

Chapter 15

Urban Design Guidelines for the Heritage Destination of Fort Kochi

* Adithya SD, Tintu Jessy Joseph, Dr.Manoj Kumar K, Sruthi Satheesan

Introduction

Heritage precincts can be potential tourism destinations. When the density of tourism increases, it creates stress on the existing infrastructure and demands a lot of open spaces, parking spaces, eating spaces, and other related utilities. This thrust often affects the inherent morphology of heritage precincts, their unique selling point. To prevent this, an urban design guideline for heritage precincts, or in other words, a guided urban development, must be imperative.

Heritage tourism in India is important due to the nation's diverse landscapes, rich cultural traditions, and historical monuments. As one of the world's oldest civilizations, India offers a diverse range of heritage sites that attract millions of tourists annually, ranging from ancient temples and forts to colonial-era buildings and cultural festivals. This form of tourism not only serves as a significant economic driver but also plays a vital role in preserving and promoting the country's cultural heritage. The robust influx of tourists fosters cultural exchange and enhances global appreciation of India's historical legacy. However, the increase in tourism introduces several challenges, including overcrowding, inadequate infrastructure, and insufficient preservation efforts, which threaten the heritage that attracts tourists.

Fort Kochi in Kerala serves as a prime example of these issues. Renowned for its unique amalgamation of local culture, historic architecture, and colonial history, Fort Kochi has seen a significant rise in popularity among travelers. The town features picturesque streets, historic churches, colonial-era buildings, and vibrant cultural events, including the famous Kochi-Muziris Biennale. Nevertheless, the influx of visitors exerts considerable pressure on the urban system and deteriorates historical buildings. Furthermore, the unique cultural identity of Fort Kochi is under threat due to changing visitor patterns and increasing commercialization.

Given the socio-economic importance of heritage tourism and the need to preserve cultural heritage, this paper explores the challenges posed by increased tourism in heritage destinations like Fort Kochi. It also examines strategies to balance tourism development with the conservation of cultural and historical assets, ensuring long-term sustainability. Maintaining Fort Kochi's cultural legacy while promoting tourism necessitates careful consideration. Sustainable tourism practices are crucial in addressing these challenges and safeguarding Fort Kochi's historical and cultural legacy for future generations. This approach aligns with Sustainable Development Goal (SDG) 8.9 of the 2030 Agenda for Sustainable Development, which emphasizes the promotion of sustainable tourism that creates jobs and conserves local culture and goods. Key measures include implementing conservation efforts, enhancing infrastructure, and promoting local culture and products. Involving the local community in tourism planning ensures that the benefits of tourism are equitably distributed and that residents have a vested interest in preserving their cultural heritage. By balancing tourism promotion with conservation efforts, Fort Kochi can be protected for future generations while fostering sustainable development.

Corresponding Author:* Adithya SD
Department of Architecture and Planning, College of Engineering Trivandrum, India
e-mail:adithyathanal@gmail.com

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Defining Heritage destination

“Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural heritage is both irreplaceable sources of life and inspiration.” (UNESCO)

According to the National Trust for Historic Preservation, heritage tourism is travel to see locations, objects, and events that accurately depict the histories and cultures of the past and present. Within the heritage sector, it is a specific kind of tourism that includes destinations like museums, heritage sites, and other historical landmarks. Around the same time that the World Heritage concept gained popularity in the 1970s, the term "heritage tourism" became widely used. This niche market for travel offers a broad range of experiences, from touring historical structures, monuments, and locations of important historical events to delving into customary landscapes, native animals, literature, music, art, folklore, and customs related to food, drink, and sports. As a result, heritage tourism offers visitors genuine and immersive experiences with a destination's cultural and historical fabric, acting as a link between the past and present.

Physical objects like locations, structures, and landscapes that serve as tangible reminders of past times are considered tangible heritage. The intangible elements of culture, such as values, customs, memories, and feelings that form a society's collective identity are considered Intangible heritage. According to Ann Marie Sullivan (2016), natural heritage is centered on biodiversity and culturally significant landscapes, emphasizing the relationship between nature and human history. The notion of "digital heritage" has surfaced in the digital era; it was first defined by UNESCO in 2016 and refers to computer-based materials such as software, databases, images, sounds, texts, and images that are preserved for future generations. Lastly, William S. (2007) clarifies cultural heritage, comprises material and immaterial possessions passed down from previous generations.

