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Divya RANI*, Sanjeev KUMAR**, Anjali PRASAD***, Ankit DHIRAJ****

BRANDING OF TOURISM IN RAJGIR AS GREEN TOURISM: VISITORS' PERCEPTIONS

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Branding turystyki w Rajgirze jako zielonej turystyki: punkt widzenia turystów

Streszczenie

Turystyka to szybko rozwijająca się branża; tworzenie marki narodowej może być częścią skutecznej strategii zarządzania krajowym rozwojem turystyki. Rajgir to miasto historyczne i religijne. Istnieje tam wiele miejsc związanych z hinduizmem, dżinizmem i buddyzmem, ale dzisiejszy rząd stworzył w Rajgirze wiele obiektów zielonej turystyki i zdefiniował Rajgir jako miejsce docelowe zielonej turystyki. Ponieważ rozwój zielonej turystyki w Rajgirze jest na wczesnym etapie, niniejsza praca ma na celu zbadanie postrzegania zielonej turystyki w Rajgirze przez turystów. W badaniu wykorzystującym ankietę przeprowadzoną wśród turystów zidentyfikowano i przetestowano elementy i cechy marki zielonego miasta. W badaniu wykorzystano metody ilościowe, przeprowadzając ankietę wśród 332 gości, aby poznać postrzeganie Rajgiru jako miejsca zielonego. Odwiedzający pozytywnie oceniają zielone zasoby Rajgiru, co można zaobserwować, biorąc pod uwagę ogólne średnie wyniki, ponieważ zielone zasoby mają stosunkowo wyższe średnie wyniki w odniesieniu do większości badanych czynników. Z informacji tych mogą skorzystać także marketerzy destynacji i menedżerowie marek, których miasta dysponują atrakcyjnymi ekologicznymi zasobami i cechami oraz schematami rozwoju ekologicznych marek.

Słowa kluczowe: zielona turystyka, Rajgir, zielone krajobrazy, dziedzictwo, parki.

* <https://orcid.org/0000-0001-6578-5054>; Research Scholar; PGT Economics, UUMV Bhairwa, Madhubani, Bihar (India); e-mail: divyaranitargir@gmail.com

** <https://orcid.org/0000-0002-7375-7341>; Dr.; Professor, School of Hotel Management and Tourism, Lovely Professional University Punjab (India); e-mail: kumarsharma12360@gmail.com

*** Dr.; Professor, Department of Economics, TPS College Patna, Bihar, India; e-mail: anjaliprasad30@gmail.com

**** <https://orcid.org/0000-0003-0694-3846>; Senior Research Fellow, School of Hotel Management and Tourism, Lovely Professional University, Punjab (India); e-mail: ankitdhiraj@gmail.com (corresponding author)

Abstract

Tourism is a fast-growing industry; creating a national brand can be part of an effective strategy for managing the national growth of tourism. Rajgir is a historical and religious city. There are many destinations related to Hindu, Jain and Buddhist religions, but the present-day government has developed many green tourism sites in Rajgir and the government branding Rajgir as a destination of green tourism. As the development of green tourism in Rajgir is in the early stage, this paper aims to investigate tourist perception of green tourism in Rajgir. A study utilizing a questionnaire survey with tourists identified and tested the components and characteristics of a green city brand. The study used quantitative methods by surveying a total of 332 visitors to know the perception of Rajgir as a green destination. The visitors have a favourable opinion of Rajgir's green resources based on observations of the overall mean scores since they have relatively higher average scores across most of the examined factors. These findings also benefit destination marketers and brand managers whose cities have attractive green resources and qualities with a framework for developing green brands.

Keywords: green tourism, Rajgir, green landscapes, heritage, parks.

Introduction

Tourism has grown to become the world's greatest industry, producing riches and employment while also exposing visitors and tourists to other cultures. India is showing signs of becoming one of the world's burgeoning tourist giants. Regarding long-term (10-year) development, India's travel and tourism industry is predicted to be the world's second-largest employer by 2019 (World Economic Forum, 2019). India's tourism industry is essential to the country's economy and is quickly expanding. According to the World Travel and Tourism Council, 42.673 million jobs, or 8.1 percent of all employment in the country were generated by tourism in 2018, and this industry also contributed 16.91 lakh crore (US\$240 billion) to India's GDP (Council, 2019).

Green tourism, also known as sustainable or ecotourism, is becoming increasingly important as concerns about climate change and the impact of tourism on the environment grow. Green tourism encourages responsible travel practices that conserve natural resources like water, energy, and biodiversity. This can help reduce tourism's impact on the environment (Tosun, 2001) and preserve these resources for upcoming generations. According to a report by the UNWTO (United Nations World Tourism Organization), sustainable tourism can help reduce greenhouse gas emissions, protect biodiversity and ecosystems, and conserve natural resources (Niedziolka, 2014). By promoting responsible travel practices, green tourism can help achieve these goals. Green tourism can also provide economic benefits to local communities by supporting small businesses, creating jobs, and promoting cultural heritage. According to the Global Sustainable Tourism Council, sustainable tourism can reduce poverty, improve

the quality of life expectancy for local communities, and encourage social equivalence (*Global Sustainable Tourism Council, 2023*).

