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Exploring Sustainability in Cultural Heritage Tourism Planning: Can Strategic Environmental Assessment Fill in the Gap?

Urmila Jha-Thakur
Fatemeh Khosravi
Giamila Quattrone
Soumyen Bandyopadhyay
Ian Magedera
Supriya Garikipati

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Environmental Assessment Fill in the Gap?

Urmila Jha-Thakur^a, Fatemeh Khosravi^e, Giamila Quattrone^b, Soumyen Bandyopadhyay^b, Ian

Magedera^c and Supriya Garikipati^d

^a Department of Geography and Planning, University of Liverpool, UK

^bSchool of Architecture, University of Liverpool, UK

^cDepartment of Modern Languages and Cultures, University of Liverpool, UK

^dManagement School, University of Liverpool, UK

^ePost-doctoral Fellow, Sustainable Research Institute, University of Leeds.

Abstract

Sustainability is critical to the delivery of cultural heritage tourism (CHT) since its foundation

to attract tourist relies on the preservation of the historic and cultural offerings of the host

community. CHT destinations within urban and semi-urban heritage sites in emerging

economies find this particularly challenging. To explore this issue and its associated

challenges, this paper brings together an interdisciplinary team representing disciplines of

heritage management, architectural and cultural history, economics, environmental planning

and sustainability to establish the extent to which sustainability principles are integrated within

CHT destinations in the semi-urban destinations of emerging economies. An interdisciplinary

analysis of the case study of Srirangapatna-Mysore region in India, using a framework for

evaluating sustainability principles within CHT reveals environmental considerations to be the

weakest link. Accordingly, Strategic Environmental Assessment (SEA) is proposed as a tool

that can potentially enhance environmental sustainability of CHT.

Keywords: Cultural Heritage Tourism (CHT), Sustainability, Interdisciplinary, Semi-urban,

India

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1. Introduction

Cultural Heritage Tourism (CHT) is an interface of both cultural and heritage tourism (Sangchumnong and Kozak 2018). Heritage tourism is a variety of heritage sites, which represent their historical background (Smith 2009) whilst cultural tourism is related to cultural aspects that include customs and traditions of people, their heritage, history and way of life (José and Hernández 2012). The United Nations Educational Scientific and Cultural Organisation (UNESCO) has combined the terminologies of "cultural tourism" and heritage tourism" into the single concept of "Cultural Heritage" in registering World Heritage Sites (Sangchumnong and Kozak 2018, p.184) and identifies cultural heritage assets as both tangible (e.g., monuments, archaeological remains, artefacts, etc.) and intangible ones (e.g., traditions, social practices, rituals, etc.) (Dragouni 2017; Ramya and Senthi 2016).

Sustainability is critical to the delivery of cultural heritage tourism (CHT) since its foundation to attract tourists, relies on the preservation of the historic, artistic and cultural offerings of the host community. Despite of current global rise of the sustainability agenda, evidence shows that cultural heritage resources are still repeatedly damaged and destroyed (Loulanski and Loulanski, 2011). The New Urban Agenda (NUA) recognizes the need to consider cultural heritage as an important factor for urban sustainable development (Nocca 2017), especially in urban and semi-urban centres of emerging economies. Furthermore, areas experiencing processes of urbanization are more likely to experience an exacerbation of the outcomes of rapid development (Mijal 2017). Embedding sustainability principles in tourism of cultural heritage sites is, therefore, of paramount importance in areas that are encountering rapid urban transformations.

Strategic Environmental Assessment (SEA) has been applied in tourism planning since the 1990s (Lemos et al., 2012), however, compared with many other sectors, its practice is still limited within this sector (Lemos et al., 2012; Khosravi and Jha-Thakur 2018; Khosravi et al., 2019). SEA can help to avoid or mitigate negative impacts and enhance positive outcomes of tourism planning at policy, plan, and programme (PPP) level (Fischer 2007; Khosravi et al., 2019). It helps in ensuring environmental aspects are given due consideration in plans, policies and programmes (PPPs). Hence, this paper aims to investigate the extent to which sustainable principles are incorporated within CHT in semi urban areas and explore the possible role that

SEA can play in enhancing the sustainability of CHT. Srirangapatna-Mysore region in India has been chosen as a study area and the rationale for its selection has been further discussed in section 2. Accordingly, this paper is organised into six sections. Following the introduction and context setting, the third section presents the methodology which further introduces the framework of analysis. The fourth section presents the findings of the research while the fifth section discusses the findings and explores the potential role that SEA can play and finally, conclusions are drawn.

