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Urban Heritage Conservation in India: Challenges of conserving Surat's tangible and intangible heritage

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Abstract: Despite of being recognized as a target for achieving sustainable cities and communities, cultural heritage is constantly challenged worldwide due to diverse pressure, including rapid urbanisation, increasing housing demand, weakening infrastructure and socio-cultural changes. Where rapid demographic growth of urban areas is happening, such as in the Indian continent, heritage is disappearing at an alarming rate. This paper examines the issue of heritage conservation in growing urban areas, by instrumentally focusing on the Indian city of Surat. Despite efforts from the local government and notwithstanding the regulatory framework in place, Surat's urban cultural heritage is being neglected and historic buildings keep being replaced by ordinary concrete buildings at a worryingly rapid pace. This paper therefore examines the context of the challenges in Surat and the efforts made with the view to discussing possible solutions to include heritage conservation policies within the urban planning and management ordinary process, thus allowing to pursue the sustainable development targets on heritage. The discussions are drawn from findings from a qualitative study undertaken in Surat. Semi-structured interviews and focus groups with local community, policy makers and key heritage experts were conducted with a photo-survey of the two historic areas in the city and document analysis to support the qualitative process. The findings reveal a myriad of challenges such as the inadequacy of urban conservation management policies and processes focused on heritage, an absence of skills, training and resources amongst decision makers and a persistent conflict and competition between heritage conservation needs and development needs. Furthermore, the values and significance of Surat's tangible and intangible heritage is not fully recognised by its citizens and heritage stakeholders. A crucial opportunity exists for Surat to maximize the potential of heritage to aid in the reinforcement of urban identity for its present and future generations. Lessons from the case study of Surat hold a general interest to heritage conservationists, urban planners and policy makers worldwide. This paper recommends thoughtful integration of heritage urban conservation into local urban development frameworks and the establishment of approaches that recognize the plurality of heritage values.

Keywords: Urban Heritage Conservation; Urban Planning and Management; Cultural Heritage; Surat's Heritage; Sustainable Development

1. Introduction

The challenges faced by urban areas today are steep and are on the frontlines of the development of inclusive cities. Yet, there is an evolution of approaches recognising tangible and intangible heritage as strategic assets in creating cities that are more resilient, inclusive and sustainable [1-3]. This growing

international discourse recognise culture as a crucial resource. In particular, the United Nations Educational Scientific and Cultural Organisation (UNESCO), has aligned itself with shifts in the development paradigm which increasingly aim to enhance the human dimension of the development of cities. In this landscape, urban heritage plays a fundamental role in reinforcing cities' identities through the integration of heritage and historic urban area conservation, management and planning strategies into local development processes and urban planning aids [2, 4]. It allows for the broader urban context to be considered with the interrelationships of heritage and its physical form, spatial organisation, connection and values. Throsby [5] highlights the need for acknowledging the "interconnectedness of economic, social, cultural and environmental systems". Thereby positioning cultural heritage as the "glue" among the multidimensions of sustainable development [6]. This approach extends beyond the notion of monuments and historic centres and includes social and cultural practices and values, economic processes and the intangible dimensions of heritage as related to diversity and identity [4]. It reinforces the integral role cultural heritage can play as a key resource in urban sustainable development.

Today, South Asian urban areas are among the largest and densest in the world, home to approximately 1.77 billion people [7]. In particular, India's urban population is projected to double by 2050 from 410 million urban residents in 2014 to a staggering 857 million in 2050 [7]. Consequently, the urban fabric is under pressures such as growing informality, housing shortages and increasing rural to urban migration. India is arguably known as one of the most popular destinations for cultural tourism with rich and varied histories and traditions that allows for the exploitation of opportunities offered by cultural heritage [8]. As a country, it has a significant number of heritage structures including 38 inscribed on the World Heritage List with 30 cultural properties, 7 natural sites and 1 mixed site as well as over 3,600 centrally protected monuments under the Archaeological Survey of India (ASI) [9]. Additionally, there are 13 elements of intangible cultural practices and expressions on the UNESCO list [10]. However, this rich heritage is facing major threats in urban areas and remain under threat from urban pressures, neglect, vandalism and, demolition [11-14]. Restoration efforts to safeguard valuable heritage assets are visible at only a few places deemed to be of historic significance, which are in most cases designated UNESCO World Heritage monuments [15, 16]. Development projects for new infrastructure and commercial developments are replacing historic buildings often based on standardised solutions which are intended to generate immediate revenues [7, 17]. However, they are usually insensitive to the authenticity and integrity of cultural heritage [13, 18]. In addition, the diversity of traditional social practices and activities has often been affected by growing urban development and pressures, resulting in a continuous loss of sense of place, belonging and identity [12, 14].

In line with the main entry points for culture heritage in the achievement of sustainable development, this paper aims to explore the landscape of urban heritage conservation in the Indian city of Surat as instrumental to a better understanding of challenges and pressures that threaten heritage conservation within rapidly growing urban contexts. Surat is a port city located on the western part of India in the state of Gujarat with historic links with the English, Dutch and the Portuguese [19, 20]. Surat has a diverse heritage landscape, although the city does not have a UNESCO World Heritage site, 5 sites are listed by the Archaeological Survey of India (ASI) and acknowledged as "Monuments of national importance" in Surat [9]. These include (1) Dargah known as Khawaja Dana Saheb's Rouza; (2) Old English Tombs; (3) Tomb of Khawaja Safar Sulemani; (4) Old Dutch & Armenian Tombs & Cemeteries; (5) Ancient site comprising S.Plot No.535 and (6) Fateh Burj [9]. This markedly adds to the promotion of Surat's urban heritage. However, at present, the challenges limiting the effective conservation of Surat's heritage are steep and significant, including: increasing migration and housing demand, stress on city management and resources, absence of social responsibility, cohesion and a loss of culture to name a few [21]. Yet, there is opportunity for the city to craft solutions for the urban future and create a sense of belonging and identity by positioning tangible and intangible heritage at the heart of urban renewal. This paper therefore examines the context of the challenges in Surat and the efforts made with the view to offering practical suggestions to make heritage an integral of part of urban

planning and management processes in accordance with the requirements of sustainable urban development. The case study is instrumental to shed light on the complexity of the challenges that threaten heritage in rapidly growing urban areas, and to draw insights with a wider applicability to similar contexts globally.