By staying in locally-owned hotels, eating at local restaurants, and buying locally-made products, travellers can support the local economy and help create sustainable livelihoods for residents. This can help reduce poverty and promote sustainable economic growth. Green tourism also promotes the preservation of cultural heritage by encouraging travellers to learn about and respect local customs and traditions. By participating in cultural activities and supporting local artisans, travellers can help preserve cultural heritage and promote cross-cultural understanding. According to a report by the United Nations Environment Programme, sustainable tourism can help promote cultural diversity and heritage preservation. By respecting local cultures and traditions, green tourism can help promote social harmony and prevent the erosion of cultural heritage. Green tourism promotes sustainable development (Lu et al., 2021) by encouraging responsible travel practices that lessen the environmental damage caused by tourism and local communities. This can create a more sustainable future for the tourism industry and ensure that it can help local communities by bringing in money while preserving natural and cultural resources. According to the WTTC, sustainable tourism can help ensure long-term economic growth and job creation in the tourism industry. By promoting sustainable development, green tourism can help create a more resilient and sustainable tourism industry (Mathew, 2022).

India is a country in South Asia with a land size of 3.287 million square kilometres, with historical and urban settlements dating back to more than 5000 BCE; the country has one of the world's oldest continuous significant civilizations. It is rich in human history and contains many archaeological sites (Harappa Civilization). India has thousands of historical sites, many of which have yet to be found. There are now 40 World Heritage Sites in India. 32 meet natural and cultural requirements according to the organization's selection standards, while 7 meet natural requirements (UNESCO, 2021). India has the world's sixth-largest number of sites. India is a cultural crossroads. Hinduism, Sikhism, Jainism, and Buddhism are all Indian religions that have spread worldwide. India is the greatest popular religious destination worldwide.

Small-scale tourism, or "green tourism," entails visiting natural regions with as little negative influence as possible on the environment. To put it briefly, this kind of tourism aims to reduce and counteract the harmful consequences of travel. Being an ecologically conscious traveller or offering environmentally conscious travel services are the main definitions of green tourism (Hasan, 2014).

Due to the rising number of tourists visiting different parts of the world, green tourism is now preferred and required in some places. The best way to preserve natural ecosystems and peaceful surroundings is to forbid travellers

from entering them entirely. However, many places' local economies heavily rely on tourism (Rinzin et al., 2007). Green, sustainable tourism provides the best of both worlds by preserving an area's nature while maintaining nearby businesses. Green tourism does not have to include roughing it on a trip with little or no luxuries. Contrarily, a lot of individuals think it may be an amazing trip. There are eco-lodges and eco-resorts for practically every type and preference. There are many possibilities for vacationing, ranging from tents on platforms that resemble tree houses with a canopy of rainforest to recycling and grey water systems. Simple steps can make a big difference in "greening up" a typical vacation, like following designated pathways, eating at restaurants that serve locally grown food, and visiting cultural sites rather than traditional tourist attractions.

Review of Literature

Understanding and addressing the expectations of distinct tourist groups is a key goal of city branding (Ashworth & Kavaratzis, 2009). The branding process is effective when the projected city image fulfils the expectations of visitors to the city. One of the most important studied and debated topics in contemporary tourism is destination image (Aziz & Zainol, 2011; Lalicic et al., 2021; Milman, 2012; Sio et al., 2021; White, 2004). The term "image" has been defined in many ways, including a person's beliefs, opinions, and impressions about a particular object, consideration of all the information obtained through various sources, or a mental connotation a person has about something that goes beyond physical perception (Aksoy & Kiyici, 2011). Since its inception as a marketing idea in the 1940s, branding has become crucial in promoting goods across all industries (Dudek-Mańkowska & Grochowski, 2019). The concept of brand image has only lately been applied to destinations (Hankinson, 2005; Lalicic et al., 2021; Pereira et al., 2012) as marketers have realized that tourist destinations are made up of both tangible and intangible components that may be perceived as a brand when combined (Hanna & Rowley, 2011; Peters et al., 2006).

Any mismatch between the location's reality and visitors' perceptions might alienate the brand's target market and eventually reduce the efficacy of any branding efforts. Green tourism offers a chance to appreciate the environment (Lennon et al., 2017). In addition to a wide range of other urban aspects (e.g., history, culture, heritage, modernity, and major events), green resources can be used to build a brand image that increases the genuine appeal of cities (Hussain & Waheed, 2016). In a city, green surroundings such as landscapes, public parks, trees, and other green spaces are considered visible, accessible, and green resources (Curson et al., 1995). The phrase "green resource brand" will be used

here to refer to the primary emphasis, which has been tailored to encompass the green resources found within cities. Trees or other vegetation are essential to green spaces because they contribute to the city's image and brand creation (Klingmann, 2010). This is why several multipurpose facilities, such as public parks, include trees or other vegetation as a key component.

Consumer perception of a brand's name is closely related to the psychological characteristics that allow us to construct meaning (Keller, 1998). Because different stakeholder groups are involved in branding cities (Atzori et al., 2018; Clemente et al., 2020), branding cities and branding commodities are different things (Ashworth & Kavaratzis, 2009). According to (Sun, 2016), branding is an effective tactic for (re)creating a location's image and boosting its competitiveness. Visitors' impressions are predicated on their awareness and understanding of the environmental issues and difficulties that the globe has been facing, such as climate change. Understanding how visitors feel about climate change and how they respond to it influences how they behave regarding environmental degradation in the vacation industry sector (Sun, 2016). Their actions, therefore, have a beneficial impact on their intention to choose ethical and environmentally friendly travel routes. "Building brand equity, or value, preference, and loyalty to a city in the eyes of tourists, is one of the key goals of city branding" (Kavaratzis, 2004). According to (Hwang et al., 2005), such city loyalty is linked to a favourable association between green areas and place attachment. This amplifies the case for the research of value formation by branding city green incomes.

