

ASSESSING THE SUSTAINABILITY OF PILGRIMAGE DESTINATIONS USING GSTC CRITERIA: A CASE STUDY OF VARANASI, UTTAR PRADESH

Abstract

Pilgrimage destinations in India experience heavy traffic. As a result, pilgrimage destinations are required to follow destination planning and management. Destination planning and management calls for diverse stakeholders to work towards the common objective of creating effectively managed sustainable tourism destination. Destination planning is a continuous process that entails taking into account prospects and challenges in the social, economic, cultural, and environmental fields.

Destination planning is crucial for religious destinations in India. It is important to address the issues and challenges faced by pilgrims and locals. Close to 60 percent of domestic tourism in India is driven by religious beliefs.

For this chapter Varanasi is the area of study. Varanasi is one of the oldest continuously inhabited cities in the world. Varanasi is located on the banks of the river Ganga in Uttar Pradesh. It is the holiest of the seven sacred cities-Sapta Puri. Ayodhya, Mathura, Haridwar, Kashi, Kanchipuram, Ujjain, and Dwarka are among the seven sacred pilgrimage sites in India known as the Sapta Puri. Varanasi is sacred for Hindus, Jains and Buddhists. Tourists and pilgrims from all over the world travel to Varanasi every year because it is a sacred city with strong spiritual and mythological beliefs. The city is facing a lot of challenges like high footfalls, infringement of carrying capacity, waste management, crowd control, the commodification of rituals, safety and security of tourists, visitor experiences and

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so on. There is a need for managing tourism in Varanasi so that the stakeholders are benefitted.

The GSTC Destinations Criteria, additionally referred to as "GSTC-D" informally, are the minimal standards for sustainability that each tourism destination should aim for and act as primary framework for the destination to become sustainable. There are 38 criteria and 174 indicators based on the four key themes of socioeconomic impacts, cultural impacts, environmental impacts, and sustainable management. Based on these criteria and indicators, the level of sustainability achieved in Varanasi was assessed and evaluated.

This chapter shall be insightful for tourism planners in sustainable tourism planning and measuring the viability of sustainable tourism practices in a pilgrimage destination.

Keywords: Destination, GSTC-D Criteria, Religious Tourism, Spiritual Tourism, Sustainable development, Varanasi.

I. INTRODUCTION

Tourism is a sector inherently linked to people's lives and has the power to impact every fabric of society due to its strong economic multiplier effect (Egan & Nield, 2003). To reap the suitable fruits of tourism development, leading international consultative tourism organizations have been urging tourist destinations across the globe to adhere to principles of sustainable development (UNWTO, 2019). Post-Covid 19, it is ideal that all stakeholders in tourism actively participate in tourism development that is conducive to people, the planet, and profitability (Roxas, Rivera & Gutierrez, 2020).

Travelling for trade and religious purposes has been the oldest form of travel. In India travelling for pilgrimage has played a very important role in our culture. Pilgrimage tourism is one of the very popular forms of travel and it applies to journeys with a religious purpose. Pilgrimage tourism combines the concepts of travel, spirituality, and cultural heritage. Pilgrimage has been a significant aspect of human civilization for centuries, with individuals from various religious and cultural backgrounds embarking on journeys to sacred sites around the world.

One of the key aspects of pilgrimage tourism is its religious and spiritual significance. People undertake pilgrimages to connect with their faith, seek spiritual solace, and deepen their religious understanding. For many, pilgrimage represents a personal and transformative journey, providing an opportunity for introspection, reflection, and renewal. It allows individuals to step away from their daily routines, immerse themselves in sacred environments, and engage in rituals and practices that hold deep meaning within their religious traditions.

II. SUSTAINABLE PLANNING OF RELIGIOUS DESTINATIONS IN INDIA

Pilgrimage destinations in India experience heavy traffic. According to the Ministry of Tourism, the religious and spiritual tourism sector accounts for more than 60% of India's domestic travel and 1433 million domestic tourists visited the pilgrimage in India in 2022. Approximately Rs 1.3 lakh crore was generated in 2022 as compared to Rs 65,070 crore in 2021 in places of worship. Sustainable tourism planning is essential for religious locations in India and there is need for a wide range of stakeholders to collaborate on efficiently managing sustainable tourism. Destination planning is a continuous process that entails taking into account prospects and challenges in the social, economic, cultural, and environmental fields and addresses the issues and challenges faced by pilgrims and locals. Thus, sustainable tourism planning for destinations is crucial to ensure that tourism development benefits local communities, protects the environment, and provides memorable experiences for travellers. Sustainable tourism is tourism that takes into account all of the economic, social, and environmental ramifications of tourism's history, as well as those of tourism's present and future. The needs of the tourism industry, as well as those of the environment and the communities that are visited by visitors, are taken into consideration within the framework of sustainable tourism (UNWTO n.d.). Today, sustainable tourism planning is widely recognized as an essential objective of tourism policy.

III. THE GSTC DESTINATIONS CRITERIA

The planning of tourism must take into account environmental, social, and economic considerations in order to achieve sustainability goals. A set of criteria is necessary to determine whether the destination development is succeeding in its sustainability objectives. These criteria provide a framework for organizing and identifying the objectives of sustainable tourism, and they allow travel destinations to evaluate their sustainability performance.

Criteria based study is useful for the assessment whether tourism is possible to develop and/ or takes place in a sustainable way (Gebhard et al., 2007). Certain indicators can be used to measure a criterion. So, criteria-based study can be more context specific as indicators are selected according to the nature of study area (Gebhard et al., 2007). Global Sustainable Tourism Criterion is an effort to establish minimum global standards for sustainable practices.