This paper is structured in the following way. Section 1 and 2 introduce the paper and conceptualise heritage within the global context and in India. Section 3 situates the paper in the context of an increasing awareness of the importance of cultural heritage in India's sustainable urban development. Additionally, a selection of national programmes introduced to foreground cultural heritage in urban management and planning are explored. Section 4 presents the methodology chosen for this paper while section 5 introduces Surat's intangible and tangible heritage supported by findings from the photo-survey. This is followed by section 6 which highlights the efforts made towards developing a sustainable and resilient Surat. The challenges to urban heritage conservation in Surat are discussed in section 7 drawn from the pilot study findings. The paper ends with a discussion in section 8 and concludes in section 9.

2. Conceptualising heritage in India

The term "cultural heritage" has evolved to become a complex and multifaceted concept in India. Heritage is a concept which is difficult to define, what it means and how it has been presented, re-presented, developed and protected, set against a back-drop of the demands, motivations is multidimensional [22, 23]. In the drive to define traditions and identities in a community [23], the notion of "heritage" is developed [3]. Living expressions and practices of heritage are also often misunderstood and treated as ambiguous due to its complexity and variation [1, 24, 25]. The interrelationship between history/the past [22] and heritage is recognised in literature defining heritage as elements of the past for contemporary society to inherit, record, conserve and pass on to future generations [16, 26].

Indeed, the concept is internationalised by UNESCO defining "world heritage" as "parts of the cultural or natural heritage of outstanding interest and therefore need to be preserved" [27]. The cultural ecosystem has been radically altered by the ways heritage is being communicated, through its intensification of the interconnections between heritage, identity and expression [28]. In introducing the notion of interpretation (Hitchcock, King, & Parnwell, 2010), the concept of heritage can be broadened into notions of local identity, ethnicity, nationalism, liveability of urban areas and social cohesion [29, 30]. Scholars [14, 15, 26, 31, 32] have argued that heritage is an essential element of national representation with the potential to perpetually remind citizens of the symbolic foundations upon which a sense of belonging is based. It is therefore presented or re-presented as something of special value or significance relating to the past. This value is often constructed through processes of selection criteria appropriated internationally or nationally and [29] then objectified to become worthy of political, economic and tourist attention and conservation. There is therefore a need to safeguard and respect the inherited values and significance of cultural heritage in cities.

After the Second World War, the UNESCO developed an international governance framework through its directives, charters and international resolutions, primarily to protect cultural property from armed conflict [30, 33, 34]. The expression "cultural property" was first introduced in the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague, 14 May 1954) [35]. This conceptualisation progresses with the introduction of the 1972 World Heritage Convention [29, 34, 36] which reconciles previous definitions of cultural heritage in three categories: (1) monuments, (2) groups of buildings and (3) sites. Years later, cultural heritage is classified by UNESCO into two groups, tangible (buildings, monuments, sites) and intangible (oral traditions, performing arts, social practices, traditional craftsmanship etc) heritage [27]. Heritage is further broadened with the formal acknowledgment of intangible heritage through the UNESCO (2003) convention for the safeguarding of the intangible cultural heritage [37]. Crucially, for urban development, is the greater awareness of the challenges of large-scale developments to the historic urban morphology described in

the ICOMOS Valletta principles (2011). The modifications in the Valletta principles reflect a greater awareness of the issues experienced in fast growing urban areas and the changes in governance that call for new structures in towns and urban areas. European regional heritage norms, such as the Council of Europe's (1985, 1992) Convention for the Protection of the Architectural Heritage of Europe, known as the Granada Convention and the European convention on the protection of the archaeological heritage further recognise the preservation of historic landscapes and cultural heritage.

While there is a superabundance in policies and practices on heritage at an international level, the context is different in India. In fact, India also differs from other countries in the Asian region. For example, countries such as the countries, Sri Lanka and Bhutan have clearly defined policies regarding urban heritage [7]. India in contrast has an institutional framework dedicated to heritage protection but lacks a strategic focus on urban heritage. Heritage legislation has largely developed as a result of a fear of that development changes and pressures will erase the history of places [13, 38]. The urban development models followed since independence indeed have irrevocably altered many historically important towns and cities [12]. Although multiple national, regional and local initiatives exist to encourage the preservation of heritage, it is seemingly sporadic and fragmented [7]. Governance systems involve multiple layers of stakeholders at the city, state and national level. In India, the Ministry of culture is the key player at the national level. The Archaeological Survey of India (ASI) along with state departments protect India's declared monumental structures although this is only a small fraction of India's cultural heritage assets [9]. NGOs such as the Indian National Trust for Art and Cultural Heritage (INTACH) and the Indian Heritage Cities Network (IHCN) also have a growing role in capacity building and experience sharing.

The valorisation and categorisation of India's heritage is represented in the Ancient Monuments and Archaeological Sites Remains Act (AMASR), 1958 and the updated AMASR Act 2010 which declares monuments and archaeological sites of national importance and introduces a broad category of monuments and archaeological sites declared as of national importance on the basis of historical, archaeological, artistic and architectural value [39]. Furthermore, influenced by international legislation on intangible heritage (UNESCO), a scheme for "Safeguarding the Intangible Cultural Heritage and Diverse Cultural Traditions of India" was introduced since the year 2013-14 [40]. The objectives of the scheme are to regenerate diverse multi-disciplinary institutions, groups, individuals, identified non-Ministry of Culture institutions, non-government organisations, researchers and scholars so that they may engage in activities for strengthening, protecting, preserving and promoting the rich intangible cultural heritage of India

3. The role of cultural heritage in developing a sustainable and inclusive urban India

In 2015, the Sustainable Development Goals (SDGs) were unanimously adopted by United Nations (UN) member states resulting in a wide-ranging set of 17 goals and 169 targets aimed at poverty reduction, leaving no-one behind and advancing the health and well-being for all by 2030, Agenda 2030 [41]. Out of the finalised SDGs, Goal 11 is the United Nation's strongest expression of the vital role cities and urban environments play in the global landscape. However, none of the 17 SDGs focus exclusively on culture with sporadic explicit references to cultural aspects. These include: target 11.4 which promotes the strengthening of efforts to protect and safeguard the world cultural and natural heritage; target 4.7 which focuses on promoting knowledge and skills and the appreciation of cultural diversity; target 8.9 and 12.b which promotes sustainable tourism and local culture aligned with target 14.7 promoting the sustainable use of aquaculture and tourism [42]. All of the targets have specific implications in the field of culture. These targets give light to the growing consensus that the future of our societies will be decided in urban areas of which culture plays a key role [3, 7, 43]. In a much more intentional manner, the 2016 United Nations New Urban Agenda recognises both tangible and intangible heritage as a significant factor in developing vibrant, sustainable, and inclusive urban economies, and in sustaining and supporting urban economies to progressively transition towards higher productivity [41, 44].