Table 1
Components of green tourism

Construct	Statement	Reference
Green Landscape	Provision of parks in Rajgir	
	Pleasant experiences in parks	
	The city's greenery is beautiful.	
	Landscape and hillside beauty	(Biljana, 2017)
	Ample green sites	(Budiasa et al., 2019)
Safety & Quality of Parks	The overall quality of parks is good.	(Chan & Marafa, 2014)
	Park accessibility	(Chan & Marafa, 2016)
	In parks, it is easy to find rare animals and plant species.	(Font & Tribe, 2001)
	The parks' amenities are of high quality.	(Ibnou-Laaroussi et al., 2020)
	Maintenance of green sites	(Jesus, 2013)
	Safe to visit parks	(Line et al., 2018)
	Citizens are supportive of city greening.	(Petrevska & Cingoski, 2017)
	People care about the environment and the environment's resources.	

Table 1
Components of green tourism (cont.)

Construct	Statement	Reference
Green Policy	The Bihar government is renowned for its progressive green policies.	(Biljana, 2017) (Budiasa et al., 2019) (Chan & Marafa, 2014) (Chan & Marafa, 2016) (Font & Tribe, 2001) (Ibnou-Laaroussi et al., 2020) (Jesus, 2013) (Line et al., 2018) (Petrevska & Cingoski, 2017)
	The city represents green tourism.	
	The Bihar government values sustainability in urban planning.	
	Bihar government is famous for park provision.	
Green Experiences & Heritage	Easy to discover valuable animals and plant species in parks	
	Easy to locate the valuable old green site	
	Sufficient recreation opportunities in the park	
	Improvement of the quality of life by green environment	

Methodology

The trustworthy strategy for gathering data for this study is a survey (Thomas et al., 2017). A collection of five-point Likert's statements was created using the specified 21 items in Table 1 as a guideline. These claims were included in a questionnaire in both Hindi and English. They used a scale from 1 (very unsatisfied) to 5 (very satisfied). The invitation that respondents based their responses on their "feelings and experiences in Rajgir" suggested that they were permitted to submit ratings regardless of their prior experience. The visitor's demographic and socioeconomic information, such as gender, education, age, occupation(s), and country of origin were also gathered.

The primary on-site survey was done between September 2022 and February 2023 to gather enough responses and to cover both the summer and winter seasons after a pilot study that verified the questions and rating system. In Rajgir, interviews were held in several locations. Because the samples at each site were considered heterogeneous, random cluster sampling was used. The survey locations cover major tourism destinations for various categories of tourists. At each location, respondents (visitors) were chosen at random for interviews.

Study Area

Rajgir (historically known as Rajagriha), which means "House of the Kings" or "King's Adobe," is an old city and municipal council in the Magadh area of

Bihar, India. According to (Gautam, Rai, Spatial, et al., 2018), the town's latitudinal and longitudinal boundaries range from 25° 02' N and 85° 25' E to 25° 03' N and 85° 42' E. Plains and hills physically separate the city. The five hills are Vaibhara, Vipula, Ratnagiri, Sona, and Udaygiri. The city has a 50 km² size, and its average height is 73 m above mean sea level. Rajgir's hills rise to a maximum elevation of 338 metres above mean sea level.

The city is home to the 2,500-year-old Cyclopean Wall (Kusumgar et al., 1963). Magadha's density capital was Rajgir. Rajgir is a significant Jain and Buddhist pilgrimage site; Rajgir is consistently famous for Hindu, Buddhist, Jain and Muslims. The favourite places of the Hindu religion are Jarasandha Akhara, where Rajgir was the capital of King Jarasandh, mentioned in the Mahabharata fight with the Pandava brother and their alias Krishana. Buddhist famous places are Venu Van, a woodland monastery given in exchange for his discourse by King Bimbisara to Buddha and Buddha stayed 4 rainy seasons in this Forest, the Japanese temple, World Peace Pagoda and Gridhra Kutta (Hills of the Vultures), where Buddha spent several months. Buddha delivered his famous Atanatiya Sutra in Rajgir. Rajgir is the most important place in the Buddhist religion because Buddha spent most of his life in Rajgir. King Ajatashatru organized the first Buddhist council in Rajgir. Rajgir is the most important Jain religious destination in the sense of Jain religion. There are 12 Jain temples in Rajgir, 10 on the mountain and 2 at its foot.

There is also a historic temple dedicated to Munisuvrat Bhagwan, which is roughly 1200 years old. Four of Bhagwan Munisuvratnath's Kalyanakas are housed in this temple. The fourteen years of Mahavira's life – the 24th Tirthankara's – were spent in Rajgir and Nalanda, where he was a chairman (four months of the rainy season). Mahavira delivered their first speech in Rajgir. The 20th Jain Tirthankar Munisuvrata was born there. Muslim saint Makhdum Shah was a Sufi Saint who spent twelve years in the woods of Rajgir. There is a small Pond name Makhdum Kund or Makhdoom Kund, where the dargah of Makhdum Shah is located. Around Guru Nanak's arrival in the town during one of his pilgrimages, the story of the Sikh faith in Rajgir is woven. Because there were hot springs all around the city, there was no access to cold drinking water. People dug a hole, and water began to spill out due to the Guru's pointing. Afterwards, the area became known as Nanak Kund, where a Gurudwara was later constructed. Rajgir has many heritage sites like Swarn Bhandar, Bimbisar Jail, Cyclopean Wall, Saptaparni caves, Maniyar Math, Chariot wheel marks, and Ajatshatru Fort.