The GSTC Destinations Criteria, additionally referred to as "GSTC-D" informally, are the minimal standards for sustainability that each tourism destination should aim for and act as primary framework for the destination to become sustainable.

The GSTC criteria are organized into four categories. The following figure illustrates the GSTC Criteria:

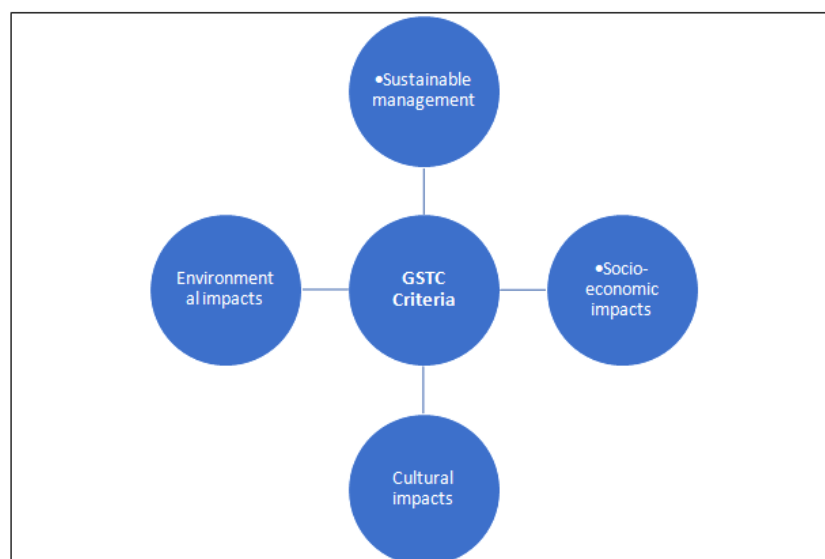


Figure 1: Category of GSTC Criteria

There are 174 indicators and 38 criteria spread over these four categories that destinations can use to gauge their success in meeting the requirements.

The level of sustainability is attained based on these criteria and indicators. The GSTC-D is designed for destinations. The scope of the GSTC-D is broad and the criteria can be implemented on different types of destinations. The destinations may be in any part of the world and of any type like rural, urban, coastal etc.

The definition of destinations as per UNWTO is

“A physical space with or without administrative and/or analytical boundaries in which a visitor can spend an overnight. It is the cluster (co-location) of products and services, and of activities and experiences along the tourism value chain and a basic unit of analysis of tourism. A destination incorporates various stakeholders and can network to form larger destinations.”

The GSTC Criteria have been developed and revised following the Standard-Setting Code of the ISEAL Alliance. It is an organisation recognized to provide guidance on international standards for developing sustainability guidelines in all sectors. The GSTC-D (Version 1.0) criteria was first developed on 1st November 2013. The first revision of the GSTC-D (Version 1.0) criteria began in 2018 and the revised GSTC-D were adopted in 2019 and is known as GSTC Destination Criteria (v2.0).

There are Performance Indicators for GSTC-D that are intended to guide in measuring compliance with the criteria. In essence, the performance indicators offer a list of situations, reasons, supporting data, and actions to consider when evaluating a destination in assessing compliance with the criteria.

These criteria are of importance for destinations to achieve Sustainable development. Applying the criteria will also allow the destination to achieve the 17 Sustainable Development Goals and the 2030 Agenda for Sustainable Development.

Following Diagram Illustrates the GSTC Destination Criteria (v2.0):

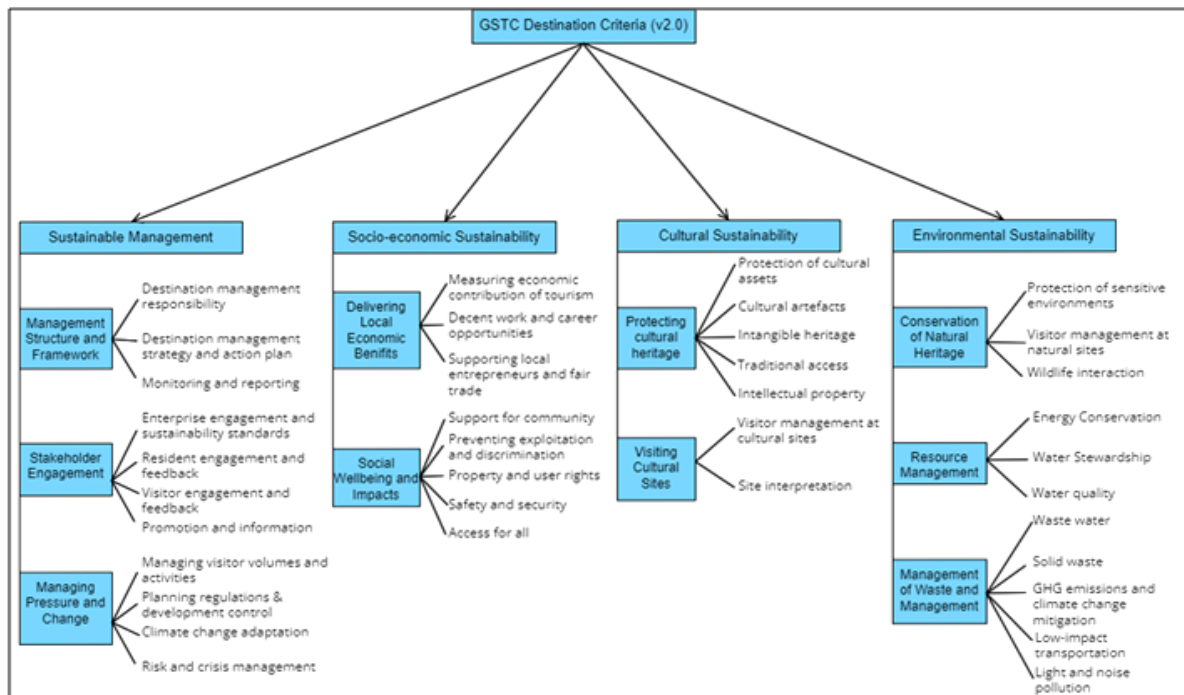


Figure 2: GSTC Destination Criteria (v2.0)