2. Setting the Context

2.1. Study area: An emerging context for exploring cultural heritage tourism

India's transition from a rural to an urban society has been described as one of the "largest and most transformative demographics shifts the world has ever seen" (Hoelscher 2016, p.28). This rapid pace of urbanization presents massive challenges to the country's resources and planning. The tourism sector in India is the largest and fastest growing industry among the various service industries (Chawla and Jain 2017) and the World Travel & Tourism Council (WTTC) calculated that tourism generated US\$210 billion or 9.4% of the nation's GDP in 2017 (2017). CHT is a vital component of the tourism industry in the country and has become a popular global leisure activity (Shankar, 2015). The Indian Government has also been paying attention to heritage through its Heritage City Development and Augmentation Yojana (2015-18), which looked at the holistic development of 12 shortlisted heritage cities through the revitalization of urban infrastructure around heritage assets (MHUA 2015). With the existing momentum gained towards CHT and the rapid urbanization that the country is facing, India offers itself as an ideal context within which the case study can be selected for the purpose of this study.

2.2. Case study: Srirangapatna-Mysore region

Srirangapatna, currently on the UNESCO World Heritage tentative list, is a historical Indian riverine island town, created by the bifurcation of River Kaveri, located in the southern Mandya district in the state of Karnataka (Shankar and Uma 2012). UNESCO recognizes the island's outstanding universal value lies in its representation of different developmental stages of defense architecture in Hindu and Islamic traditions. These range from the Hoysalas, the Vijayanagara, the post-Vijayanagara to the Islamic traditions introduced in the period of Haidar Ali and Tipu Sultan. Religious representations in the forms of temples, mosques, tombs and

gardens are scattered across the island. In recent times, these cultural sites support the economy and lend themselves as the "variety of heritage places" that Smith (2009, p.32) refers to in defining heritage tourism as a type of cultural tourism.

However, considering the location of Srirangapatna, treating it as an isolated island does not serve well in terms of considering both tourism potential and sustainability. The town is situated along the Mysore-Bangalore Highway and is well connected to major urban areas, especially Mysore, which is located just 22 km away. Furthermore, the state of Karnataka, within which our case study area is located, lends itself as an ideal context for this study. The state boasts 507 of the 3,600 centrally protected monuments in India, with Hampi and Pattadakal already accorded with World Heritage status (Rani 2017). Development and implementation of appropriate policies and management strategies are imperative for long-term success in regions that are seeking to employ CHT as means to economic growth (De Oliveira 2003). Hence, instead of focusing exclusively on Srirangapatna, this study encompasses the Srirangapatna-Mysore region as its study area and considers the wider tourism policies and plans at state level.

3. Methodology

CHT is a multidisciplinary subject, where understanding of the value of heritage architecture and assets goes hand in hand with expertise in the field of cultural history, environmental planning, social changes and economics, therefore a team was constituted with expertise in heritage management, architectural and cultural history, economics, environmental planning and sustainability. This is an important methodological approach adopted by the study as it enables the interpretation of the results through a variety of lenses, which is believed to deliver greater results on the research undertaken (Loulanski and Loulanski 2011). The research is also based on a single case study of a semi-urban region located within an emerging economy with cultural heritage assets that have been attracting tourists. This strategy of a single case is considered to be appropriate 'on the basis that the case is revelatory' (Sangchumnong and Kozak 2017, p.186). The sustainability evaluation started with documentary review of planning policies, reports and management strategies related to tourism and cultural heritage available for the Srirangapatna-Mysore region within the wider state of Karnataka. These include:

• Karnataka Tourism Master Plan (2010- 2020) (KSTDC, 2010),

- Karnataka Tourism Policy (KTP) (2009- 2014), (DoT, 2009),
- Karnataka Tourism Policy (KTP) (2015-2020), (DoT, 2015),
- City Development Plan for Mysore (Mysore City, 2006),
- Conservation Plan for Srirangapatna Fort by Indian Heritage Cities Network Foundation (IHCNF, 2016) and
- Karnataka Tourism Vision Group document (KTVG, 2014).

This was supported by 10 exploratory interviews that were conducted amongst heritage experts, and tourism and cultural related professionals in the case study region in 2019. Observations carried out by the interdisciplinary team during field visit of the region in 2018 further complements the evaluation.