Green Resources in Rajgir

Several tourist destinations are associated with the Hindu, Jain, and Buddhist religions today. The government is concentrating on developing tourist

destinations in Rajgir and the surrounding areas. The first entirely green energy towns in India will be Rajgir and Bodh Gaya. The towns would start receiving solar energy through a pioneering renewable energy project in 2023. Tourists come to Rajgir for religious reasons and to appreciate the natural beauty.

In the present scenario, the government has developed many green tourist destinations. Some of these are mentioned below.

Ghora Katora Lake: The lake was made accessible to the general public on January 29, 2011. In November 2018, a 70 feet-high Buddha statue was dedicated to the place. It is located 7.5 miles (or 12 km) from Rajgir. A route through a forest stretches 6.5 kilometres (4.0 miles) from Rajgir to Ghora Katora. The area is surrounded by low hills on three sides and the 70 feet statute of the god Buddha can be admired there. It has natural beauty with historical background. It is believed to be where the stable of King Jarasandha (Mahabharat epic) horses used to drink water. The lake's form resembles a horse encircled on three sides by the mountains (Kumar & Prabhat, 2013). The World Peace Pagoda is nearby. Surrounded by hills, the lake looks picturesque and makes for an ideal trip. Horse carts or tongas and bicycles help tourists reach them. Motor vehicles are prohibited near the lake. One can enjoy boating here. It is a very relaxing place, and all one can hear is the sound of wind and water. During the winter, the lake draws migratory birds from Siberia and central Asia.

Rajgir Zoo Safari: Zoo safari is currently being built in Rajgir, Bihar, India. The Rajgir Zoo safari is spread over 480 acres of land (TNN, 2021). The animals will not be kept in cages here; instead, they will be permitted to walk freely around a forest, with guests being able to observe them from a safe, environmentally friendly vehicle. It will be in a forested location between the mountains of Vaibhigiri and Songiri. A tiny telescope would be installed atop Vaibhigiri Mountain to see the Zoo Safari from above. It will be located in the current forest area and divided into five large zones, one for each animal type: tiger, lion, bear, leopard, herbivores, a small butterfly park and an aviary zone for birds. It will include a shooting range, bicycle path, mobile café, orientation, information centre, bamboo hut where visitors may stay overnight, and rock-climbing area.

Nature Safari: 1250 acres comprise a nature safari (PTI, 2021). Because it is set in a natural setting, it is known as a "nature safari." The Nature Safari offers a variety of recreational facilities, a rock-climbing wall, zip lines, including a suspension bridge, a wrestling area, an archery range, a kids' park and a watch tower. The centrepiece of the Nature Safari is a glass bridge that is 200 feet tall and 85 feet long (Farrukh Nadim, 2021).

Pandu Pokhar: A nature park spread across 22 acres (Pandu Pokhar, 2016) of land parallel to the foothills of Rajhara Hills in Rajgir. A wellness centre with replicas of Lord Buddha to unwind after a long day or to take a stroll in a beautiful rose garden, a fern garden, or a herbal garden is a leisure attraction and

a lovely spot for everyone to see and enjoy. A “Residential Camping Pitch” is located inside Pandu Pokhar.

Venu Van: King Bimbisara offered a thin forest to Lord Buddha (David Geary, 2016). Near Rajgir’s centre, there is a lovely artificial forest called Venu Van. Even now, this park remains serene, with a tiny pond in the middle and tall trees along the walkways.

Hot Springs: A stairway ascends to the numerous temples at the foot of Vaibhava Hill. Men and women have their own designated areas for bathing, and the water is dispensed by spouts from the Saptadhara (Gautam, Rai, & Shekhar, 2018), the seven streams that are thought to originate in the hills below the “Saptarni Caves.” The Brahmakund Spring, which has a temperature of 45 degrees Celsius, is the hottest of the springs.

Ropeway: Rajgir ropeway was funded by Japanese philanthropist FUJI Guruji. The foundation stone for the chairlift ropeway was set in 1965, and it is the oldest ropeway in India. Treat yourself to the scenic views of Rajgir city when you are enjoying the ropeway ride (Batra, 2003). The 7.5-minute ride has a beautiful view of Rajgir’s hills and goes one way.

Pant Wildlife Sanctuary: Pant Wildlife Sanctuary is located near the Bimbisara Jail in Rajgir. There are five mountains on the premises of the Pant Wildlife Sanctuary, namely Ratnagiri, Vipulgiri, Vaibhargiri, Songiri, and Udaygiri. Numerous ecosystem services, such as different types of flora and fauna, are provided to the surrounding landscape by this sanctuary. The forests cover the area of 35.84 km². The thick forests at the foothills of Rajgir are home to a wide variety of species, both flora and fauna, e.g. the wild boar, Nilgai, red jungle fowl, Golden Jackal, Indian python, etc.

Jai Prakash Udhyan: This is an attractive lush green garden on the side of National Highway 82, Rajgir. A small hill surrounds the park, adding more charm to its beauty.