IV. STUDY AREA: VARANASI

Varanasi is a city located in Uttar Pradesh. It is situated on the left bank of the river Ganga. Varanasi is known also as Benares, Banaras, and Kashi. It is known as India's spiritual capital and is also the religious centre of Hindus, Jains, and Buddhists. It is one of the Hindus' *Sapta Puri*, or "seven cities". These seven cities are sacred cities for Hindus and they are Ayodhya, Mathura, Haridwar, Varanasi, Kanchipuram, Ujjain, and Dwarka.

Varanasi is the holiest pilgrimage spot for Hindus and Hindus believe that one who is blessed to die in Varanasi would attain salvation and freedom from the cycle of birth and re-birth. It is regarded as the Abode of Lord Shiva and Parvati. In Varanasi, the River Ganga is thought to have the ability to wash away the sins of people.

Sarnath, which is 10 kilometers from Varanasi, is significant to Buddhist pilgrims because it is the place of the Buddha's first sermon after enlightenment. The city is significant to Jains because it is believed that Parsvanath, the twenty-third Tirthankar, was born there. The city was graced by 8th century saint Adi Shankaracharya. He stayed for a considerably long period. The commentaries on Vyasa's Brahmasutras, the Upanishads, and the Bhagavad Gita were written during his long stay there. Varanasi city has expanded along the crescent shape of the river Ganga. It has been a centre of religious, spiritual, and educational activities since ancient times and these activities have been significant in shaping the character of the city. The primary economic activities are silk weaving, the production of wooden toys, bangles made of glass, ivory work, and brassware; horticulture of which betel leaves and mangoes are most prominent. These activities are not only providing jobs but they have elevated the level of specialization by which the products are known. These products now bear the city's name such as *banaraslangdaam*, *banarasipaan*, or *banarasi saree*. The overall economy of the city is based on tourism and tourist-related activities.

V. PROMINENT TOURISM ATTRACTIONS IN VARANASI

Varanasi is rich in tangible and intangible heritage. Following enlists the tangible heritage properties in Varanasi.

1. Type of Heritage/Tourist Attractions in Varanasi:

Table 1: Typology of Tourist Attractions in Varanasi; Source: City Development Plan for Varanasi 2041

Type of Heritage	Number
Ghats (Riverfront)	84
Kunds(Water Ponds)	88
Other Heritage	1370
Prominent Temples	20
Mosques	2
Total	1564

2. **Ghats in Varanasi:** Varanasi owes its existence to the Ganga River, which is considered to be the most holy river for the Hindus. In Varanasi, the river runs from south to north, symbolizing the cycle of life from death—south is seen to be Yama's domain—to life—north is believed to be Shiva's domain, represented by Kailash. The ancient city of Kashi was built on the river's western banks as a result of this unusual river flow alteration. The ghats face the rising sun and thus the ghats of Varanasi are considered sacred by Hindus.

The ghats are riverfront i.e. stone steps that lead up to the river. The ghats are an integral part of Kashi's cultural, religious, and social life. There are 84 ghats in all that is lateral to the river. Depending on the kind of function carried out on the ghat, each has its significance. With a few exceptions, all 14 of the Ghats were named after gods and are over 350 years old. The most sacred of all the ghats are five that are referred to as *panchtirth*- Assi Ghat, Dasashwamedh Ghat, Manikarnika Ghat, Panchganga Ghat, and Adikeshav Ghat.

3. **Kunds:** The kunds are a significant component of Varanasi's natural and cultural heritage. They are not only historical treasures, but they also embody long-forgotten flood prevention and storm water management techniques. There were originally more than 100 kunds of which only about 88 kunds remain across the city. Names of a few kunds are Pisach Mochan Kund, Gyan Bapi Kund, Lolark Kund, Bakariya Kund, and Lakshmi Kund.
4. **Temples:** In Varanasi, there are about 2000 temples of all sizes, including small, medium, and large. Along the Ganga River's ghats are many significant temples. Some of the noteworthy temples are Kashi Vishwanath, Sankat Mochan temple, Tulsi Manas Temple, Durga Temple, Kal Bhairav Temple, and Mritunjaya Temple.
5. **Sarnath:** Sarnath is the holy place of Buddhists where Lord Buddha in the 6th century BC gave the first sermon. The great Buddhist king Ashoka constructed a monastic township in the third century BC, and it remained prosperous until the eleventh century. The Mulagandha Kutii Vihar remnants, the Dharmrajika Stupa remains, the Dhamek Stupa, the Ashokan Column, the monuments, relics, monasteries from the Mauryan period, and the archaeological museum are the primary attractions in Sarnath.
6. **Ramnagar:** The Ramnagar Fort located is about 14 km from Varanasi on the opposite bank of the river Ganga. It is the ancestral home of the Maharaja of Banaras. Maharaja Balwant Singh built this fort-palace in the 18th century. The Ramnagar Fort is home to a museum exhibiting the royal collection, which includes an armoury of swords and guns, vintage cars, royal palkies, ivory work, and antique clocks.
7. **Intangible Heritage:** The intangible heritage of Varanasi comprises a variety of arts, customs, and traditions. These include:
 - **Scholastic Traditions:** Since ancient times, Banaras has been an excellent center for learning and is renowned as the "Capital of Knowledge.". Sanskrit, yoga, the Hindi language, and spiritualism have always been promoted in Varanasi. Yoga and Ayurveda's founder, Maharshi Patanjali, had links to Varanasi. The city is home to notable authors like Tulsidas, Kabir, and Prem Chand. 'Theosophical Society' founder

Mrs. Annie Besant chose Varanasi as the location for her organization, and Asia's largest university, Benares Hindu University, was founded by Pandit Madan Mohan Malviya in the city.