Despite the intensification of urban growth in India's cities, cultural heritage issues have not been mainstreamed into the overall urban planning and development framework [12]. The decentralisation of power to local bodies is given in the 74th amendment to the Constitution. This therefore empowers local bodies to act proactively and develop processes and practices that suit their context. These local mechanisms feed into the state Acts and legislation as mentioned in section 2. The fragmentation and complexity of the current governance systems have not facilitated a favourable ground for culturally sensitive urban development strategies. The national system does not allow for the translation of fundamental steps in heritage conservation at a local level such as the identification of heritage and the provision of regulations that prevent demolition and regulate new developments [12].

The Government of India has launched several national innovative programmes driven by the international discourse to shift the paradigm from the narrow perspective of monumentalism to the renewal and preservation of the urban fabric and historic areas. The Smart Cities Mission was launched in 2015 to promote cities by developing core infrastructures and giving a decent quality of life to its citizens, a clean and sustainable environment with a focus on sustainable and inclusive development [45]. Aligned with that programme is the National Heritage City Development and Augmentation Yojana (HRIDAY) scheme (2015 – 2019) introduced by the Ministry of Housing and Urban Affairs, which is being implemented in 12 cities around the country. The main objective of this initiative is to preserve character of the soul of heritage city and facilitate inclusive heritage linking urban development [11]. Table 1 illustrates a few further examples of projects and interventions that have foregrounded cultural heritage in two categories: (1) urban management institutional frameworks and (2) citizen participation and urban awareness programmes. As discussed earlier in this section, the protection of urban heritage is fundamentally a question of urban management and planning. The projects identified in Table 1, part 1 have attempted to recognise and integrate cultural heritage in the process of urban development and planning in several Indian cities. The JnNURM (Jawaharlal Nehru National Urban Renewal Mission) scheme from 2005 to 2014 acted as a national catalyst for improving infrastructure focused on the development of heritage areas. The historic city of Jaipur is a good example of significant efforts made through this scheme. The Jaipur Master Plan 2025 was developed to integrate a Heritage Management Plan becoming one of the first city level heritage plans in India to be integrated in the Master Plan of a city. This resulted in the development of a broad overview of the built heritage resources, a comprehensive heritage list and an action plan [12]. A further example of the integration of heritage in masterplans is the Masterplan of Delhi 2021 which included the identification of heritage zones and archaeological parks and the development of Special Conservation plans for listed buildings and precincts. The development of Heritage Management Plans (HMP) and City Heritage Cells (CHC) is another integration approach in planning, design, implementation and management. The scheme initiated at the request of Government of India is the World Bank, Cities Alliance, (2012 – 2018) which proposed the development of HMPs and CHCs as part of the revitalisation of 40 historic cities. Example cases include Jodhpur and Ahmedabad. Through the HMPs and CHCs, crucial conservative interventions and initiatives have been undertaken. For example, a significant achievement by the Ahmedabad Heritage Cell is the introduction of a bye-law prohibiting the demolishing of listed heritage properties without prior permission [18].

	Type	Heritage Programme	Location	Details
Part 1. Urban Institutional Framework				

a	Masterplans	2005 - 2014 Jawaharlal Nehru National Urban Renewal Mission - Jaipur Heritage Plan	Jaipur (part of national 63 cities)	Central government-funded scheme. Develop historic areas and include them in masterplans (Jaipur as example)
b	Masterplans	Masterplan of Delhi 2021	Delhi	Inclusion of a special heritage zone in 2021 Delhi Masterplan
c	Heritage Management Plan & Heritage Cell	40 Historic cities	National	To build awareness among citizens and develop a comprehensive plan for cities
Part 2. Citizen participation and Promoting urban heritage awareness				
a	Heritage Walks	Amritsar, Jaipur, Ahmadabad, Pondicherry, Delhi	National	Initiating public awareness and by show-casing a city's heritage and facilitating participation.
b	Public Education Events	The Heritage Education and Communication Services (HECS) of INTACH	National	Recognizing the importance of heritage education in spreading awareness among the people
c	Heritage Tourism	Indian heritage passport programme UNESCO launched in 2006.	National	Heritage-based tourism as a driver for local development.

Table 1: Selected examples of Urban Heritage Programmes in India

The second category in Table 1 is concerned with citizen participation and urban heritage awareness. Engaging with the local citizens to promote cultural heritage is a crucial ingredient in the process and practice of urban heritage conservation and management. The active participation of the local community ensures the sustainability of interventions and strengthens social and cultural identity and education. Some activities undertaken to generate awareness include heritage walks and public education initiatives and events. Heritage walks have been a popular awareness initiative in India with effective implementation in areas such as Amritsar, Jaipur, Ahmadabad, Pondicherry and Delhi. As a result, residents in Ahmedabad living in heritage houses made deliberate effort to clean the facades of their homes and the entire historic area [12, 18]. The heritage walk in Pondicherry acted as a catalyst for the improvement of the Tamil and French quarters with the development of informative signage for heritage buildings and pathways.

Table 1, part 2b mentions the work of national organisations such as the Heritage Education and Communication Services (HECS) of INTACH who promote awareness among various groups including local communities, heritage professionals and educational institutions [46]. It also organises training programmes in various cities to improve the awareness of the citizens role in conserving and preserving tangible and intangible heritage. Linked to this initiative is the recognition that providing employment and skills training for citizens through awareness promotion leads to employment opportunities in the cultural tourism sector. Fore-fronting heritage-based tourism is the UNESCO led

initiative, “the Indian Heritage Passport Programme” [47]. This scheme encouraged states to promote heritage tourism and generate local employment.