3.1 Framework to analyze sustainability principles within CHT

In order to identify criteria to investigate sustainability principles within CHT, a literature review was conducted looking at the broad criteria used within sustainable tourism. Ever since, the sustainability concept was developed in 1987 by the United Nations World Conference on Environment and Development, it has crystallised the notion that the optimal form of growth needs to follow a three-pillar approach: the economic, the social and the environmental (Sangchumnong and Kozak 2018). This sustainability model was later further elaborated with the addition of the cultural aspects as a fourth key dimension (see, Agenda 21 for Culture, Faro Convention, Council of Europe 2005). Some tourism scholars have assessed tourism sustainability against the social, environmental and economic dimensions (Mowforth and Munt 2009). Loulanski and Loulanski's (2011) in their CHT studies, adopted 15 broad criteria representing all the four pillars of sustainability including the cultural one. Since, CHT lies at the core of this study, we have adopted the four broad pillars of sustainability which includes a) social equity b) economic viability c) cultural heritage and d) environmental responsibility. The sub-criteria were inspired from the sustainable tourism literature but were also adopted based on the input from the interdisciplinary team. The criteria and sub-criteria are presented below and summarised in Table 1.

3.1.1 Social equity: Participatory governance is an established concept of sustainable tourism (Landrof 2009), which was introduced more than three decades ago (Murphy 1985), and it remains topical in sustainable tourism (Dragouni et al. 2018). It is also paramount to evaluate

existing relationships between different stakeholders (Hughes et al. 2016; Dragouni 2017). Furthermore, in delivering sustainability within the CHT, it is important to consider community awareness and attitude towards heritage and environment (Nicholas et al. 2009, GSTC 2018). Accordingly, the framework examines the relationship between stakeholders and their participation in the process, local community participation and the extent to which their attitude and values are accommodated.

- 3.1.2 Economic viability: Lack of appropriate tourism plan and policy can lead to the marginalization of local businesses (Loulanski and Loulanski 2011). It can also lead to further escalation of prices for essentials, returning minimal economic benefits to destination hosts, who are nonetheless heavily affected by tourism change (Mbaiwa 2005). Therefore, from the perspective of enhancing CHT's economic viability, it is important to consider the resource implications of tourism activities. Planning must deal with tourist numbers, length of stay and type of engagement within the area. Furthermore, to sustain tourism and enhance protection of cultural heritage, it is also imperative to consider the extent to which the revenue generated can be used in enhancing and protecting the heritage and environmental assets of the location (Weng et al. 2019).
- 3.1.3 Cultural heritage: Providing an inventory of local cultural heritage assets is fundamental step to protect what is found in a specific area (Myers 2016). The importance of inventories is recognized in different international heritage charters, including the Athens Charter (Tyrwhitt 1933) and the UNESCO Convention and Recommendations (1972). Interpretation is another key instrument in sustainable management of heritage tourism, particularly for visitors and impact management at heritage sites (Loulanski and Loulanski 2011). How these assets are interpreted, used and engaged with, is also crucial in ensuring their potential is effectively utilised. Poria et al. (2009) highlighted that visitors prefer on-site interpretation, as an essential element in the management of heritage related tourist attractions. Interpretation programmes should be designed as an educational resource for people of all ages and for possible uses in school curricula, informal and lifelong learning programmes (ICOMOS Charter for the Interpretation and Presentation of Cultural Sites 2008).
- **3.1.4** Environmental responsibility: Tourism can increase profitability, but at the same time can be resource intensive and cause pollution to the environment. The environmental impacts

of tourism need to be considered in plan making for CHT to ensure that the carrying capacity can accommodate tourist influx (Khosravi and Jha-Thakur 2018). Negative environmental impacts such as solid waste management, air pollution, water pollution are important criteria. Encouraging tourists to act in ways that minimizes environmental impact, is one of the greatest challenges for sustainable tourism development (Buonincontri. et al 2017). Threats from tourism on the environment and heritage are not limited within the boundaries of the island. Some of these challenges need to be considered cumulatively considering the wider geographical area (Clark 1994; Lemos et al. 2012).

Table 1: Framework for analysing Sustainability principles in the Planning of CHT