- **Performing Arts:** Varanasi is known for several 'Gharanas' or Schools of Indian classical music. The tradition of their style of music has been maintained for generations. Varanasi also has a rich folk music tradition. Kashi gave a special character to art forms like Thumri, Dadra, Kajri, and Kathak. The Sitar Master Pandit Ravi Shankar, Ustad Bismillah Khan, who popularized Shehnai, Kishan Maharaj, the table player, and Kathak master Birju Maharaj are just a few of the renowned musicians and artists who were born and raised in Varanasi.
- **Art & Craft:** Varanasi got recognition as Geographical Indicators (GI) in the year 2009 with Banaras brocades and sarees. For centuries, Varanasi has been renowned for its silk weaving. Banaras Brocade Sarees are made of finely woven silk and embellished with zari thus making it unique. Other prominent art and craft of Varanasi are Soft Stone Jali Work, Banaras Gulabi Meenakari Craft, Varanasi Wooden Lacquerware and Toys, Banaras Repousse Metal Craft, and Varanasi Glass Beads.
- **Cuisines:** The popular cuisine is kachori sabzi, baatichokha, rabri jalebi or tamatar chaat, ghat-ghat ki chaat, nimona, golgappe, chudamatar, malaiyyo a winter sweet, banarasi 'maghaipaan'.
- **Fairs & Festivals:** Varanasi has developed into a prominent hub for a variety of fairs and festivals throughout the year because of its religious and cultural significance. Some of the well-known festivals observed in Varanasi include Ganga Mahotsav, Boudh Mahotsav, Ganga Water Rally, Dhrup Mela, Mahashivratri, Nag Nathaya Mela, Hanuman Jayanti, and Ramleela of Ramnagar.
- **Tourism development in Varanasi:** Tourism is one of the most significant economic activities in Varanasi, employing more than 30% of the city's population. The following table states the number of domestic and foreign tourists visiting Varanasi.

Table 2: Statistics Indicating the Number of Domestic and Foreign Visitors to Varanasi

Year	Domestic Tourist	Foreign Tourist	Total
2017	5947355	334708	6282063
2018	6095890	348970	6444860
2019	6447775	350000	6797775
2020	876303	106189	982492
2021	3075913	2566	3078479
2022	71147310	83741	71231051

The number of tourists visiting Varanasi has surpassed Ten crore in 2022–2023. This is linked to the government's encouragement of religious tourism and the renovated Kashi Vishwanath corridor. The amount of money earned from tourism in Varanasi increased by 65%, and employment in the industry increased by 34.2%. Varanasi has

good connectivity through air, rail, and road from Delhi the national capital which is the hub of international flights. Tourism is boosted in Varanasi because of this good connectivity from Delhi.

8. Key Issues and Concerns in planning and management of religious tourism in Varanasi: Let us learn about the various issues and concerns that the city is facing due to multiple factors. In the following section the problems commonly associated with tourism in Varanasi are discussed:

- **Overcrowding and Congestion:** Throughout the year, Varanasi draws a sizable number of tourists and pilgrims, leading to overcrowding, especially in popular areas such as the Ghats and Old City. The high influx of visitors can result in congested streets, crowded public spaces, and challenges in managing the flow of people, which can diminish the overall experience for tourists and disrupt the daily lives of residents. The encroachment is another menace in the city. According to a study, unauthorized parking takes up 50% of the available road space in the main city as there are no adequate parking facilities there.
- **Environmental Pollution:** The river Ganga, the lifeline of Banaras holds enormous religious and cultural significance. The untreated sewage, industrial waste, solid waste, and waste from the temples, hotels, restaurants, and other establishments makes their way either onto the streets or into the river, affecting the water quality, and causing threat to the ecosystem of the river. Water contamination from improper offerings and ceremonial disposal, cremations near river, disposal of cremated remains in the water, or immersion of dead bodies in rivers results in visual and health problems. Air pollution from vehicles and open burning of waste also contribute to the degradation of the city's environment. Because the authorities are ill-equipped to handle the volume of waste produced in the city, neither visitors nor locals are mindful of correct waste disposal practices. A report stated that more than 600 tonnes of garbage was produced daily in Varanasi in 2013. It is over 18,000 tonnes for a month. Presuming that the resident population has doubled and the number of tourists has increased by almost 10%, envisage the waste produced in the present day.
- **Overpopulated:** In 2018, Varanasi had an estimated population of over 41 lakhs in an area of about 81 square kilometres. In such a situation, the population density comes to 380 people per square kilometre. Additionally, Varanasi sees millions of tourists each year. Varanasi welcomed more than 6 crore tourists in 2018, according to reports from Uttar Pradesh Tourism. That is fifteen times the city's resident population. The persistent problem of garbage and litter, and poor waste management, has been worsened by the expanding population and tourist traffic.
- **Pressure on Heritage Properties:** Economic gains from tourism necessitate finding a balance between tourism growth and the preservation of cultural legacy of Varanasi. Ancient buildings, temples, and heritage sites may become overburdened by constant tourist traffic. The built heritage of the city, which is a priceless non-renewable resource, is currently in grave danger. Preservation and protection of heritage sites are inadequate. Heritage buildings inevitably decay and sustain damage over time, and

many of them are in terrible shape. The dilapidated historic buildings don't get the maintenance or repairs they need. The number of *kunds* are declining and it is caused by neglect, unauthorized construction near the *kunds*, and general ignorance. Heritage sites are experiencing the consequences of the population surge, especially in the old city regions. Currently, 1.5 to 2 lakh people visit the Kashi Vishwanath temple corridor every day. About 5 lakhs more people visit during holidays and festivals. Consequently, the daily flow of visitors to the Kashi Vishwanath Corridor has considerably exceeded the renovated capacity of the complex, placing a strain on the infrastructure of Varanasi.