Results and Discussion

The questionnaire survey results in Table 2 indicate that more male tourists (77.4%) than females responded to the study, and 21.7% were below 20 years old, with 33.1% between 20 and 40 years old, 38% between 40 to 60 and 7.2% over the age of 60. 69.3% were married, and 30.7% were single. In terms of annual household income, 47% of the sample earned monthly Rs 60000 and above, 39.5% made between Rs 40000 and Rs 60000, 10.5% earned between Rs 20000 to Rs 40000 and 3% earned below Rs 20000. For the highest education level completed, 30.4% of the respondents were below the 10th level, 29.8% passed the 12th level, 26.8% reached graduation, and 13% achieved other degrees. Re-

garding occupation, 50.3% of the respondents had their own business, 31% had government jobs, and 18.7% had not done any job yet. Domestic tourists (91.9%) significantly outnumbered foreign tourists, and 68.1% described themselves as tourists and 31.9% as pilgrims. The purposes of travelling are predominantly rest and relaxation (47.3%), culture & heritage (20.5%), visiting eco-tourism zones (16.9%) and religious reasons (15.4%). Many respondents (41.3%) got information about Rajgir through the internet/website.

Table 2
Demographic profile of the respondents

Variable	Frequency	%	Variable	Frequency	%
Citizenship			Education Level		
Indian	305	91.9	Below 10 th	101	30.4
Non-Indian	27	8.10	12 th	99	29.8
Gender			Graduation	89	26.8
Male	257	77.4	Other	43	13.0
female	75	22.6	Household Income (Rs)		
Marital Status			Below 20000	10	3.0
Married	230	69.3	20000–40000	35	10.5
Single	102	30.7	40000–60000	131	39.5
Occupation			60000 and above	156	47.0
Business	167	50.3	Age		
Government Job	103	31.0	Under 20 years	72	21.7
Unemployed	162	18.7	20–40	110	33.1
			40–60	126	38.0
			60 years & above	24	7.2

In this study, the visitor's view of Rajgir's green city was broken down using principle component analysis (PCA). The reliability of visitors' replies was evaluated using Cronbach's alpha. The construct's Cronbach's coefficients varied in value from .725 to .886 and showed good dependability for future data analysis.

Table 3
Construct reliability alpha result

Construct	Alpha
Green landscape	.886
Safety & Quality of Parks	.821
Green Policy	.725
Green Experience & Heritage	.845

Due to the results of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, the KMO and Bartlett's test also demonstrated that the analysis was significant and valid. The number 903 revealed a nearly 90.0% common variance, which may have been brought on by the analyses' underlying causes. Additionally, Bartlett's test of sphericity's probability is 0.000 or $p < 0.01$, which shows that the original variables have statistically significant relationships. Thus, factor analysis can be used in this situation.

Table 4
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.903
Bartlett's Test of Sphericity	Approx.	3725.474
	Chi-Square	
	df	210
	Sig.	0

Hair et al. (2006) proposed that percentage of variance explained, eigenvalues and item communalities be used to establish how many factors need to be retrieved. Significant factors are those with eigenvalues greater or equal to 1.0. Hair et al. (2006) recommend a factor loading of 0.35 or higher, but a factor loading of 0.6 has been used instead for practical purposes (Hair et al., 2006). In this table, all statements have more than 0.6 loadings (.615-.850). The results are given in Table 5.

Table 5
Principle component analysis of visitors' perception (Factor loading > 0.5)

Construct	Variables	Factor Loading	Communalities (%)
Green Landscape	PGL1	.849	17.3
	PGL2	.831	
	PGL3	.837	
	PGL4	.620	
	PGL5	.772	
Safety & Quality of Parks	PSQ1	.780	34.5
	PSQ2	.665	
	PSQ3	.693	
	PSQ4	.776	
	PSQ5	.795	
	PSQ6	.631	
	PSQ7	.670	
	PSQ8	.665	

Table 5

Principle component analysis of visitors' perception... (cont.)

Construct	Variables	Factor Loading	Communalities (%)
Green Policy	PGP1	.699	49.1
	PGP2	.735	
	PGP3	.644	
	PGP4	.615	
Green Experiences & Heritage	PGH1	.850	63.1
	PGH2	.810	
	PGH3	.818	
	PGH4	.721	

As noted, the questionnaire was divided into five sections. Section I included 5 questions defining the green landscape ($\alpha = .886$, mean = 18.67, S. D = 4.440). Among the investigated aspects, the top three items of green landscape perceived by the visitors are PGL3 (3.92), PGL1 (3.91), and PGL (3.89). Section II comprised 8 statements defining the Safety and Quality of Parks ($\alpha = .821$, mean = 23.39, S. D = 7.370). The visitors prioritised PSQ8 (mean = 3.99, S. D = 1.124) while visiting Rajgir. Section III has four statements to define green policy ($\alpha = .725$, mean = 14.57, S. D = 3.614). There is a variety of initiatives that the government implemented in Rajgir to make it more green. The visitors' perception is the most positive in relation to two statements, i.e. PGP2 (mean = 3.77 S.D = 1.106) and PGP3 (mean = 3.74 S.D = 1.194). Section IV with its four statements defines the visitors' green experience and Heritage ($\alpha = .845$, mean = 15.88, S. D = 3.612) in Rajgir. The visitors that picked the statements PGH2 (mean = 4.11 S. D = .999) and PGH1 (mean = 4.06 S. D = 1.105) recognized Rajgir as a green and heritage destination.