Although it is evident that effort is being made to improve sustainable planning and heritage conservation in India as detailed in Table 1, there exist challenges that limit the impact and scope of these initiatives. The wealth of programs needs to be effectively coordinated, monitored and accounted for in order to progress towards the holistic protection of cultural heritage. Several cities still report neglected, derelict heritage structures and persistent demolition despite the ambitious heritage improvement rhetoric from the national programmes [12]. Thereby questioning the sustainability, continuity and replicability of the interventions.

4. Methodology

A qualitative pilot study in the city of Surat (Figure 1) was conducted for the discussions in this paper. This study used a variety of sources for data triangulation including document content analysis, semi-structured interviews and focus groups, and a photo-survey.. First, policy documents and literature relevant to India’s cultural heritage and the city of Surat were collected and analysed. All relevant policies and regulations in force nationally, regionally and locally were systematically gathered and considered, including national laws, policies, and governance of heritage conservation in India, Gujarat and Surat. All relevant previous surveys and investigations on Surat heritage were systematically collected and analysed. We considered the National Institute of Urban Affairs (2018) studies prepared to issue the “Rules & Regulations for Heritage Buildings & Precincts in Surat”, a local regulation aimed at the conservation of all the listed heritage buildings and sites and identified precincts, as listed by Surat Municipal Corporation (SMC) in 2009, and any others as shall be updated and notified by the SMC. Incidentally, the team of researchers provided the City of Surat with an expert feedback on the draft regulations, as an outcome of the analysis conducted on it. We did an in-depth analysis of the GIS Based Mapping of Living Heritage of Surat For Improved Heritage Management in Surat prepared by the Urban Management Center in 2009, which still forms the basis of the knowledge of the local heritage in Surat. The desk analysis of the documents was complemented with primary data collected in Surat in September 2018. Documents were discussed with local practitioners and with city planners on the occasion of the interviews’ administration, with the aim of checking the level of accuracy of the work, how the studies were generating impact on actual heritage conservation policies and how far the current situation was with respect to the studies dated back 2009. Indeed, some historic buildings are no longer existing, however, the conceptual approach if the conceptual approach identified in the studies, both in terms of boundaries identification of the two main historic areas in the city of Surat and in terms of heritage classification, including the articulation of the historic traditional houses into 4 typologies (i.e.: Art Deco, Colonial, Vernacular, Arabesque) are still current. Qualitative primary data were collected in September 2018 by a team of 3 UK and 3 Indian researchers and included focus groups, interviews, and direct observation/ survey. A list of 40 potential stakeholders to invite on focus groups and interviews was prepared by UK and Indian researchers jointly, making sure that all relevant categories on heritage conservation were covered. The delivery of the focus groups and interviews followed up with the rationale for sampling and was enriched through a snowball technique, by further enlarging the sample with more stakeholders. In total, 44 experts were involved either through focus groups or interviews.

Two focus groups were organised with local academics, decision makers and practitioners, to capture different views and perspectives on heritage conservation on Surat, gathering a total of 34 participants. The goals of the two focus groups were twofold: (1) discussing with local experts about heritage conservation to gauge their view on principles and criteria applied in Surat, and (2) raising awareness about the importance of heritage conservation for local identity. One focus group was arranged at the University of Surat and included 15 participants sampled across different categories of stakeholders. The second focus group was arranged by the Association of Engineers and Architects and gathered 19 participants coinciding with the local architects and engineers committee. From both focus

groups the researchers appreciated that though conservation of heritage was considered important in principle, still different views on what should be included in heritage and how to conserve persisted, showing a gap in the interconnection between the national framework for heritage conservation and guidance locally provided by local authorities by embedding such principles into the local plans and regulations. Engaging with the stakeholders in heritage was imperative for discussing the challenges in Surat. The focus groups proved to be crucial for the facilitation of understanding meanings attached to issues in contexts that had not been interrogated in advance by the project team.

Interview Code	Local Expert Group	Affiliated Organisation	Role
I1 & I2	Local Government	Surat Municipal Corporation	Interviews with two Heritage experts from Surat Museum
I3	Local University	Sardar Vallabhbhai National Institute of Technology (SVNIT), Town and Regional Planning	Heritage Consultant
I4	Private	Indian National Trust for Art and Cultural Heritage (INTACH)	Heritage Architect
I5	Private & Local Government	Local Organisation & Surat Municipal Corporation	Art historian & Heritage Cell Coordinator
I6	Private	Local Organisation	Heritage Architect
I7	Private	Surat iLAB & Surat Smart City	CEO
I8	Private & Local Government	Resilience Surat as part of the Rockefeller Foundation 100 Resilient cities project	City Resilience Officer
I9	Local University	National Institute of Technology (SVNIT), Town and Regional Planning	Heritage Proprietor & Industrialist
I10	Private	Local Organisation	Yoga expert

Table 2: Semi-structured local expert interviewees

Further qualitative empirical data included 10 semi-structured interviews administered with local experts on heritage conservation, sampled by selecting them across both public and private sector

(Table 2). Diverse perspectives were sought for the interviews such as the local yoga teachers and artists who were able to draw on their experience and skills and enable a kind of storytelling about Surat's heritage. These additional perspectives assist in highlighting the interconnection between tangible and intangible heritage. Other stakeholders who contribute significantly to strategic planning of heritage in Surat such as the local Government (Surat Municipal Corporation) officials and heritage architects and consultants were consulted. Although, a limitation of the engagement was on the restricted focus on prominent stakeholders based in Surat. Interviews and informal discussions with other role holders in the state of Gujarat and less visible members of the community would have provided polyvocality and enhanced the engagement process.