- **Lack of Tourism Services:** The number of visitors decreased year over year in the years 2012 to 2013 as a result of pollution, traffic congestion, flooding-like conditions, bad roads, and a shortage of tourist amenities. Due to COVID-19, there was a sharp decline in the number of tourists in 2020, affecting travel agencies, hotels, tour guides, and other tourism-related businesses. Currently, the tourism demand is growing at a fast pace in Varanasi. Adequate tourism services are required to meet this growing demand. There are not enough tour guides in the city to serve the growing number of tourists. There aren't enough information centres and promotional materials like city guides or brochures.
- **Lack of Infrastructure and Facilities:** Varanasi faces infrastructure challenges in accommodating the increasing number of tourists. In April 2023, nearly 12 lakh tourists visited temple town on a weekend. There exist about 1,200 hotels/lodges in Varanasi, and those along the Ganga are in great demand on weekends. Around one lakh pilgrims reach the Kashi Vishwanath temple every day, and the number doubles on holidays. The availability of quality accommodations, transportation services, and amenities may not always meet the demands of visitors, particularly during peak seasons. There are not enough designated parking spaces for overnight parking of buses and taxis. The proper signage is required in 'Galis' i.e., alleys.

VI. SUSTAINABLE TOURISM DEVELOPMENT IN VARANASI

A comprehensive sustainable approach involving government bodies, local communities, tourism stakeholders, visitors, and effective management strategies is essential for addressing the problems associated with tourism in Varanasi and thus preserving the cultural and environmental integrity of the city. Varanasi happens to be the constituency of Prime Minister India, Mr. Narendra Modi. This gives the city an advantage in development. There have been ongoing efforts by stakeholders to develop Varanasi as a sustainable city and sustainable tourism. Though there is no formal adoption of GSTC -D in Varanasi. In the following section the schemes, plans, projects, strategies, and guidelines have been discussed regarding sustainable tourism development in Varanasi.

In the following section adoption of a sustainable tourism development strategy in Varanasi that complies with the GSTC-D criteria on four primary themes will be discussed- Sustainable management; Socio-economic impacts; Cultural impacts and Environmental impacts. The secondary data in form of reports, articles, research papers, blogs etc have been considered in evaluating the GSTC-D criteria for Varanasi.

1. Sustainable Management: The integrated sustainable development of Varanasi is the involvement of different stakeholders from government bodies, private bodies, NGOs and others. The stakeholders are engaged in works like policy making and its implementation, as pressure groups, working on field and so on. Following is the list of stakeholders:

- Varanasi Development Authority
- Municipal Corporation of Varanasi
- Ministry of Tourism, GoI
- Ministry of External Affairs, GoI
- Ministry of Urban Development
- Indian Association of Tour Operators
- Department of Tourism Uttar Pradesh
- Archaeological Survey of India
- State Archaeology department
- Varanasi Smart City Limited (VSCL), a Special Purpose Vehicle (SPV)
- Administration of Varanasi-District Magistrate, commissioner, police, traffic police
- NGOs
- Citizens
- Tourism businesses

Following table highlights the agencies involved in sustainable tourism development in Varanasi:



Figure 3: Role of various agencies involved in tourism development in Varanasi Source: City Development Plan for Varanasi, 2041 (Final City Development Plan), March 2015

Varanasi is a hub of culture and heritage. To revive and retain its character following initiatives were undertaken since 2014 to upgrade the infrastructure:

- The Ministry of Urban Development hired consultants, to identify popular tourist destinations in and near Varanasi.
- Google was assigned to map the city appropriately.
- The Union budget of Rs 500 crore sanctioned for developing five tourist circuits. Out of this, Rs. 70.6 crore will be used to boost tourism in Varanasi, while Rs. 12.5 crore will be utilized to upgrade 24 railway stations in and around the city, including the Varanasi Railway Station.
- Rs 100 crore was allotted for improving the facilities at the ghats, and for beautification of the city.
- The Ministry of Tourism worked with the Ministry of External Affairs to offer visas on arrival at Varanasi airport for foreign tourists from select countries.
- In 2015 a state-of-the-art and environment-friendly building-Varanasi International Cooperation and Convention Centre (VCC), called Rudraksha was planned and built by Japan's Grant Aid through Japan International Cooperation Agency (JICA). It stands for the friendship of Japan and India. It was inaugurated in May 2021.
- In 2023, development projects worth Rs 1,780 crore were sanctioned. The construction of the ropeway, which would make Kashi the first city in India to have public ropeway transportation, was a significant step. Additionally, it will become India the third nation in the world to receive it, following Bolivia and Mexico.
- Varanasi Smart City Project-The Varanasi Smart City Limited (VSCL) was established as a Special Purpose Vehicle (SPV) on October 29, 2016, to carry out the Smart City Mission (SCM) in Varanasi. According to the rules, the Smart City Mission will run from 2015 to 2020.
- The smart city development plan is based on the following Six principles:
 - 'Suramya Kashi (picturesque);
 - Samunnat Kashi (progressive);
 - Surakshit Kashi (secure);
 - Sanyojit Kashi (organized);
 - Nirmal Kashi (pure) and
 - Ekikrit Kashi (unified)'.
- In Varanasi, the smart city project will focus on Varanasi's socio-economic growth, cleanliness, smooth traffic movement etc. The Varanasi smart city concept is expected to cost a total of Rs 2,520 crore, which will be used to upgrade the infrastructure, e-governance, and ghats. There is budget allocation for specific area development and for pan-city solutions.
- Heritage conservation & beautification of City: The renovation of Core Area of Varanasi, which is also the main commercial hub of the city and is located close to the Kashi Vishwanath temple is essential. It is because the infrastructure in the old city is overburdened by the growing local and tourist population. The renovation is expected to benefit 4 lakh people.
- Renovation of Godliya Crossing to the Dashashmedh Ghat area which is a well-known tourist and pilgrim destination in Varanasi.
- Kund rejuvenation and beautification.
- Restoration and redevelopment of ancient Ghats.
- Under the flyover placemaking
- Traffic Solution: Important components of the Smart City Plan regarding traffic include the construction of multilevel parking with a smart card system and display

