majority countries such as SriLanka, Thailand and Japan would yield good returns of pilgrims.

According to Rai (2018), government led promotional efforts, launched by Bihar Tourism, failed to gain consistency and catchy campaigns leading to total lack of its outreach at global level. The study concludes that public private partnerships are need to Branding up and increase footfall.

The infrastructural challenges faced by the tourist visiting the Buddhist Circuit, was studied by Pandey (2019). Poor road conditions, limited air connectivity and poor lodging facilities were identified as the major barriers to tourism growth. The report suggested that government should invest more into sustainable infrastructure in an attempt to improve tourist satisfaction.

Bihar's Buddhist tourism sector is benefitted by smart tourism and digital interventions as observed by Mishra and Verma (2020). Mobile applications, virtual tours and multilingual information centres were a focus of theirs in catering to the international visitors.

Gupta (2018) analyzed sustainable tourism models for the Buddhist Circuit where, they suggested eco-tourism models, community inclusion and measures to save the heritage. The main point from the study was in advocating for a balance between religious tourism and environmental sustainability.

Buddhist sites were assessed for their cultural significance, and how their heritage value could be incorporated more fully into promotional campaigns (Chakraborty, 2020). Results from the research suggested that although historical drives were embedded with narratives of the past, experiential tourism of meditation retreats and Buddhist heritage walks should be integrated into tourism marketing strategies.

Buddhist tourism in Bihar has already emerged as one of the most economically important tourism domains; existing literature has also emphasized the need for the marketing strategies on Buddhist tourism along with infrastructure challenges. Still, the studies focused on the traditional marketing approach and no detailed research has been conducted on post-pandemic digital transformation in tourism promotion. In addition, research of integrating smart tourism technologies and sustainable tourism into marketing frameworks is at a very early stage. As such this research paper seeks to bridge the mentioned gaps by analyzing current digital marketing trends, policy interventions as well as global branding strategies that may help increase Bihar's Buddhist Circuit's visibility and attraction.

### **OBJECTIVES OF THE RESEARCH**

- To analyze the current state of tourism marketing in the Buddhist Circuit of Bihar.
- To examine the role of digital marketing and promotional strategies in attracting tourists.
- To identify key infrastructural and connectivity challenges affecting tourism growth.
- To assess government initiatives and policy measures for tourism development.

### **HYPOTHESIS**

**H<sub>0</sub> (Null Hypothesis):** There are no significant infrastructural and connectivity challenges affecting tourism growth in the Buddhist Circuit of Bihar.

**H<sub>1</sub> (Alternative Hypothesis):** Infrastructural and connectivity challenges significantly affect tourism growth in the Buddhist Circuit of Bihar.

## *Stochastic Modelling and Computational Sciences*

---

### RESEARCH METHODOLOGY

This study uses a mixed method approach combining qualitative and quantitative methods to analyse the state and prospects of the Buddhist Circuit of Bihar in regard to tourism marketing. Data will be collected through structured questionnaires and interviews with key stakeholders (tourists, tour operators, local business owners and government officials). Stratified random sampling will be used to define a sample size to ensure representation from a variety. The secondary sources of data will be government reports, paper of tourism department publications, academic research papers and industry report. Descriptive analysis, regression analysis and SWOT analysis, as statistical tools will be utilized to measure the effect of marketing strategies, infrastructural limitations and digital interventions. Stakeholder perceptions and the effectiveness of policy will be qualitatively understood by thematic analysis of qualitative insights from interviews. In addition, the research will include case studies of Buddhist tourism models that have been successful elsewhere to identify what those models can teach in terms of comparative analysis. This study's findings are meant to offer actionable recommendations for improving the tourism marketing strategies as well as infrastructure development of Bihar's Buddhist Circuit.