Criteria	Sub-criteria (Question form)	Adapted from
Social equity	1. Do local communities participate in the planning process?	Dragouni et al., 2018; Ruhanen 2004; Nowacki et al. 2018; GSTC 2018;
	2. Is community-relevant values and attitudes accommodated?	Ruhanen 2004; Nowacki et al. 2018
	3. Is the relationship between stakeholders addressed?	Hughes et al; 2016; Dragouni 2017; Ruhanen 2004; Nowacki et al. 2018.
Economic viability	1. Are economic benefits of tourism to the area considered? Especially in terms of impact on livelihoods?	Ruhanen 2004; Dragouni 2017; GSTC 2018; Nowacki et al. 2018
	2. Are current visitor numbers, length of stay quantified?	Ruhanen 2004; Nowacki et al. 2018; GSTC 2018
	3. Is there allocation of economic resources for the maintenance of cultural heritage assets?	Weng et al. 2019; Mbaiwa 2005
Cultural heritage	1. Is there any inventory strategy for heritage tourism assets?	GSTC 2018; ICOMOS 2008,
	2. Is there any interpretation strategy at natural and cultural site?	Loulanski and Loulanski, 2011; GSTC 2018
	3. Is there consideration for appropriate approaches for cultural heritage protection?	GSTC 2018
	4. Is there any strategy to provide guidelines for visitor behaviour at heritage sites to minimise adverse impact?	GSTC 2018; Buonincontri et al. 2017; Jiang et al. 2017
	5. Does the Government encourage training and education on CHT for relevant stakeholders?	Weng et al 2019; Ramya and Senthi, 2016
Environmental responsibility	1. Have pollution impacts been identified (air, water, waste, biodiversity etc) that may be caused by tourism?	Giurea et al., 2018, Lemos et al. 2012.
	2. Are sensitive environments taken into consideration?	Ruhanen 2004; Nowacki et al. 2018; GSTC 2018
	3. Are cumulative impacts taken into consideration?	Clark 1994; Khosravi and Jha-Thakur, 2018

4. Exploring sustainability in the case study area

4.1. Social equity

4.1.1 Local community participation: The review of documents exhibits a somewhat mixed result in terms of community participation within the plan making process. The constitution of the KTVG in 2014 by the state Government was an important step taken towards community involvement in planning. KTVG comprised of eminent citizens and sector specialists who were in charge of advising the state government on the way ahead for the tourism sector in Karnataka. Nevertheless, there seems to be no public engagement by the KTVG in the preparation of the KTP 2015-20 (DoT 2015). The Conservation Plan for Srirangapatna Fort, on the other hand, explicitly emphasises the need to involve the local community in future decisions regarding the Fort (IHCNF 2016). The Mysore City Development Plan was the only document to show evidence of stakeholders' engagement by way of questionnaire surveys (Mysore City 2006). Though there seems to be some appreciation of the need for community participation, the issue has not been incorporated whole heartedly within the planning documents. The interviewees suggested that though there are informal ways of engaging stakeholders, there is a lack of a systematic approach.

4.1.2 Accommodating community values and attitude: An analysis of the documents indicate that the planning process did not explore or identify attitudinal and cultural values that are important for the local community. For example, the riverine island is also home to intangible cultural assets such as the presence of the "Lingayat community", which has been recognised within the Encyclopaedia of Religion and Ethics (Vol. 8) (Hastings 1915). Community members protect the sanctity of their worship area by not wearing slippers, not just within the temple premises but also in the surrounding area. During the field trip, the experts were asked to remove their shoes even when the area was flooded. The observation reflected the importance of appreciating the value of such cultural practices.

4.1.3 Developing relationship between stakeholders: The KTP 2015-2020 (DoT 2015) has confirmed that the implementation of strategies should be done through coordination between various stakeholders across different sectors. This need has been encompassed in the KTVG (2014), which proposes the setting up of Regional Tourism Entities (RTE) that would bring together various stakeholders in developing and implementing a shared vision. However, there

is no evidence of strategies in place to implement this. During the field visit it was observed that the Fort wall in Srirangapatna was in serious need of repairs. In this regard, one interviewee mentioned that:

..."The fort walls enjoy heritage status, but are part of privately-owned land. Owing to their heritage status, private owners stay away from carrying out any kind of work on the walls. Furthermore, since the walls fall within private boundaries, the ownership of their maintenance is not taken up by the government either".

Therefore, these heritage assets in the word of the interviewee are almost treated as 'no-man's property' and left to perish. This example highlights the importance of the much-needed coordinated stakeholder involvement, to protect and preserve heritage sites in the riverine island.

4.2 Economic viability

4.2.1 Consideration of economic benefit of tourism to the area: KTVG (2014) has estimated the amount of employment possibilities, additional revenue potential and the investments needed for providing a fillip to tourism in the State. These estimations have been used in the KTP 2015-20, which has focused on facilitating private investments in the tourism sector to achieve the estimated targets. The KTP 2009-2014 (DoT 2009, p.15) has focused on the "home stay policy" of the Government of Karnataka with creation of 5000 quality room for tourist accommodation, resulting in direct employment for about 7500 people. The main aim of this scheme was to transfer the benefits of tourism directly to the local people.