boards at various locations in Varanasi, a city-level mobile application for parking availability, provision of e-rickshaws, designation of no-vehicle zones, conversion of 20 vacant cinema halls in the centre of the city as parking spots.

- **Traffic Management-** For traffic management in Varanasi city, the traffic police, the Regional Transport Office, and Varanasi Municipal Corporation have divided the city into 4 zones- three zones for city areas and one for rural areas; traffic control systems and e-challans; and decongesting streets by moving stray cattle to a designated natural setting with veterinary and shelter facilities outside the city.
 - **Waste Management:** The plan's primary focus on waste management includes installing RFID sensor-based bins for collecting solid waste and upgrading existing sewer systems.
 - A station for monitoring air quality
 - Use of Technology: Wi-Fi access in important public areas
 - Installing CCTV cameras and information signboards at all crossings and other key locations
 - The Varanasi Municipal Corporation recommended installing underground cabling, creating pathways, subways, and foot over bridges in crowded areas, creating bicycle tracks, and installing GPS on all police, ambulance, public transportation, and solid waste vehicles. GIS mapping of the city's utilities and development of a mobile application for problem sharing by citizens
 - Automated centrally regulated street lighting
 - E governance: e-governance integrated with Portal and Mobile app
 - Single station IT solutions for managing the city through the introduction of data centres, interoperable command & control centres, surveillance, and traffic camera
 - Redevelopment of very old Police Stations
- 2. Socio-Economic Sustainability:** In Varanasi, there are about 43,000 tour guides who play an essential role in promoting historic buildings. By giving the tour guides foreign languages training, they may interact with foreign visitors, thus, expanding their target market. This results in a 23% rise in job opportunities in the tourism industry. 200 guides trained for G20 delegates and their families. Their scope of work has increased by introducing curated tourism Gastronomy, architecture, and the Weaver community.
- 3. Cultural Sustainability:**
- **Kashi Vishwanath Corridor:** In Varanasi, the most popular attraction is Kashi Vishwanath Temple. The Kashi Vishwanath Dham was expanded and renovated by creating The Kashi Vishwanath Temple corridor. It will ease the pressure on the temple and also transform pilgrims' experience of the city. The corridor allows for the simple passage of pilgrims and worshippers between the ghats and the famous Kashi Vishwanath temple. Earlier, they had to pass through congested streets to reach the temple. A 3,000 square feet corridor was expanded to a 5 lakh square feet space that can accommodate 50,000 to 75,000 worshippers and comprises 23 buildings. The first phase is complete with world-class facilities for pilgrims in and around the temple. During the project's construction, more than 40 ancient temples were rediscovered and rebuilt. To carry out the massive project, more than 300 properties have been acquired. Around 1,400 shopkeepers, tenants, and homeowners were rehabilitated. The Banaras

Hindu University is a centre of learning and significant funds have been set aside for renovation activities at the university. Launch of Sound & Light Show at Sarnath

- **Ghats:** Restoration, cleaning, and beautification of ghats under the Smart City project are undertaken. The central government instructed the Uttar Pradesh irrigation department to relocate a tortoise sanctuary to a more suitable location to protect the ghats from the threat of soil erosion. Balaji Ghat and Naubatkhana in the city have been restored by the Indian National Trust for Art and Cultural Heritage (INTACH), a nonprofit organization devoted to preserving and protecting India's cultural heritage. Ustad Bismillah Khan, the master shehnai player, practiced and performed his music in Naubatkhana. U.S. Ambassadors Fund for Cultural Preservation (AFCP) of the U.S. State Department and the New York-based nonprofit World Monuments Fund assisted INTACH in carrying out this restoration work. Following the renovation, the ghat now houses a museum, an information centre, and an auditorium for cultural events that highlight the life and culture of the people of Varanasi. The Kashi Vishwanath temple complex and six ghats were cleaned by NGO Sulabh International, a player in the sanitation and waste management fields.
- **Development of Varanasi Under PRASHAD Scheme – Phase II:** The project “Development of Varanasi Under PRASHAD Scheme – Phase II” was approved by the Ministry of Tourism with a cost of Rs. 44.69 crores in Feb. 2018. It includes: Tourist Facilitation Centre, Panchkoshi Path, Pilgrim Facilitation Centre, Road Development and Signages have been completed and dedicated to the nation. The project “Development of River Cruise in Varanasi under PRASHAD Scheme” was approved by the Ministry of Tourism with a cost of Rs. 10.72 crores in Feb. 2018. The Operation of the Cruise Boat from Assi Ghat to RajGhat includes components viz. Passenger Cum Cruise Vehicle, Modular Jetty, Audio Visual Interventions, and CCTV Surveillance have been completed and dedicated to the nation.
- **Arts & Crafts:** The city is developing an integrated silk complex for the benefit of the weavers and other stakeholders as it is going to free weaver community from intermediaries. To promote Varanasi's handloom products, Rs 50 crore would be invested on a facilitation centre and a museum of crafts. Establishing a state-of-the-art music school in Varanasi that will support the musical families of the city. The Municipal Corporation of Varanasi has developed a plan where popular vocalists like Channulal Mishra and Girija Devi will assist the local musicians. The Indian Hotels Company Limited, which owns the iconic brand Taj, set up a training program for female weavers to help them become self-employed and earn income. These handicrafts and handlooms are available for purchase in the IHCL lifestyle store, The Taj Khazana.