The visitors have a favourable opinion of Rajgir's green resources based on observations of the overall mean scores which have relatively higher average scores across most of the examined factors. The visitors to Rajgir believed that the safety and quality of parks were most relevant in Rajgir (mean = 23.39, S.D = 7.370). The visitors also positively viewed the green landscape (mean = 18.67, 4.440). The visitors had a bigger preference for PGH2 (mean = 23.39, S. D = 7.370) and PGH1 (mean = 4.06, S. D = 1.105) within the green experience and heritage construct.

Several trends are easily visible. The items connected with the green city image (mean varied from 2.60 to 3.99), the items related to green policy (mean ranged from 3.50 to 3.77), and those pertaining to safety and park quality, are among the aspects with the lowest scores. These findings indicate an unbalanced image of the green brand, although visitors awarded the „green poten-

tial" element excellent marks. This variety suggests that Rajgir's green city brand has variously perceived advantages and disadvantages.

Table 6
The visitors' perception of green city resources

Construct	Variable	Mean	Standard deviation	
Green Landscape	PGL1	3.91	18.67	.926
	PGL2	3.89		1.028
	PGL3	3.92		1.009
	PGL4	3.10		1.357
	PGL5	3.86		.981
Safety & Quality of Parks	PSQ1	2.69	23.39	1.302
	PSQ2	2.94		1.575
	PSQ3	2.98		1.628
	PSQ4	2.75		1.298
	PSQ5	2.60		1.769
	PSQ6	3.71		1.020
	PSQ7	3.72		1.167
	PSQ8	3.99		1.124
Green Policy	PGP1	3.50	14.57	1.274
	PGP2	3.77		1.106
	PGP3	3.74		1.194
	PGP4	3.56		1.300
Green Experiences & Heritage	PGH1	4.06	15.88	1.105
	PGH2	4.11		.997
	PGH3	3.95		1.070
	PGH4	3.77		1.191

Conclusion

Tourists strongly declare that Rajgir is a green destination. Regarding its distinctive character and green offers, they have a very good symbolic impression of Rajgir as a destination for green tourism. A brand or sub-brand that emphasizes a city's green resources might draw more visitors or discourage visitors from frequenting traveller's or tourist's viewpoint. The primary focus of this attraction should be on exhibiting Rajgir as a green and historical location. Based on a city's true strengths, successful city branding should be implemented instead of artificially highlighting its flaws (Parkerson & Saunders, 2005). There-

fore, when evaluating the potential for using green resources in city branding, it is important to consider both the rating of each component of the green brand and its dimensional association. Green experience and heritage are perceived as the strongest aspects of green tourism. On the other hand, Rajgir's reputation as a green city, the government's greening efforts, and its ecological assets are less well known. Unfortunately, some of these factors contribute to how visitors perceive the brand of green resources. The study's findings should assist Rajgir's destination managers in enhancing their marketing strategies to meet tourists' needs and preferences better while also maintaining and creating opportunities for those who are more interested during their trip.

Limitation of the study

The study's findings have certain limits, so further theoretical and practical advancements might be made.

1. It used a rather narrow set of metrics to determine how "green" Rajgir was. Additional investigations could be conducted by adding more standards for evaluating the implementation of green policies and safety and security initiatives.
2. The chosen respondents only represent one interest group. Thus, other stakeholders (such as locals, hotel and tourist stakeholders, etc.) may be included in further studies. A more thorough perspective might be achieved by merging and comparing comments.
3. The evaluation is based on a tiny sample of tourists, which raises questions about how well the results represent the nation. Various models and theories relating to green branding may be used in further studies.

However, the study might help better understand the potential for branding Rajgir as a tourist destination that offers green tourism, which could then be the basis for particular communication strategies. Overall, the study yields helpful conclusions and suggests insightful lines of inquiry for more research in tourist branding.

STATEMENT OF ETHICS

This study titled *Branding of Tourism in Rajgir as Green Tourism: Visitors' Perceptions* was conducted in accordance with the World Medical Association Declaration of Helsinki. The study protocol was reviewed and approved by the School of Hotel Management & Tourism, Lovely Professional University, Phagwara, Punjab, India. The participants of the study are hereby providing consent to participate in this study.

DECLARATION OF CONFLICTING INTERESTS

The authors declared no potential conflicts of interests with respect to the research, authorship, and/or publication of the article *Branding of Tourism in Rajgir as Green Tourism: Visitors' Perceptions*.