4.2.2 Identification of current visitor numbers and length of stay: Increased length of stay and spending by tourists has been one of the missions of the KTP 2015-2020 (DoT 2015); the plan has options, like assisting development of tourism infrastructure, to increase visitation and duration of stay. The focus of the KTP 2009-2014 (DoT 2009) has been on home stay facilities, as Karnataka has large numbers of well-built houses with unused rooms suitable for conversion into tourism accommodation with minimal improvement. The City Development Plan for Mysore provides guidelines for home stay facilities. Within Srirangapatna, an increasing trend of visitor numbers have also been noted, which has highlighted the potential of heritage as a key driver for economic development. The Conservation Plan for Srirangapatna Fort (IHCNF

2016) also confirms the potential for tourism infrastructure such as home-stays and identifies a total of 841 properties in the core town containing heritage value to various degrees. The field visit confirmed the appropriateness of this suggestion, especially because, due to the limited size of the island (5km by 1.5 km) and the presence of heritage sites scattered across it, building new infrastructure would not be feasible.

4.2.3 Allocation of resources for protection of cultural heritage assets: Evidence suggested that careful planning is needed to ensure resources are diligently used in preserving the heritage assets, as some of them were in dire need of maintenance. However, it was pointed out by one of the interviewees working on heritage that some money was allocated for heritage protection which was used to whitewash the armoury. Unfortunately, such a step was seen as an easy road to restoration – which according to the research team was not sympathetic to the tangible heritage of the area (See Fig 1a and 1b). Based on the Conservation Plan for the Srirangapatna Fort (2016) and the interviews, it was evident that the Central and State Governments do have resources to maintain and protect heritage properties; however, for this to be channelled effectively, further training in cultural heritage may be needed, along with enhanced coordination amongst the various stakeholders.

4.3 Cultural heritage

4.3.1 Inventory of heritage tourism assets: Despite the emphasis placed on inventories in international heritage policy, a lack of attention to them is noticed in the KTPs (2009-2014 and 2015-2020) and the Conservation Plan for Sringapatna Fort (DoT 2009; DoT 2015, IHCNF2016). However, the City Development Plan (IHCNF 2016) for Mysore has an option for listing, inventory and documentation of heritage building as part of its tourism objectives. The need to preserve and nurture existing cultural assets has been highlighted in the KTVG (2014). Comparing the documents revealed that the goals and objectives are not necessarily aligned. All interviewees confirmed that a number of historically important sites have received little attention, despite richness in heritage assets.

4.3.2. Interpretation of natural and cultural sites for tourists: The KTP 2009-2014 has provided some options for tourism interpretation centres, while The KTP 2015-20 has detailed more options for tourism interpretation centres as facilities for the dissemination of knowledge on natural or cultural heritage amongst tourists (DoT 2009; DoT 2015). Interpretation of

heritage sites has also been mentioned by KTVG (2014). However, the Conservation Plan for Srirangapatna Fort (IHCNF 2016) claims that visitor information, guided interpretation, tours and descriptive plaques are lacking in the Srirangapatna fort, and that tourists in Srirangapatna are left to rely upon guide-books and visit only the prominent parts of the fort. Other monuments have fallen out of the tourism circuit due to lack of information, signage and design strategies to retain people on-site.

4.3.3. Consideration of cultural heritage protection methods: Although the objective of restoration is to revive the original concept or legibility of the object (Lakhani and Kumar, 2018), lack of awareness of the use of compatible materials in historical building conservation has resulted in a rebirth of lime technology and application (Sabri and Suleiman, 2014). For e.g. white washing as a restoration exercise has been seen in different heritage buildings in India, and Indian archaeologists and heritage activists are now used to seeing heritage building being white washed in the name of restoration (See Figure 1a and 1b). Furthermore, vandalism and demolition, additions to historic structures that are not sympathetic with their architectural character, encroachment of shops, signboards, water tanks and telecommunication towers upon the historic built fabric are common concerns identified in the literature and were evident during the field visit (Hosagrar 2007). One interviewee opined that: "There is an urgent need for training heritage experts and government officials in India with regards to suitable methods for restoration".

It seems the City Development Plan for Mysore (Mysore City 2006) is the only plan with options for heritage protection. Based on this plan, a list of all the heritage buildings has been prepared, and the respective agencies tasked with the preparation of conservation plans. Evolving guidelines and a policy document for the protection, conservation and management of heritage properties is also discussed within the City Development Plan for Mysore.





Figure. 1a Unrestored, original armoury

Figure. 1b Restored whitewashed armoury

4.3.4. Guidelines for visitor behaviour at heritage sites: Despite the importance of tourism behaviour in heritage sites, the documents reviewed did not consider this aspect in planning for tourism within the area. Both the KTPs (DoT 2009; DoT 2015) have options for a Tourist Interpretation Centre, through which they aim to help people understand, appreciate and care for the natural and cultural environment. However, based on the evidence found in the planning documents, field visit and interviews, this aspect needs strengthening. For example, as noted by an interviewee, some of the areas near the Lingayat temple are snake infested and yet it is expected that visitors need to take their shoes. This raises the need to advice tourists, both, with respect to local cultural practices as well as safety.