4. Environmental Sustainability

- **River Ganga:** The required state agencies were notified in 2014 to create a new action plan for waste management and sewers in the city that empties into the Ganga. The government allocated Rs 2,040 crore for Ganga cleanup in its first budget. Over 300 million litres of sewage are produced daily in the highly populated city of Varanasi.

An estimated 35–40 MLD of raw sewage enters the river without treatment. The National Mission for Clean Ganga (NMCG) maintains the cleanliness of the Ganga River by removing all trash, untreated sewage, and other pollutants. NMCG has restored and upgraded twenty-six ghats in Varanasi. The first solar-powered e-boats in India were introduced to the river Ganga in 2016.

VII. CONCLUSION

Since ancient times, pilgrims, tourists, and other travellers have gathered in great numbers to Varanasi in large numbers. Due to the growing population and increased demand for tourism-related activities, the city is under a considerable stress. Therefore, the city's sustainable growth was imperative. The government departments, tourism businesses, NGOs, citizens and other stakeholders have taken this responsibility seriously. However, the city's ever-growing local and visitor populations will always pose a threat to its sustainability. According to the GSTC destination criterion, sustainable short- and long-term planning is necessary. The GSTC-D Criteria provide a framework for destinations to plan and manage tourism activity sustainability. It is evident from secondary research that Varanasi is actively pursuing sustainable development in the city. Depending on the requirements of the destination, in this case Varanasi, these criteria might be adopted and, if necessary, amended. But the lesson is that sustainable development should take precedence if we are to preserve the essence and character of this oldest city on Earth.

REFERENCES

- [1] Bramwell, B., & Lane, B. (1993). Sustainable tourism: An evolving global approach. *Journal of sustainable tourism*, 1(1), 1-5.
- [2] Egan, D. J., & Nield, K. (2003). The economic impact of tourism--a critical review. *Journal of hospitality and tourism management*, 10(2), 170-178.
- [3] Gebhard, K. Meyer, M. & Roth, S. (2007). Criteria for Sustainable Tourism for the three Biosphere Reserves Aggtelek, Babia Góra and Šumava, *Ecological Tourism in Europe and UNESCO MaB*, www.oete.de.
- [4] Hajra, R., & Ghosh, T. (2014). Formulation of methodological approach for sustainable tourism using 'GSTC' criteria: A case study of Sagar Island, India. *International Journal of Innovative Research and Development*, 3(1), 305-309.
- [5] Ministry of Urban Development & world Bank (2015). Project City Development Plan for Varanasi – 2041 (Final City Development Plan), https://openjicareport.jica.go.jp/pdf/12250312_03.pdf
- [6] Nagar Nigam Varanasi, Solid Waste Management - Action Plan (2019). <https://nnvns.org.in:449/nnvns/images/SWM-plan-24th-march-2019.pdf>
- [7] Roxas, F. M. Y., Rivera, J. P. R., & Gutierrez, E. L. M. (2020). Mapping stakeholders' roles in governing sustainable tourism destinations. *Journal of Hospitality and Tourism Management*, 45, 387-398.
- [8] Singh, R. P., & Rana, P. S. (2017). Varanasi: sustainable development goals, smart city vision and inclusive heritage development. *Kashi Journal of Social Sciences*, 7(1-2), 219-236.
- [9] UNWTO. (n.d.). Sustainable Tourism Development. Retrieved from <https://www.unwto.org/sustainable-development>
- [10] Chitlangiya R. (2023). Temple boom, infra burden— how Varanasi, Ujjain, & Ayodhya are tackling surge of devotees, <https://theprint.in/india/temple-boom-infra-burden-how-varanasi-ujjain-ayodhya-are-tackling-surge-of-devotees/1690654/> (Accessed on 11 August 2023)
- [11] Roychoudhury S. (2014). <https://scroll.in/bulletins/333/scroll-in-the-1-way-to-reach-indian-americans-in-the-us>. (Accessed on 11 August 2023)
- [12] Sen A., (2018). Varanasi smart city project: How PM Modi's constituency is being transformed in a 'unique' way, <https://www.financialexpress.com/business/infrastructure/varanasi-smart-city-project-how-pm-modis-constituency-is-being-transformed-in-a-unique-way/1135889/> (Accessed on 11 August 2023)