Figure 1: The city of Surat

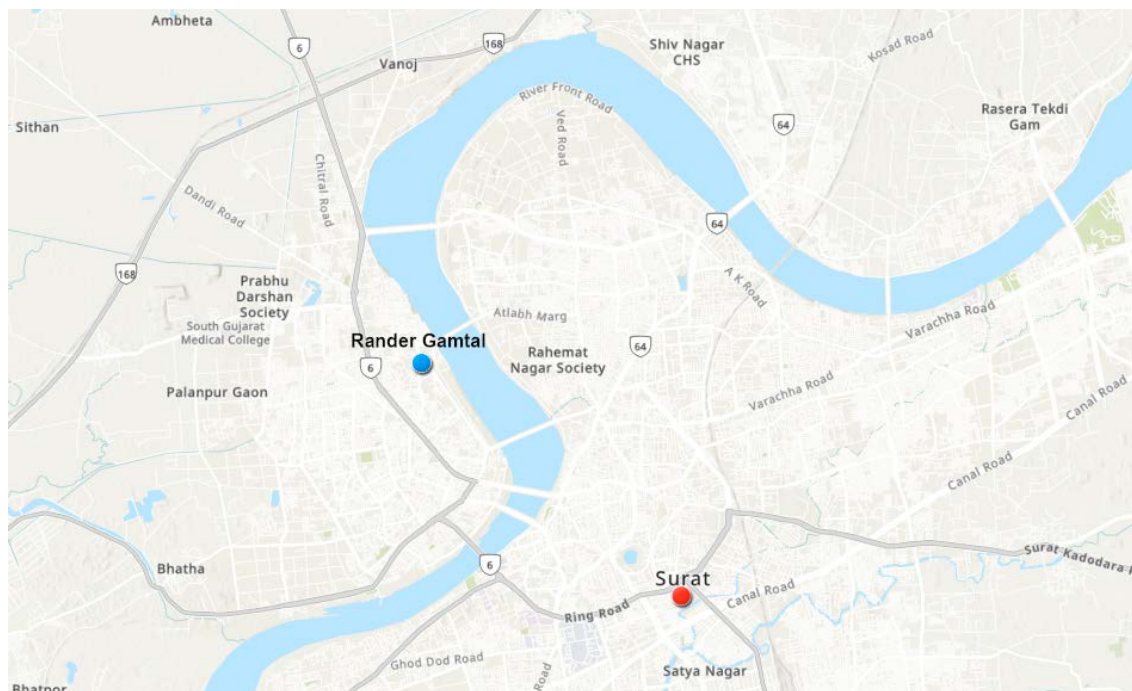


Figure 2: Surat Central Zone and Rander Gamtal

A photo-survey of the city was finally undertaken as a visual tool to support the understanding of heritage conservation in Surat. Fieldwork was conducted in Surat Central Zone and Rander Gamtal

(Figure 2). The survey was based on the study conducted by Urban Management Centre for the Surat Municipal Corporation [19]. GIS maps of Surat Central Zone and Rander Gamtal were used to identify sub-areas in the two historic areas showing highest concentration of historic buildings, to be further investigated on site in terms of state of conservation and actual context situation. Fieldwork was conducted both by car / motorbike and by walking during working days, morning and afternoon. Photographs were taken both to document the state of conservation of the built environment and to capture people using it. The direct observation of the two areas allowed understanding some of the main challenges to heritage conservation in Surat as further discussed in the following sections, covering systematically findings from all the empirical data gathered by the team.

5. Understanding Surat's Cultural Heritage

The city of Surat has a diverse and vibrant economic and sociocultural fabric and heritage landscape (Figure 3 & 4). Having survived numerous historic invasions and power structures, it is presently in the top ten largest cities in India and recognised as one of the fastest growing cities [48]. As a port city located on the western part of India in the state of Gujarat (Figure 1), Surat has an established heritage with a diverse portfolio of tangible assets and intangible heritage and roots from the English, Dutch and the Portuguese.



Figure 3: Vibrant city of Surat (Station road known as Rajmarg Surat)



Figure 4: Street markets of Surat (Chauta bazar)

The strategic location of the city aided in forming historic overseas links with the rest of Asia, Europe, Africa and the Middle East which date back from 300 BC. These trading connections influenced the living patterns and built heritage in Surat and Rander. Key historic moments include major development by Malek Gopi, a rich trader in 1496-1521 AD, the establishing of silk and cotton factories from the 1600s, the construction of the inner-city wall in 1664 AD and the outer-city wall in 1715 AD. The city of Surat grew in the 17th and 18th centuries to become an established and formidable export and import centre of India. Settlement in Surat continued to develop with custom houses and gardens along the River Tapi and Surat's fort. By 1901 AD, the diamond cutting industry was established and began exporting diamonds to the United States of America from the 1970s. Currently, 80 per cent of diamonds of the world are cut in Surat [20] and the jewellery and textile industry has allowed a steady flow of wealth into the city. Despite being affected by a plague in 1994, devastating floods in 2006 and 2008, the city of Surat has continued to advance by earning awards for its urban water, sanitation and mobility infrastructure.

Surat is one of the oldest economic hubs and hence the impact of various cultural eras from all over the world. This has been the result of our old city houses and buildings. (I3, Heritage Consultant, Expert Interviewee)

This dynamic history has created and shaped the cultural identity of the city of Surat. Historic social practices and processes have remained interdependent and reciprocal with Surat's built fabric. The built environment is a crucial space for expressing traditional and spiritual activities which are still actively imprinted on urban life as shown in Figures 5 to 8.

The city of Surat has kept the heritage and survived invasion and calamities. The people's spirit is inclusive and festive...Surat is an amalgamation of many traditions and communities. It is a base for many crafts. The city has a lot of harmony which has its footprints in a way of amalgamation in the built heritage and intangible heritage. (I4, Heritage Architect, Expert Interviewee)



Figure 5: Transporting preparations for a festival



Figure 6: Residents using local temple (Gopipura)



Figure 7: Residents using urban traditional areas (Rander) for small retail or everyday traditional activities.



Figure 8: Festivals and traditions are still very lively and fully embedded in the city's everyday life.

Surat's built fabric reflects the powers that have historically dominated and influenced the city, including the Hindus, Muslims, French, Dutch, Portuguese and the British. Heritage sites across the city reflect elements and motifs that tell its own individual story through its design, material, woodwork, cornicing, paint, colour and landscaping of that era. Building materials evolved depending on the influence at that time. Local traditional houses used timber for the main house construction. The use of other construction materials such as brick and concrete demonstrated external influence.

The construction techniques of the housing are quite similar..., but the decoration is different. The housing inside are very simple but the façades instead are very different, because they are an expression of social distinction and power. (I6, Heritage Architect, Expert Interviewee)

Surat's built heritage reflects cultures of the settlers as well as the economic growth and status of their owners. The house form has evolved over the centuries responding to modernisation and contemporary living and the rise of industry. Different architectural languages are visible in the house form such as the facades, the layout, plan form and hierarchy of spaces. In particular, the front façade is a crucial reflection of the owners sociocultural, political and economic status and beliefs. Surat's building facades elements have different influences: Vernacular, Colonial (Gothic and Renaissance), Art Deco and Arabesque. The vernacular architecture depicts houses built from local resources and with local traditions often with wooden facades, large brackets and overhanging eaves. The carvings in the wooden columns are highly decorated, reflecting animal, bird and floral patterns. Surat's colonial influence resulted in forms of Gothic and Renaissance styles (Figure 9). The Arabesque style includes the use of repetitive geometric patterns on the facades and the buildings are made completely in brick and lime. Façade divisions using decorative art forms built with modern industrial material reflect the influence of the Art Deco style, as shown in Figure 10.