4.3.5. Training and education on CH for relevant stakeholders: KTPs have some options for training different stakeholders and local communities in hospitality, but these are not about creating awareness of the heritage resource (DoT 2009; DoT 2015). The Conservation Plan for Srirangapatna Fort (IHCNF 2016) has considered some training of guides, guidance and awareness campaigns for owners of properties adjacent to the fortification walls. The City Development Plan for Mysore has the objective to promote awareness among the public for the conservation, restoration and protection of the cultural and natural heritage of Mysore. As pointed out by an interviewee, such capacity-building workshop to raise awareness amongst stakeholders have taken place in Mysore in 2011 organised by the IHCNF. However, the field visit indicated apathy and lack of awareness. For e.g. stone cannon balls used during Tipu's

rule and displayed in the Dariya Daulat Bagh (Tipu Sultan's Summer Palace and Museum) were spotted in backyards of village houses (See Figure 2a and 2b).





Figure. 2a Cannon balls in the kitchen garden Figure. 2b Cannon balls in Museum

4.4 Environmental responsibility

4.4.1. Identification of environmental impacts of tourism: Tourism influx to the historical town of Srirangapatna has seen a rise in numbers from 4900 in 2000-2001 to 26791 in 2006-2011 (IHCNF, 2016). Municipal solid waste (MSW) is one of the greatest challenges for the tourism industry (Giurea et al. 2018) in Srirangapatna as well as within the state of Karnataka, particularly along the coast (KTVG 2014). Sanitation is another threat in Srirangapatna, especially along the northern and south-western banks of the island. The IFMR survey (2012) finds that there are only 12 public toilets in the island, while open drains with untreated sullage flow directly into the river at several points through open unlined channels buried under the fort ramparts. This can be a risk for the environment as well as the people living along the banks of the River Kaveri (IHCNF 2016). The quality of environment has not been given consideration in any of the planning documents. The interviews further confirmed that generally both local people and tourists are less sensitive about environmental protection in the island. During the walk along the heritage sites, no dustbins were noted and as pointed out by one of the interviewees, the rubbish strewn across the heritage walks increase dramatically during the peak season of the festivals when the tourists flock the area in big numbers.

4.4.2. Consideration of sensitive environments: The KTP (2015-2019) (DoT 2015) includes guidelines for eco-tourism that are applicable to protected areas, national parks, wildlife sanctuaries, community reserves, conservation reserves, sacred groves, or pilgrimage spots in

protected and/or forested areas. It also mentions that conservation education should be promoted in and around each destination to create awareness amongst local communities, government staff and visitors in order to enhance support for ecotourism and environmental conservation. However, the KTP (2009-2014) (DoT 2009) and the Conservation Plan for Srirangapatna Fort (IHCNF 2016) make no mention to sensitive environments. Based on interviews, it seems much work is needed to create an impact on ground.

4.4.3. Consideration of cumulative impacts: Srirangapatna is witnessing growing real-estate investment in the hospitality and commercial sectors (IHCNF 2016). The intersection of the highway and railway track further exposes the island to the influences of the broader region and the neighbouring urban centres of Bangalore and Mysore. This connection is highlighted in the Mysore City Development Plan (Mysore City 2006), which gives special emphasis to the Srirangapatna-Mysore route. However, the planning documents do not really take a regional perspective in considering either the cumulative impacts of the adjoining areas or how attracting tourists can increase the current load of waste management and associated transport pollution. This is also not considered in the planning documents at the state level. Interviews further confirmed very little or negligible understanding with regards to cumulative impacts are evident amongst stakeholders. However, as one interviewee pointed out, some tourist attraction spots such as the Jog fall have received lot of public support in terms of going against the Government decision to attract more tourists and artificially convert the waterfall as a perennial one. Such emerging examples indicate rising environmental awareness of people and its influence on Government decisions.