Heritage tourism and its impacts

Heritage tourism is growing as a significant component of the global tourism industry, particularly in countries diversifying beyond traditional attractions. Heritage tourism needs to adapt to globalized communities while maintaining unique local identities amidst evolving political, economic, and socio-cultural environments. (Park, 2013). Heritage interpretation must be dynamically linked to socio-cultural contexts and the evolving urban landscape, ensuring that it remains relevant and meaningful for both residents and visitors. This approach helps preserve cultural identity and supports community engagement with heritage sites. (Munasinghe, H., 2022). A place can become a modern tourist destination through developing tourist facilities and effective marketing to potential visitors. The challenge lies in maintaining an authentic identity while implementing modern visitor management. (Laws, E. 2007).

Hariry, M. Z. (2017) suggests that urban conservation in historical settlements requires a methodology that evaluates and synthesizes past and present architectural elements to maintain historical continuity and urban identity. By incorporating local and traditional elements into modern architecture, it is possible to protect and preserve historical buildings amidst ongoing changes.

Rapid development and construction of tourist facilities can negatively impact natural and cultural heritage, highlighting the importance of sustainable development practices to protect these resources. (Mahgoub, Y. 2022). Adaptive reuse of public buildings, particularly in the cultural and creative sectors, can play a significant role in sustainable urban development by transforming neglected or abandoned spaces into valuable resources. (Chiacchiera, F., & Mondaini, G. 2023).

Smart heritage involves integrating advanced technologies into the preservation and management of cultural heritage, making it dynamic and adaptable to modern needs while ensuring sustainability. (Song, H., & Selim, G. 2022). Managing urban heritage precincts involves navigating complex challenges unique to urban environments, necessitating comprehensive guidelines to ensure effective conservation and integration with urban development. (Hajarnis, M.)

Material and Methods

The methodology for this research study follows six structured steps. Initially, the authors formulate the research problem and hypothesis to set the foundation. Next, the authors conduct a theoretical study focusing on heritage destinations and tourism, exploring definitions, types, and the impact on heritage sites. Then carry out a literature review, examining global cases like Venice and Indian cases such as Jaisalmer, Jaipur, and Fort Kochi. Literature Case Study 1, shed light on the difficulties faced by internationally significant sites in Venice. Literature Case Study 2, describes the Indian context of Jaisalmer, rich in cultural and historical significance. The third case study discusses the impact of tourism in Jaipur. Taken together, these literature case studies provide an extensive overview of the world's heritage conservation landscape, incorporating various approaches, including the impact of tourism on different heritage sites. These stages help the authors identify key parameters categorized into physical/morphological, social, economic, cultural, ecological, and infrastructural aspects. For the primary case study, the authors conduct detailed site-specific studies using urban design tools, such as walkthrough analysis, photographic surveys, and interviews. This stage also

includes city tourist profiles and heritage asset mapping, supported by master plans and development reports. Then analyze and infer the gathered data, leading to the development of urban design guidelines and conclusions aimed at sustainable heritage tourism.

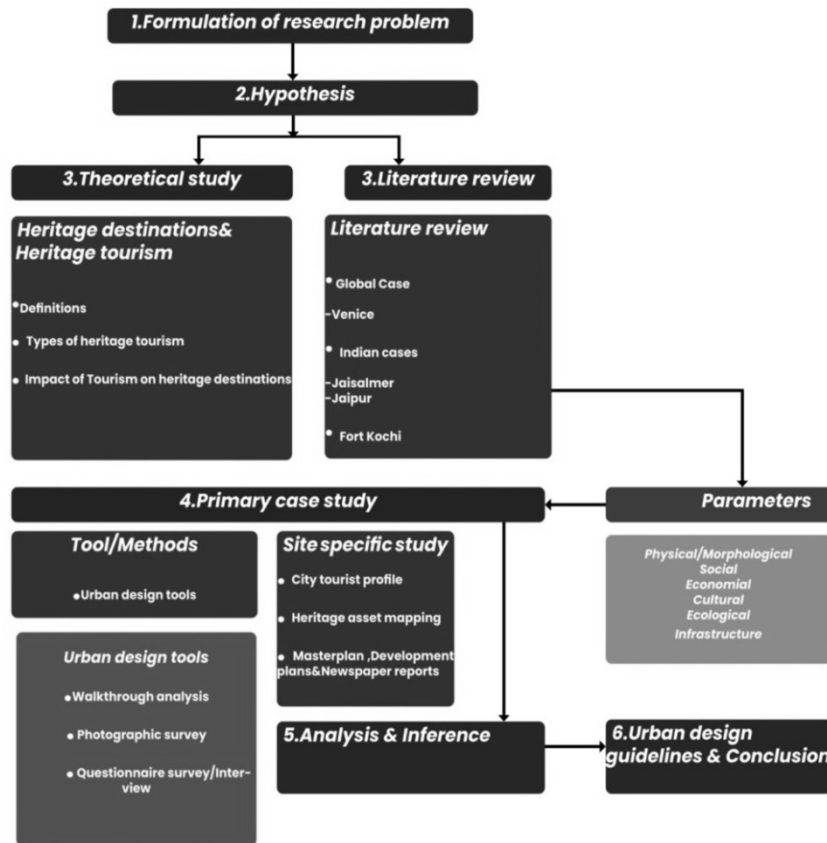


Figure 1. Methodology.