Figure 9: House façade in Gopipura showing colonial style influence



Figure 10: Façade elements with Art Deco influence (Cinema road)

The design and ornamentation of certain structural elements are great examples of the cross-cultural influences in Surat and richness of its patrons. For example, columns and brackets can be found in Surat's heritage buildings, with detailed carving and embellishment often bearing floral, animal and bird carvings and general geometric patterns with associated meanings. Figure 11 shows the beautification applied to carvings on the Chintamani temple column. Additional elements of focus central to Surat's heritage architecture are the windows and doors (Figure 12 & 13). These are often found to be symbolically decorated with meaningful motifs, dominating the façade in a predominantly symmetrical composition.



Figure 11: Interior temple pillar decoration (Gopipura)



Figure 12 & 13: Door and window design and decoration of heritage houses (Gopipura)

Findings from the photo-survey demonstrated that Surat's heritage is increasingly at risk, neglected and in desperate need of urgent attention as shown in Figures 14 to 17. A lack of maintenance and investment has amplified the vulnerability of heritage properties.



Figure 14 & 15: Dilapidated heritage buildings (Rander)



Figure 16 & 17: Heritage buildings in need of restoration (Rander)

6. Efforts to develop a Smart, Sustainable and Resilient Surat

The city of Surat has committed to becoming a “champion for resilience” through the 100 Resilient Cities (RC) Challenge which seeks to work with cities around the world to build resilience and tackle social, economic, and physical challenges that are faced by cities in an increasingly urbanized world. As a result, Surat introduced the Surat Resilience Strategy in 2017 [21] as a platform to help address the critical question of what can be done to protect and improve the way of life of citizens of Surat in the present and in the future. Developing heritage in the city is identified as a major part of this strategy and digitisation is embedded in this discourse. Surat’s resilience strategy describes one of the main resilience challenges as a loss of local unique culture and the demolition of heritage structures due to an increasing demand for housing [21].

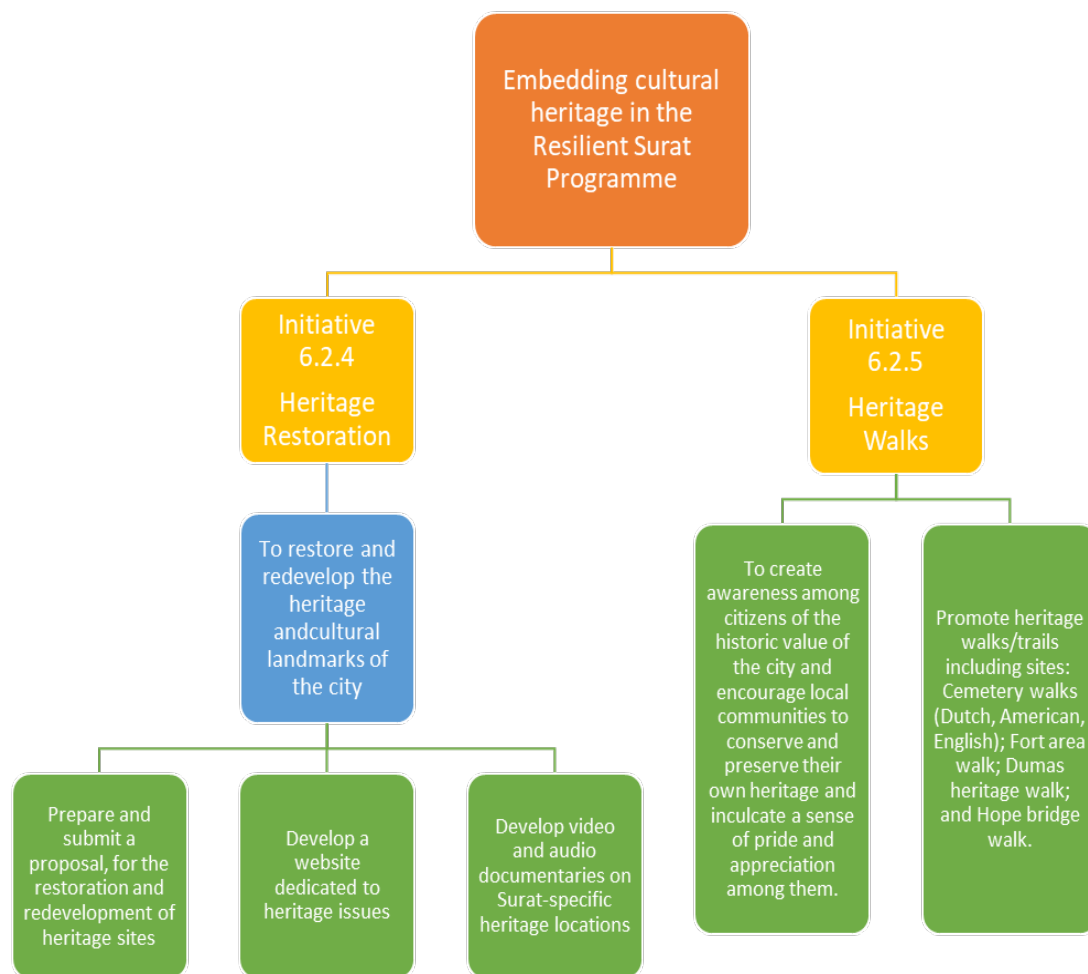


Figure 18: Surat resilience heritage interventions

Two initiatives were proposed pertaining directly to cultural heritage (Figure 18): Firstly, “Heritage Restoration” (Initiative 6.2.4) and secondly, “Heritage walks in Surat” (Initiative 6.2.5) [21]. The objective of the proposed “heritage restoration” initiative is to restore and redevelop the heritage and cultural landmarks of the city with a timeline of 2017 to 2020 [21]. It is largely based on a draft heritage policy produced by the SMC in 2011. It is important to note that at the time of authoring this paper, there is no active heritage policy in Surat to refer to. The draft heritage policy was developed from results gained from a heritage survey in 2011 conducted by the Urban Management Centre (UMC) to map Surat’s heritage with significant heritage value using GIS. The survey was assigned to the UMC, Ahmedabad, in July 2008. It focused predominantly on the built/tangible heritage of Surat as advised by the SMC. The UMC describes the SMC as one of the most progressive local governments in the country in its initiative to protect and conserve its valuable heritage [19]. In October 2008, the UMC initiated the study of GIS based mapping of living heritage of Surat, in Central Zone. The UMC determined the significance of the buildings they were surveying based on four value typologies: architectural value, cultural value, historical value and religious value. The initial survey found 4, 450 properties worthy of attention and for the detailed survey they screened the stock and concluded on 2,417 properties in the walled city of Surat.