- [13] <https://www.hindustantimes.com/india-news/places-of-religious-tourism-earned-1-34-543-crore-in-2022-reveals-govt-data-101679388028123.html#:~:text=The%20number%20of%20domestic%20tourists,the%20ministry%20of%20tourism%20said>(Accessed 9 August, 2023)
- [14] https://www.statista.com/topics/10692/religious-tourism-in-india/?kw=&crmtag=adwords&gclid=CjwKCAjwp6CkChB_EiwAlQVyxV_9y6VPUPWnW3Ps9IhKDP2LGj4GsdsIJubbP_9KdFP9rkJyIFVjhRoCr64QAvD_BwE(Accessed 9 August, 2023)
- [15] <https://www.uptourism.gov.in/en/post/Year-wise-Tourist-Statistics>(Accessed 9 August, 2023)
- [16] <https://timesofindia.indiatimes.com/city/lucknow/up-is-2nd-biggest-contributor-to-domestic-tourism/articleshow/95133002.cms>(Accessed 9 August, 2023)
- [17] <https://www.outlookindia.com/outlooktraveller/travelnews/story/70754/indian-tourism-statistics-ranks-uttar-pradesh-as-the-most-popular-state-for-domestic-tourism>(Accessed 9 August, 2023)
- [18] <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1735970> (Accessed 9 August, 2023)
- [19] <https://www.slideshare.net/AvanitaSharma/varanasi-development-plan-analysis-238867576>(Accessed on 10 August, 2023)
- [20] <http://spa.ac.in/writereaddata/executive-summary-varanasi.pdf> (Accessed 10 August, 2023)
- [21] https://eaindustry.nic.in/ddp/Varanasi_DDP_Report_Final.pdf (Accessed 10 August, 2023)
- [22] <https://www.uptourism.gov.in/en/post/Year-wise-Tourist-Statistics>(Accessed 10 August, 2023)
- [23] <https://timesofindia.indiatimes.com/india/varanasi-tourist-numbers-top-10-crore-level-a-big-boost-to-economy-pm-modi/articleshow/102257818.cms?from=mdr>(Accessed 10 August, 2023)
- [24] <https://economictimes.indiatimes.com/news/economy/infrastructure/smart-city-plan-of-varanasi-identifies-traffic-congestion-and-encroachment-as-major-problems/articleshow/50226443.cms?from=mdr> (Accessed on 11 August 2023)
- [25] <https://timesofindia.indiatimes.com/city/varanasi/improved-traffic-arrangement-less-chaos-in-kashi-from-new-year/articleshow/96441819.cms> (Accessed on 11 August 2023)
- [26] <https://www.tripoto.com/varanasi/trips/varanasi-has-a-serious-garbage-problem-and-it-s-time-we-dealt-with-it-5bf2b1877c068> (Accessed on 11 August 2023)
- [27] <https://varanasi.nic.in/district-produce/banarasi-saree/>(Accessed on 11 August 2023)
- [28] <https://varanasi.nic.in/art-craft-varanasi/>(Accessed on 11 August 2023)
- [29] <https://www.uptourism.gov.in/en/page/varanasi-sarnath>(Accessed on 11 August 2023)
- [30] <https://travel.economictimes.indiatimes.com/news/destination/states/varanasi-records-surge-in-tourist-arrivals-since-completion-of-kashi-vishwanath-corridor/99370354#:~:text=Gokul%20Sharma%2C%20president%20of%20the,the%20number%20doubles%20on%20holidays.> (Accessed on 11 August 2023)
- [31] <https://www.hindustantimes.com/cities/lucknow-news/varanasi-tourism-sees-boom-with-12-lakh-visitors-over-the-weekend-thanks-to-kashi-vishwanath-corridor-spiritual-tourism-101681148243474.html> (Accessed on 11 August 2023)
- [32] <https://timesofindia.indiatimes.com/city/varanasi/oldest-living-varanasi-has-new-plans-for-tourists/articleshow/97240358.cms?from=mdr>
- [33] http://timesofindia.indiatimes.com/articleshow/52067229.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- [34] <https://www.narendramodi.in/kashi-vikas-yatra#:~:text=PM%20Modi%20laid%20the%20foundation%20stone%20and%20dedicated%20development%20projects,the%20apprehensions%20of%20people%20and%20%E2%80%A6>
- [35] https://economictimes.indiatimes.com/news/elections/lok-sabha/india/vvip-constituency-8-things-pm-modi-did-for-varanasi/articleshow/69052002.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst (Accessed on 11 August 2023)
- [36] <https://www.hindustantimes.com/india-news/pm-modi-in-varanasi-today-full-list-of-projects-to-be-launched-by-him-101640217295784.html> (Accessed on 11 August 2023)
- [37] <https://www.news18.com/politics/rs-1780-cr-counting-how-pm-modis-constituency-varanasi-is-scaling-new-heights-of-development-7377457.html>, March 24, 2023 (Accessed on 12 August 2023)
- [38] http://timesofindia.indiatimes.com/articleshow/97240358.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst(Accessed on 12 August 2023)
- [39] <https://www.ndtv.com/india-news/what-is-kashi-vishwanath-corridor-project-explained-in-5-points-2648407>(Accessed on 12 August 2023)
- [40] <https://www.deccanherald.com/content/449862/ngo-clean-varanasi-ghat.html>

- [41] <https://www.indiablooms.com/life-details/F/4325/varanasi-a-centuries-old-ghat-restored.html>
- [42] <https://www.aninews.in/news/national/general-news/nmcg-ensuring-pristine-flow-of-ganga-in-varanasi20230304221017/>
- [43] http://timesofindia.indiatimes.com/articleshow/92991139.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- [44] <https://www.livemint.com/news/india/pm-modi-to-inaugurate-international-cooperation-and-convention-centre-rudraksha-in-varanasi-on-july-16-see-pics-11626249020095.html>
- [45] (Accessed on 13 August 2023)
- [46] <https://www.kamakoti.org/kamakoti/details/Shankaracharya-Kanchipuram3.html>(Accessed on 13 August 2023)
- [47] <https://varanasi.nic.in/history/>(Accessed on 13 August 2023)