Gathering Datasets and deriving parameters

To understand the impact of tourism on heritage destinations, the authors identified a need for studying different cases in both international and Indian contexts. The parameters derived from the literature case study are consolidated in Table 1.

Table 1. Parameters derived from the literature case study



Parameter	Sub Parameter
Physical	Built form, Built use, Built character, Building density, Built ownership, Imageability, Streetscape
Ecological	Open spaces, Waste management, Vegetation, Pollution
Socio-Cultural	Demography, Population density, Identity, Authenticity, Festivals & Events
Infrastructure	Tourism infrastructure, Street furniture, Streetlights, Comfort stations
Economic	Livelihood, Employment


Case study

Situated on India's scenic southwest coast, Kochi is a bustling metropolis that skilfully attempted to combine its rich historical legacy with contemporary architecture, rendering it an alluring travel destination. Kochi is a testament to Kerala's enchanting beauty. Kerala tourism statistics show that Kochi, known for its distinct cultural tapestry and varied architectural heritage, draws the greatest proportion of both domestic and foreign visitors.

Fort Kochi is the destination that attracts the most percentage of both local and foreign tourists, according to Kerala tourism data. Fort Kochi is renowned for its rich trading and imperial past. It is currently one of the city's most cosmopolitan districts, with the majority of its residents being middle-class. The area is high-density and low-rise, and contains several historical sites and narratives. Wandering around Fort Kochi's narrow lanes, which are decorated with colourful street art, or perusing the spice markets are delightful sensory experiences for visitors. The city's cultural attractiveness is further enhanced by the Kochi-Muziris Biennale, which is a celebration of contemporary art. Table 2 shows the analysis of the case study based on the parameters derived.

Table 2. Case study analysis

Parameter	Sub Parameter	Inference
Physical	Built form	<ul style="list-style-type: none"> The built form of Fort Kochi can be categorized into three different typologies. <ol style="list-style-type: none"> Bungalow Form Street Form Large Court Form The present form which is the Dutch overlaid on the earlier Portuguese town, has undergone various changes, reused, and modified. The various forms generate different spatial character in public areas.
	Built use	<ul style="list-style-type: none"> Many residential properties and warehouses in Kochi have been transformed into hotels and venues for the Kochi-Muziris Biennale.
	Built character	<ul style="list-style-type: none"> Illegal renovation of heritage structures. Old tiled roof buildings are replaced with metal roofing sheets.  <p>Figure 3. Built character map of the study area (Source: Author)</p>
	Building density	<ul style="list-style-type: none"> High-density mixed-use development  <p>Figure 4. Figure-ground map of the study area (Source: Author)</p>
	Imageability	<ul style="list-style-type: none"> Billboards and posters generate visual pollution in the

		Heritage destination.
Ecological	Open spaces	<ul style="list-style-type: none"> • Kochi Carnival 2023-Created a stampede situation due to overcrowding and lack of management. Need more open spaces to accommodate the increasing crowd during festivals.  <p>Figure 5. Available open space map of the study area (Source: Author)</p>
	Waste management	<ul style="list-style-type: none"> • The surge in tourist numbers especially during festive seasons led to a significant increase in waste generation.
	Social equity	<ul style="list-style-type: none"> • People who are the original residents are either forced to move to other locations or change their uses to commercial purposes.(KMC Master plan 2041)
	Demography	<ul style="list-style-type: none"> • Fort Kochi is one of the regions with a high population Density. • An increase in population can be seen.
Socio-Cultural	Identity and authenticity	<ul style="list-style-type: none"> • Local food culture is changing to a global menu. Native Food of Fort Kochi is not available in food joints or restaurants. • All of the heritage sites and buildings are being overtaken by urban expansion and the strain brought on by the tourism sector, which is causing them to lose their original identity.
	Festivals& Events	<ul style="list-style-type: none"> • The Biennale of Fort Kochi transforms host locations with public sculptures, performances, and art installations. • Kochi Carnival 2023 caused rushes due to overcrowding and poor management.
	Livelihood	<ul style="list-style-type: none"> • The economic benefits of luxury tourists do not filter down to the community.

Preparing guidelines

Based on the analysis of the issues, a set of guidelines for the heritage precinct of Fort Kochi has been developed and is shown in Table 3.

Table 3. Guidelines for Fort Kochi (Developed by Author).