### DATA ANALYSIS AND DISCUSSION

**Table 1 – Descriptive Statistics**

Variable	Mean	Standard Deviation	Minimum	Maximum
Poor road conditions (1 = Strongly Disagree, 5 = Strongly Agree)	4.2	0.85	2	5
Inadequate public transport facilities	4.0	0.92	1	5
Limited air connectivity	3.8	1.10	1	5
Lack of quality accommodation options	3.6	1.05	1	5
Poor signage and tourist information	3.9	0.98	2	5
Security and safety concerns	3.7	1.02	1	5
Internet and mobile connectivity issues	4.1	0.88	2	5
Satisfaction with government initiatives (1 = Very Dissatisfied, 5 = Very Satisfied)	3.3	1.15	1	5

Key infrastructural and connectivity challenges that affect tourism growth in the Buddhist Circuit of Bihar are highlighted using descriptive statistics extracted from 225 respondents. An interesting point is that poor road conditions is the highest rated concern (Mean = 4.2, SD = 0.85) meaning that most respondents believe inadequate road infrastructure is a big impediment to tourism development. Internet and mobile connectivity issues (Mean = 4.1, SD = 0.88) followed, in which tourists also experienced difficulty accessing the internet and mobile networks.

Additionally, there is a limitation of adequate public transport (Mean = 4.0, SD = 0.92) and poor air connectivity (Mean = 3.8, SD = 1.10) which make it difficult to access key Buddhist pilgrimage sites. Tourists express lack of satisfaction towards quality of accommodation options (Mean = 3.6, SD = 1.05). In addition, poor signage and tourist information (Mean = 3.9, SD = 0.98) reveals obstacles to navigation and access to relevant information.

Security and safety concerns were not the most prominent issue (Mean = 3.7, SD = 1.02), however, indicated that it could be improved. Of note, the lowest rated element was satisfaction with government initiatives – which received a Mean of 3.3 (SD = 1.15), signalling a somewhat divided response amongst respondents on the effectiveness of policy. Values of standard deviation across some of the variables are relatively high in demonstrating that tourists perceive these attributes differently.

However the results indicate that the first order of business to improve the tourism experience in the Buddhist Circuit in Bihar should be to address road infrastructure, digital connectivity, transport facilities and accommodations.

## Stochastic Modelling and Computational Sciences

**Table:** Correlation Analysis Between Infrastructural & Connectivity Challenges and Tourism Growth

Variables	Tourism Growth	Road Conditions	Public Transport	Air Connectivity	Accommodation	Signage & Info	Internet & Mobile Connectivity
<b>Tourism Growth</b>	1	-0.562**	-0.485**	-0.423**	-0.398**	-0.410**	-0.531**
<b>Road Conditions</b>	-0.562**	1	0.512**	0.467**	0.438**	0.402**	0.491**
<b>Public Transport</b>	-0.485**	0.512**	1	0.456**	0.419**	0.405**	0.472**
<b>Air Connectivity</b>	-0.423**	0.467**	0.456**	1	0.398**	0.387**	0.451**
<b>Accommodation</b>	-0.398**	0.438**	0.419**	0.398**	1	0.376**	0.429**
<b>Signage &amp; Tourist Information</b>	-0.410**	0.402**	0.405**	0.387**	0.376**	1	0.414**
<b>Internet &amp; Mobile Connectivity</b>	-0.531**	0.491**	0.472**	0.451**	0.429**	0.414**	1

The results of correlation analysis show that tourism growth in Bihar's Buddhist Circuit has significant negative relationships with different infrastructural and connectivity challenges.

A significant negative correlation ( $r = -0.562$ ,  $p < 0.01$ ) exists between Road Conditions and tourism growth indicating poor road infrastructure as a critical factor limiting tourism development. Tourism growth is greatly reduced as road conditions deteriorate.

A strong negative correlation is also present in Internet & Mobile Connectivity ( $r = -0.531$ ,  $p < 0.01$ ). Therefore, the fact that limited digital infrastructure, namely an insufficient supply of mobile and internet services, hinders the tourists' capacity to plan their trips and to navigate in the region implies that it constrains growth.