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References

- Aksoy, R., & Kiyici, S. (2011). A destination image is a type of image and measuring destination image in tourism (Amasra case). *European Journal of Social Sciences*, 20(3), 478–488.
- Ashworth, G., & Kavaratzis, M. (2009). Beyond the logo: Brand management for cities. *Journal of Brand Management*, 16(8), 520–531; <https://doi.org/10.1057/PALGRAVE.BM.2550133>.
- Atzori, R., Fyall, A., & Miller, G. (2018). Tourist responses to climate change: Potential impacts and adaptation in Florida's coastal destinations. *Tourism Management*, 69, 12–22; <https://doi.org/10.1016/j.tourman.2018.05.005>.
- Aziz, A., & Zainol, N.A. (2011). Destination image: An overview and summary of selected research (1974? 2008). *International Journal of Leisure and Tourism Marketing*, 2(1), 39–55; <https://doi.org/10.1504/IJLTM.2011.037185>.
- Batra, A. (2003). Indian Tourist sites–In the footsteps of the Buddha. *ABAC Journal*, 23(2), 46–57.
- Biljana, P. (2017). Branding the Green Tourism in Macedonia. *Sociologija i Prostor*, 55(1), 101–116; <https://doi.org/10.5673/sip.55.1.5>.
- Budiasa, I.M., Suparta, I.K., & Nurjaya, I.W. (2019). Implementation of Green Tourism Concept on Glamping Tourism in Bali. In: *Proceedings of the International Conference On Applied Science and Technology 2019 – Social Sciences Track (ICASTSS 2019)*. Nusa Dua, Indonesia; <https://doi.org/10.2991/icastss-19.2019.44>.
- Chan, C.-S., & Marafa, L.M. (2014). Rebranding Hong Kong “Green”: The potential for connecting city branding with green resources. *World Leisure Journal*, 56(1), 62–80; <https://doi.org/10.1080/04419057.2013.876587>.
- Chan, C.-S., & Marafa, L.M. (2016). The green branding of Hong Kong: Visitors' and residents' perceptions. *Journal of Place Management and Development*, 9(3), 289–312; <https://doi.org/10.1108/JPMD-02-2016-0008>.
- Clemente, F., Lopes, A., & Ambrósio, V. (2020). Tourists' perceptions on climate change in Lisbon region. *Atmosphere*, 11(3), 297; <https://doi.org/10.3390/atmos11030297>.

- Council, W.T. & T. (2019). *WTTC_India2019*. 2019.
- Curson, T., Evans, G., & Bohrer, J. (1995). *Market research survey of people using the Royal Parks: Annual report 1994*.
- Dudek-Mańkowska, S., & Grochowski, M. (2019). From creative industries to the creative place brand: Some reflections on city branding in Poland. *Place Branding and Public Diplomacy*, 15, 274–287. <https://doi.org/10.1057/s41254-019-00141-7>.
- Font, X., & Tribe, J. (2001). Promoting green tourism: The future of environmental awards. *International Journal of Tourism Research*, 3(1), 9–21. [https://doi.org/10.1002/1522-1970\(200101/02\)3:1<9::AID-JTR244>3.0.CO;2-Q](https://doi.org/10.1002/1522-1970(200101/02)3:1<9::AID-JTR244>3.0.CO;2-Q).
- Gautam, A., Rai, S.C., & Shekhar, R. (2018). Hot-springs of Rajgir: Spatial re-distribution and conservation. *Sree Journal of Spatial Perspectives*, 2(1), 1–9.
- Geary, D. (2016). Walking in the Valley of the Buddha: Buddhist revival and tourism development in Bihar. *Journal of Global Buddhism*, 17, 56–63.
- Global Sustainable Tourism Council. (N. d.). *Why sustainable tourism?* (n.d); <https://www.gstcouncil.org>. Retrieved April 30, 2023.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate Data Analysis*. Vol. 6. Pearson Prentice Hall, Upper Saddle River.
- Hankinson, G. (2005). Destination brand images: A business tourism perspective. *Journal of Services Marketing*, 19(1), 24–32; <https://doi.org/10.1108/08876040510579361>.
- Hanna, S., & Rowley, J. (2011). Towards a strategic place brand-management model. *Journal of Marketing Management*, 27(5–6), 458–476; <https://doi.org/10.1080/02672571003683797>.
- Hasan, A. (2014). Green Tourism. *Journal Media Wisata*, 12(1); <https://doi.org/10.36276/mws.v12i1.195>.
- Hussain, K., & Waheed, A. (2016). Building green brand relations: The role of green brand image as a significant driver. *International Journal of Environment, Workplace and Employment*, 4(2), 116–138; <https://doi.org/10.1504/IJEWE.2016.080447>.
- Hwang, S.-N., Lee, C., & Chen, H.-J. (2005). The relationship among tourists' involvement, place attachment and interpretation satisfaction in Taiwan's national parks. *Tourism Management*, 26(2), 143–156; <https://doi.org/10.1016/j.tourman.2003.11.006>.
- Ibnou-Laaroussi, S., Rjoub, H., & Wong, W.-K. (2020). Sustainability of Green Tourism among International Tourists and Its Influence on the Achievement of Green Environment: Evidence from North Cyprus. *Sustainability*, 12(14), 5698; <https://doi.org/10.3390/su12145698>.
- Jesus, J.D. (2013). *Visitor Perception of Destination Image: a Case Study of Palestinian Tourism*. London Metropolitan University, London, UK.