Parameter	Guideline
Physical	
1.Built use & Built form	<ul style="list-style-type: none"> • Preserve and repair original architectural components, including doors, windows, and ornamental details. • Adaptive reuse of current buildings for new purposes while making sure that the original architectural features are retained. • Make sure that any alterations or additions respect the existing architecture style, and are well-integrated.
2.Built character	<ul style="list-style-type: none"> • Reinforce and implement the current rules and regulations pertaining to heritage protection, which forbid making unapproved changes to historical buildings in zone A & B. • Penalties and legal measures should be applied to anyone or organizations found guilty of doing unlawful modifications. • Emphasize the importance of traditional architectural features, such as tiled roofs, both historically and culturally. • Discounts or other financial incentives to landowners who decide to conserve to encourage preservation.
3.Built ownership	<ul style="list-style-type: none"> • To stop degradation, emphasize the value of maintaining the current structure and encourage routine and proactive building maintenance.
4.Imageability	<ul style="list-style-type: none"> • Provide control signs to keep the streetscape unified and visually beautiful. • Make use of, accurate lighting to improve visibility without taking away from the historic atmosphere.(Lighting up of bus stand area) • Utilities like power lines and communication infrastructure should be integrated or concealed. When it is possible, burying utilities underground. • Create an essential infrastructure that blends in with the heritage district, such as traffic management features or street furniture. • Inform the public about the role that aesthetics plays in preserving the precinct's historical significance. • To maintain aesthetic integrity, promote appropriate conduct, such as refraining from trash or vandalism. • Make sure that the area's aesthetic appeal is not compromised by modern needs.
Ecological	
1.Open spaces	<ul style="list-style-type: none"> • Adaptive reuse of unused lands into public open spaces. • Multipurpose and flexible open space to conduct multiple events. • Employ technology, such as crowd-monitoring systems and smart signs, to increase the effectiveness of open space utilization during festivals. • Put emergency evacuation plans and designated entrance and departure points into action.
Socio- cultural	
1.Identity and authenticity	<ul style="list-style-type: none"> • Invite neighborhood food sellers and eateries to include native cuisine from Fort Kochi on their menus. • Encourage cooperation between local communities and chefs to guarantee the authenticity of the cuisine. • Plan culinary festivals and gatherings that showcase customary ingredients and methods of preparation. • Encourage gift stores to stock genuine, locally produced goods that pay homage to Fort Kochi's past. • Establish a platform for the marketing of goods from traditional cottage industries, such as textiles and handcrafted items.

<p>2.Social security</p>	<ul style="list-style-type: none"> • Provide schemes for rent control or subsidies to shield households from growing living expenses. • Provide possibilities for affordable housing in the heritage precinct so that the original occupants may stay. • Use interactive exhibits and guided tours to help people comprehend and value the heritage site.
<p>Physical Infrastructure</p>	
<p>1.Infrastructure facilities</p>	<ul style="list-style-type: none"> • Designated vendor zones and regulations to control the placement and operation of street vendors. • Address the inadequacy of public toilets and restrooms by strategically locating and upgrading existing facilities. • Install proper street lighting infrastructure in Fort Kochi, particularly around the bus stand area, to enhance safety and security. • Utilize energy-efficient and aesthetically pleasing lighting fixtures that complement the heritage character of the surroundings. • Create informative signage and way-finding systems to guide visitors through the circuit, encouraging exploration and engagement with the local culture and history.

Discussion and Conclusion

Heritage precincts like Fort Kochi are invaluable cultural assets that require careful management to balance tourism and preservation. By developing and implementing urban design guidelines, it is possible to create a sustainable tourism model that enhances the visitor experience while protecting the unique qualities of these historic areas.

Urban design guidelines can be used to restructure a heritage destination by providing a framework for preserving the heritage character and achieving visual harmony. These guidelines ensure that new constructions within the heritage sites are designed in a way that is compatible with the existing heritage buildings and the overall character of the site. As cities struggle with the challenges of urbanization and increasing tourist footfall, the lessons learned from Fort Kochi's journey underscore the importance of proactive and well-crafted urban design strategies in shaping the future of our cherished heritage destinations.

To draw people to the city, the government must promote housing and job prospects while also regulating and reducing tourism. In order to guarantee that its residents have suitable living conditions, additional public areas and infrastructure must be built. Although tourism brings economic benefits and generates employment, its negative effects must be taken into account, and the preservation of the city must come first.

In conclusion, urban design guidelines plays an important role in the thoughtful restructuring of heritage destinations. By navigating the delicate balance between preserving historical authenticities and accommodating the needs of a growing tourism industry, these guidelines offer a sustainable framework for the revitalization of cultural treasures.

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Conflict of Interests

The author declares no conflict of interest.

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