Tourism growth is moderately negatively correlated with Public Transport ( $r = -0.485$ ,  $p < 0.01$ ) and Air Connectivity ( $r = -0.423$ ,  $p < 0.01$ ). Lack of public transport and poor air access to certain areas make it hard for tourists to reach the major destination areas, hindering long term tourism growth in the area.

Apart from mobility, accommodation ( $r = -0.398$ ,  $p < 0.01$ ) and Signage & Tourist Information ( $r = -0.410$ ,  $p < 0.01$ ) also reveal negative relationships that are weakly associated with tourist growth. Lack of proper signage and information along with poor accommodation options can lead to bad experience of tourists which can be decreased tourists revisit ratio or not recommend it to their friends about Buddhist Circuit.

Thus, the correlation analysis strongly upholds the hypothesis of massive dependence of tourism growth in the Buddhist Circuit of Bihar on infrastructure as well as connectivity related challenges. Road conditions, internet connectivity, and public transport are the three most critical issues which the region's tourism sector will have to address and improve before it could take off. These findings demonstrate that significant steps should be taken to overcome these challenges in any policy or development strategy designed to improve tourism.

### CONCLUSION

The objective of this study was to investigate the effect of infrastructural and connectivity challenges on the growth of tourism in the Buddhist Circuit of Bihar. Using primary data collected from 225 respondents from tourists as well as tourists and stakeholders in the region, the findings suggest strongly that unavailability of infrastructure and connectivity are major barriers to tourism development.

Road conditions and internet & mobile connectivity are found to be the major challenges that affect tourism growth, as evidenced by the correlation analysis with road conditions and internet & mobile connectivity giving a negative correlation of -0.562, -0.531 respectively with tourism growth. Such positive impact could be expected by improving something as the most immediate and substantial ameliorating influences on fortifying the tourism experience. Further, public transport, air connectivity, accommodation, and signage & tourist information are all issues that were found to have moderate negative correlations with tourism growth and therefore require significant improvement in the area's tourism infrastructure.

---

## *Stochastic Modelling and Computational Sciences*

---

The hypothesis testing indicates that the tourism growth on the Buddhist Circuit is significantly challenged by infrastructural and connectivity. Based on key issues identified in transportation, digital access and hospitality services, it is clear that intervention is needed in order to unlock the tourism potential in the region.

More generally, the study confirms the need to invest strategically in road infrastructure, public transport, digital connectivity and tourism facilities. Addressing these challenges can improve Bihar's Buddhist Circuit as a tourist destination targeting both domestic and international tourist, which can enhance the sustainable tourism growth and socio-economic development in the region.

### REFERENCES

- Gupta, R. (2018). Sustainable tourism models for the Buddhist Circuit: Eco-friendly initiatives and community involvement. *Journal of Sustainable Tourism*, 25(3), 305-323.
- Kumar, R., & Choudhary, S. (2017). Financial implications of Buddhist tourism on Bihar's GDP and local businesses. *Indian Journal of Economic Development*, 16(4), 225-238.
- Mishra, S., & Verma, A. (2020). The role of smart tourism and digital interventions in boosting Bihar's Buddhist tourism sector. *International Journal of Tourism Innovation*, 9(2), 112-127.
- Pandey, S. (2019). Infrastructural challenges in the Buddhist Circuit: An analysis of road conditions, air connectivity, and lodging facilities. *Tourism and Infrastructure Journal*, 19(1), 40-55.
- Rai, M. (2018). Government-led promotional efforts in Bihar: A review of tourism campaigns. *Journal of Tourism Management*, 20(2), 174-188.
- Sharma, P. (2016). Digital marketing in Buddhist tourism: Bridging the online visibility gap. *Journal of Digital Marketing*, 8(4), 41-56.
- Singh, V. (2015). The economic contributions of Buddhist tourism in Bihar: Employment and revenue generation. *Indian Journal of Tourism Studies*, 12(3), 220-235.
- Chakraborty, S. (2020). Cultural significance and heritage value of Buddhist sites: Integrating experiential tourism into marketing strategies. *Journal of Cultural Tourism*, 14(1), 59-73.