- Kavaratzis, M. (2004). From city marketing to city branding: Towards a theoretical framework for developing city brands. *Place Branding*, 1, 58–73; <https://doi.org/10.1057/palgrave.pb.5990005>.
- Keller, K.L. (1998). Branding perspectives on social marketing. *ACR North American Advances*, 25, 299–302.
- Klingmann, A. (2010). *Brandscapes: Architecture in the experience economy*. The MIT Press.
- Kumar, N., & Prabhat, V.K. (2013). *Ghoda-Katora Lake, Rajgir (Nalanda), an Ideal Bird Sanctuary-A Review*. Anusandhaan-Vigyaan Shodh Patrika.
- Kusumgar, S., Lal, D., Sarna, R.P. (1963). Radiocarbon dating: Results. *Is.Ac.In*, 58(3), 141–152.
- Lalicic, L., Marine-Roig, E., Ferrer-Rosell, B., & Martin-Fuentes, E. (2021). Destination image analytics for tourism design: An approach through Airbnb reviews. *Annals of Tourism Research*, 86, 103100; <https://doi.org/10.1016/j.annals.2020.103100>.
- Lennon, M., Douglas, O., & Scott, M. (2017). Urban green space for health and well-being: Developing an ‘affordances’ framework for planning and design. *Journal of Urban Design*, 22(6), 778–795; <https://doi.org/10.1080/13574809.2017.1336058>.
- Line, N.D., Hanks, L., & Miao, L. (2018). Image matters: Incentivizing green tourism behaviour. *Journal of Travel Research*, 57(3), 296–309; <https://doi.org/10.1177/0047287517697848>.
- Lu, C.-W., Huang, J.-C., Chen, C., Shu, M.-H., Hsu, C.-W., & Bapu, B.T. (2021). An energy-efficient smart city for a sustainable green tourism industry. *Sustainable Energy Technologies and Assessments*, 47, 101494; <https://doi.org/10.1016/j.seta.2021.101494>.
- Mathew, P.V. (2022). Sustainable tourism development: Discerning the impact of responsible tourism on community well-being. *Journal of Hospitality and Tourism Insights*, 5(5), 987–1001; <https://doi.org/10.1108/JHTI-02-2021-0052>.
- Milman, A. (2012). Postcards as a representation of a destination image: The case of Berlin. *Journal of Vacation Marketing*, 18(2), 157–170; <https://doi.org/10.1177/1356766711435975>.
- Nadim, F. (2021). CM Nitish Kumar opens Nature Safari, cabin ropeway at Rajgir. *The Times Of India*; <https://timesofindia.indiatimes.com/city/patna/cm-opens-nature-safari-cabin-ropeway-at-rajgir/articleshow/81714110.cms>. Retrieved: June 10, 2024.
- Niedziolka, I. (2014). Sustainable tourism development. *Regional Formation and Development Studies*, 8(3), 157–166.
- Pandu Pokhar. (2016). *The Heritage*. Bihar Tourism; <http://www.pandupokhar-rajgir.com/>.

- Parkerson, B., & Saunders, J. (2005). City branding: Can goods and services branding models be used to brand cities? *Place Branding*, 1, 242–264; <https://doi.org/10.1057/palgrave.pb.5990026>.
- Pereira, R.L., Correia, A.L., & Schutz, R.L. (2012). Destination branding: A critical overview. *Journal of Quality Assurance in Hospitality & Tourism*, 13(2), 81–102; <https://doi.org/10.1080/1528008X.2012.645198>.
- Peters, M., Weiermair, K., & Katawadee, P. (2006). *Strategic brand management of tourism destinations: Creating emotions and meaningful intangibles*. Vol. 1. Tenzin.
- Petrevska, B., & Cingoski, V. (2017). Branding the green tourism in Macedonia. *Sociologija i Prostor: Časopis Za Istraživanje Prostornoga i Sociokulturnog Razvoja*, 55(1(207)), 101–116.
- PTI. (2021, March 26). Bihar CM Nitish Kumar inaugurates ‘Nature Safari’ at tourist hotspot Rajgir. *Financial Express*.
- Rinzin, C., Vermeulen, W.J., & Glasbergen, P. (2007). Ecotourism as a mechanism for sustainable development: The case of Bhutan. *Environmental Sciences*, 4(2), 109–125; <https://doi.org/10.1080/15693430701365420>.
- Sio, K.P., Fraser, B., & Fredline, L. (2021). A contemporary systematic literature review of gastronomy tourism and destination image. *Tourism Recreation Research*, 1–17; <https://doi.org/10.1080/02508281.2021.1997491>.
- Sun, Y.-Y. (2016). Decomposition of tourism greenhouse gas emissions: Revealing the dynamics between tourism economic growth, technological efficiency, and carbon emissions. *Tourism Management*, 55, 326–336; <https://doi.org/10.1016/j.tourman.2016.02.014>.
- Thomas, J.C., Mueller, E.V., Santamaria, S., Gallagher, M., El Houssami, M., Filkov, A., Clark, K., Skowronski, N., Hadden, R.M., & Mell, W. (2017). Investigation of firebrand generation from an experimental fire: Development of a reliable data collection methodology. *Fire Safety Journal*, 91, 864–871; <https://doi.org/10.1016/j.firesaf.2017.04.002>.
- TNN. (2021). Rajgir zoo safari to open next month. *Times of India*.
- Tosun, C. (2001). Challenges of sustainable tourism development in the developing world: The case of Turkey. *Tourism Management*, 22(3), 289–303; [https://doi.org/10.1016/S0261-5177\(00\)00060-1](https://doi.org/10.1016/S0261-5177(00)00060-1).
- UNESCO. (2021). *The World Heritage List—World Heritage Site—Pictures, Info and Travel Reports*; <https://www.worldheritagesite.org/list/countries>.
- White, C.J. (2004). Destination image: To see or not to see? *International Journal of Contemporary Hospitality Management*, 16(5), 309–314; <https://doi.org/10.1108/09596110410540285>.
- World Economic Forum. (2019). *The Travel and Tourism Competitiveness Report 2019 [El Informe de Competitividad de Viajes y Turismo 2019]*.