5. Strategic Environmental Assessment as a way forward

Based on the sustainability principles explored in our case study, it was evident that environment was the weakest link (see section 5.1). Hence the need to incorporate this aspect pf sustainability especially in the decision-making process seemed to be vital. Furthermore, since the focus is on heritage assets as well, this dimension too needs to be appropriately incorporated within decision-making. Therefore, using some form of Impact Assessment (IA) was deemed to be necessary as these are ex-ante assessment tools which are carried out on policies, plans, programmes and projects in aiding decision-making. They can focus on various themes including Heritage Impact Assessment (HIA), Environmental Impact Assessment

(EIA), Sustainability Assessment (SA), Social Impact Assessment (SIA), Strategic Environmental Assessment (SEA) amongst many others (Fischer and Noble 2015). In this context, the team did consider HIA, SA, EIA and SEA's potential to deliver sustainability within CHT. EIA is project specific and hence the regional aspect along with consideration of cumulative impacts, which was felt to be critical in our case study couldn't be delivered through it. HIA and SIA both have a specific theme, which would not allow a broader considerations of other sustainability issues. In this respect SA could be more suitable. However, SA implies that environmental aspects will be considered at par with social and economical aspects (Morrison-Saunders and Fischer 2006). Based on the case study and the specific weakness of environmental issues, the need to emphasise on strengthening environmental considerations was felt imperative. Accordingly, the potential of SEA as a way forward within CHT has been explored here.

Furthermore, though Environmental Impact Assessment (EIA) has been practiced in India since the 1976-77 and was made mandatory in 1994 with the introduction of the EIA Notification under the EPA (Paliwal, 2006), since its inception, EIA has faced several challenges and the need to support the EA system by introducing it above the project level as SEA, has been highlighted from as early as 1994 to more recent years (See for e.g. Valappil et al, 1994; Erlewein, 2013; Rathi, 2017). SEA by facilitating effective tiered decision-making is expected to strengthen EIA (Fischer, 2007). However, SEA is yet to be made mandatory in India. A recent study (Jha-Thakur and Rajvanshi, forthcoming) summarised 15 examples of SEA from the country, which are carried out rather in an ad-hoc fashion. So far most of the SEAs conducted are driven by conditions of donor agencies. There are examples of pro-active interests within certain state Governments like Uttarkhand and Maharashtra, which have conducted voluntary SEA to enhance sustainable decision-making in India (For e.g. See Rajvanshi et al, 2012; PMC, 2017). Considering renewed interest in EA in India and the developing expertise of SEA (Jha-Thakur and forthcoming, 2020), it is pertinent to discuss how in the state of Karnataka, SEA could play a critical role in protecting its environmental and heritage resources while encouraging tourism.

5.1 Strengthening Environmental Sustainability

As evident from the findings, economic viability seems to be the best performing criterion (See Table 2), followed by cultural heritage and social equity. Within the criteria of environmental responsibility, only one sub-criterion is partially met, making environment the weakest link in sustainability considerations. Environment has featured mainly to promote tourism, for e.g. within the guideline available for eco-tourism in the state tourism policy (2015-19).

Table 2. Application of Framework for analysing Sustainability principles in the Planning of CHT

Criteria	Sub-criteria	Performance
Social equity	1. Community participation	©
	2. Community-relevant values and attitudes	0
	3. Relationships between stakeholders	©
Economic viability	1. Economic benefit of tourism to the area	•
	2. Identification of current visitor numbers and length of stay	•
	3. Economic resource for the maintenance of Cultural Heritage	©
Cultural heritage	1. Inventory of heritage tourism assets	©
	2. Interpretation of natural and cultural site for tourists	©
	3. Guideline for visitor behaviour at heritage sites	О
	4. Consideration of cultural heritage protection methods	0
	5. Training and education on CH for relevant stakeholders	©
Environmental	1. Identification of environmental impacts of tourism	0
responsibility	2. Consideration of sensitive environments	©
	3. Consideration of cumulative impacts	О

Fully achieved within the constraints, © − Partially achieved, O − Not achieved or not considered

Compromising environmental issues at the cost of economic drive has been also identified in the KTVG (2014), which talks about encouraging annual art and culture events in the capital city of Bangalore, in an attempt to create an image of a "Cool metropolis and away from its current association with messy infrastructure and garbage" (p.6). However, the study highlights the pressure that increased tourism can bring about in a state which has several ecological hotspots and in the specific region, which is already reaching its threshold in terms of waste

management and increasing water pollution (IHCNF, 2016). This approach can seriously backfire as the state is heavily investing on tourism, but if the environmental parameters and the heritage assets, based on which tourists are attracted, are not given due consideration then the sector is unlikely to deliver long lasting sustainable yields. Eventually, poorly planned tourism within the context of CHT would lead to the decline of the heritage assets themselves along with degraded and costly environmental issues, which would dilute monetary profits (Aas et al. 2005). Past experiences with SEA reveal how it can help integrate sustainability criteria in PPP decision-making and can facilitate consideration of alternatives at an early stage (White and Noble, 2013). In support of this view, IUCN (2013) in their guidance to link EA, especially SEA with World Heritage Sites noted the critical role such an integration can play in 'ensuring that the potential adverse impacts of development proposals on a site's Outstanding Universal Value, and alternatives to these proposals are fully considered in decision-making'. In Northern Ireland the Regional Development Strategy- (DRD 2035) has set out guidance on SEA especially for the Historic Environment.