An example of the commitment to heritage restoration (Figure 19 to 22, initiative 6.2.4) is the development of the city’s first heritage precinct at Chowk Bazar [20]. Under this project, 11.5 hectares of land around Surat’s fort are currently being redeveloped including Surat’s castle and moat, Suryaputri Udyan up to the river edge, Frazer promenade and Shanivari along the river bank.

As part of the fieldwork, the research team with a local conservation architect and 60 selected architecture students from across India visited the restoration project at Surat's fort. Surat's fort was built in the year 1540-41 for protection against the Portuguese raids. The fort currently has twelve-metre-wide battlements and four-metre-thick walls.



Figure 19 & 20: Restoration of Surat Fort wall along the river edge



Figure 21 & 22: Redevelopment occurring alongside the old Surat fort walls

Heritage walks (Figure 23 & 24, initiative 6.2.5) can be understood as an innovative way to encourage citizens and tourists to better understand the local cultural, natural, social, and historical importance of the city [21]. As a response to this proposal, the SMC developed a specific heritage walk route to encourage residents and visitors to walk through the city and experience the art, architecture and culture of Surat [49].

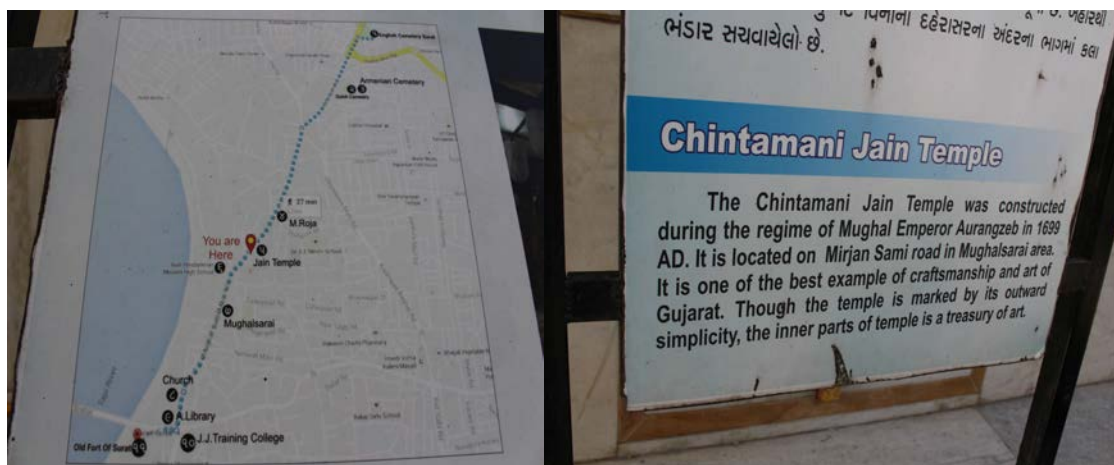


Figure 23 & 24: Heritage walk signage

Although this route positively promotes Surat's heritage, it can be perceived as a missed opportunity for several reasons. Firstly, it is limited in its scope as it only considers 11 tangible heritage sites as part of the heritage walk. Secondly, there is no mention of Surat's separate or associated intangible heritage. The SMC also created a mobile application to support this heritage walk as shown

in the screenshots below (Figure 25). The use of digitisation positively reinforces the engagement of heritage with citizens and tourists. Unfortunately, the app relies on traditional digitisation such as audio and images without introducing more engaging methods such as augmented reality or 3D digital reconstructions which can create an immersive and accessible way to experience Surat's heritage.