5.2 Facilitating a Regional Approach

Based on the nature of the issues that surround CHT planning in the Srirangapatna and Mysore region, EA is needed above the project level. According to the interviews it was apparent that Mysore which is a major tourist attraction serving the brand name "Royal Heritage city" (KTVG 2014, p.5), is seen as a competitor for the riverine island in terms of tourism. However, taking a broader regional approach reveals that tourists in Mysore would be the likely visitors to the island and therefore, rather than competing with Mysore, developing integrated tourism plans would add to the overall sustainability of tourism within Srirangapatna and the broader region. This regional approach is further suggested by KTVG (2014, p.19), which states that Regional Tourism Entities (RTE) need a "shared tourism vision" and SEA has the potential to facilitate this. It is also worth noting that Srirangapatna is on the tentative list for UNESCO heritage, and UNESCO recently has been shifting its approach from a monument-centric to a cultural landscape-orientated one. Therefore, regional consideration adopted by SEA will further complement UNESCO's recent approach on heritage preservation (Tanriverdi Kaya 2016).

5.3 Enhancing Stakeholder Involvement and Awareness

In terms of incorporating social equity within CHT, further scope of improvement was felt with regards to engaging stakeholders in decision-making, developing relationships with the wider groups and tapping into stakeholder values (See Table 2). The findings also highlighted apathy and lack of expertise and understanding related to heritage issues (See Fig 1a, 1b, 2a, 2b). Public participation is a distinguished feature within SEA, which leads to transparency and greater acceptance of outputs of PPPs by affected population (Rega and Baldizzone, 2015). It helps in driving the planning process through facilitating clear goals and objectives and also engages stakeholders in a transparent and democratic manner. (McCluskey and Joao 2011; Fischer 2007). Hence, by incorporating SEA, public engagement in plan making is expected to be enhanced (Khosravi et al., 2019). SEA can also lead to learning by individuals, organisations and communities thereby facilitating long term attitudinal change, which seems to be the need of the day in creating environmental and heritage awareness in our case study (See Jha-Thakur et al, 2009). Furthermore, lack of maintenance and negligence escalating from lack of awareness may lead to careless or unplanned tourism and can cause heritage sites to suffer from littering, vandalism and degradation, which were all evident during the field visit (Dragouni 2017).

5.4 Avoiding costly mistakes

The State Government of Karnataka is aiming to make the state the top tourism destination in India and amongst the top 50 destinations in the world (KSTDC, 2010). In doing so, mega tourism projects worth 100 crore and above are being invested upon to create tourism hubs (DoT, 2015). Since investment and stake is high, it becomes even more imperative to make sure it is being channelized correctly. Past research reveals that tourism over-development, uneven distribution of tourism costs and benefits in communities, undervaluation and exploitation of cultural heritage by tourism, dominance of economic interests and short-term profits over sustainability, lack of integrated management on all levels, are the main causes of unsustainability (Richards and Wilson 2006; Loulanski and Loulanski 2011). SEA helps in identifying the right issues at the right time and aims in identifying 'potentially costly inconsistencies' (Fischer, 2007, p.7). One such example of a costly mistake in our case study which could have been avoided is that of the re-location of an armoury which costed two

hundred thousand dollars and a delay of more than 5 years (Kumar 2017). Based on the interviews, the re-location was initiated to make way for the doubling of the Bangalore Mysore railway line that cuts through the island. Though the heritage asset was identified, a SEA would have allowed for design changes of the planned railway track in the first place to avoid having to remove the armoury to a different location.

6. Conclusion

In this paper, we adopted an interdisciplinary framework for exploring sustainability of CHT planning within the plan, policy and programme level in a semi-urban location within an emerging economy. The study reveals how the planning process being investment-centric, grossly ignored and almost camouflaged environmental considerations in the pursuit of "selling the dream" (KTVG 2014 p.10, Soonthodu, 2017) for the tourism sector at all level of planning. Tourism in India is economically important and is the fastest growing service industry in the country. CHT seems to be an important sub component which seems to be endangered due to lack of environmental considerations within the decision-making processes. Even heritage and social factors have scope of further improvement. Accordingly, this study proposes that the tourism sector in India should consider environmental assessment tools above the project level such as SEA in their planning process in order to steer the direction of future growth towards sustainable development. SEA is expected to help enhance stakeholder involvement, raise heritage and environmental awareness, facilitate regional approach and avoid costly mistakes.

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