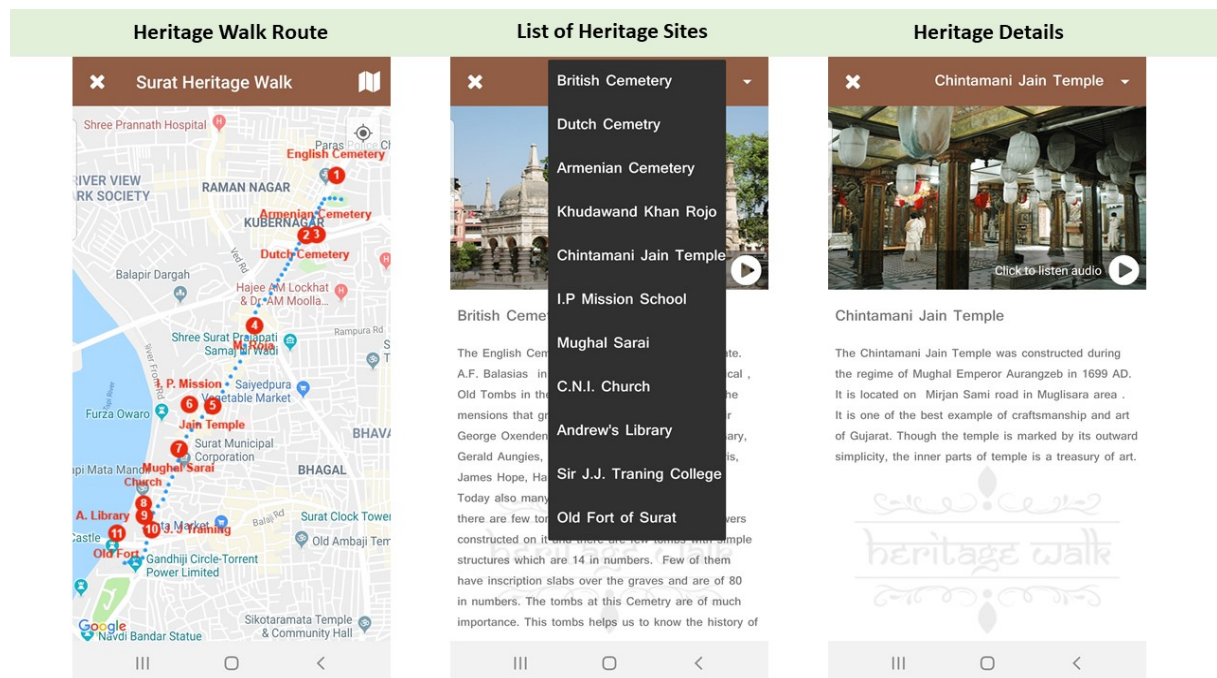


Figure 25: Screenshots of Heritage Walk App

7. Challenges to urban heritage conservation in Surat

The city of Surat is currently urbanising rapidly with demands of urban sprawl and development [19, 20]. Surat's urban context includes social cohesion challenges, increasing rural to urban migration, rising housing demands and considerable stress on city management and resources [21]. Despite the commitment and efforts by local Government discussed in the section above, there still remain considerable challenges in effectively conserving Surat's urban cultural heritage. These are explored in this section and are drawn from the findings gathered from the qualitative fieldwork.

7.1 Inadequate urban heritage conservation management governance and legislative framework

Surat's policy instruments on heritage are underdeveloped and there are no specific local policies or strategies on heritage conservation in place yet. An attempt to produce guidelines for the conservation of heritage based on the survey conducted in 2009 has been made, but still local authority struggles to implement it. This implies that heritage conservation is not perceived as a priority when considering other urban development objectives. The existence of a top-down approach to governance in Surat leads to the exclusion of communities in the practice and processes of urban planning. Cultural heritage continues to remain marginal in discussions about urban development agendas, often overlooked in the context of urban poverty, social inequalities and a severe lack of basic infrastructure. Additionally, risk mitigation policies with a heritage focus remain largely insufficient particularly in view of Surat's vulnerability to flooding. The SMC has made notable yet limited efforts to restore key monuments such as the Fort and castle as discussed in the section above. However, urban conservation and regeneration processes are not integrated successfully thereby reinforcing monumentalism.



Figure 26 & 27: New development and heritage building (Rajmarg)

7.2 New development and real estate urban pressures

Surat faces the urgent task of providing new infrastructure to meet the needs of a growing population. People from rural areas and other less-developed towns and cities are migrating to Surat in search for employment opportunities in expanding and established sectors such as the textile trade and diamond business. According to the Census taken in 2011, Surat had a population of 4, 466, 826 although the actual population may exceed these figures due to rapid development in Surat's metropolitan region [19]. Consequently, Surat is experiencing real estate pressures for new infrastructure and commercial developments that can house more people and add increased value to the land. There is an existing conflict between the need to preserve heritage and its urban fabric and modernisation projects to meet economic objectives. Providing urban infrastructure to meet the rise in population while protecting the integrity and authenticity of its heritage remains a distinct challenge.

The interpretation given by local experts on the impact of such a rapid urbanisation on local heritage was twofold. Through the analysis of both interviews and focus groups data we understood that (1) rapid urbanisation boosts the property market to produce more housing, hence old buildings are replaced with new buildings with higher densities and (2) the replacement of newcomers weakens the affection that local communities still have for local heritage, since newcomers are often not aware about the heritage value and local identity.

Surat is experiencing an increasing population at a very fast rate and very rapid urbanisation. This creates significant problems to create heritage awareness, identifying and awaiting opportunities. (I7, CEO of Surat iLAB & Smart City, Expert Interviewee)

The problem is not just about land value, is also about money. They go up and up because they do want to rent to more and more people. (I4, Heritage Architect, Expert Interviewee)

Urbanisation is a threat because young generation left the historic city and new owners replaced traditional owners, and found old housing unsuitable to accommodate contemporary lifestyle (I1 & I2, Surat Municipal Corporation Museum experts, Expert Interviewee)

The rise in the real estate market has increased the land value in certain areas resulting in housing that are unaffordable for low-income groups and therefore remaining vacant. Developers are buying land in the historic areas, demolishing heritage buildings and replacing it with modern housing at a larger scale to increase the land value (Figure 26 & 27). As a result, heritage buildings and its surrounding areas are falling rapidly into decay and the areas. Furthermore, the attractiveness of contemporary ways of living are leading to many people leaving traditional houses and the historic parts of Surat because of unsuitability. Some heritage houses as designed according to the Indian tradition, lack adequate infrastructure such as toilets, sewage systems and water pipers. Implementing contemporary infrastructure such as an AC, bathroom or flush toilets that is compatible with the old fabric in heritage buildings is a significant challenge.



Figure 28 & 29: Heritage buildings



Figure 30 & 31: New developments

The photo sequence (Figure 28 to 31) above refers to different buildings captured in the same day, however, it shows the typical trend happening in the two areas of Rander and Gopi Surat. Historic traditional buildings are often 2 or 3 storey buildings, built of traditional materials such as bricks. In a leapfrogged but yet systematic way, they are replaced by individual landowners/builders with concrete buildings, allowing to push the density higher. The second step in the sequence shows a single traditional building demolished. As the photo shows, this is not happening systematically by chunks of the historic precinct but with randomised and scattered intervention. From one hand, this makes the process of destruction of the traditional heritage slower, from the other hand, this process is happening silently but in a growingly pervasive manner and is spoiling the identity and the value of the historic urban fabric. The third step in the sequence shows the typical higher rise building replacing the previously existing traditional one. Allowing for sending on another site more suitable for development the extra volume that the landowner has been granted through the planning permission, would have protected the existing traditional heritage and still enabled the property market to gain fair profit. The fourth step clearly shows how the new building follows a kitsch aesthetic, replacing the sophisticated elegance of traditional architecture with bombastic inconsistent and ungrounded architectural features, still it also clearly appears how the owner considers such replacement aesthetically valid since the façade looks quite willingly manicured. This leads to the following set of considerations, about the importance of raising awareness in the newcomers on the value of traditional heritage and architecture.

7.3 Inadequate understanding of heritage values

At present, there is no standard classification and valorisation approach towards the cultural heritage in Surat. The paucity in recognising the pluralistic values of Surat's tangible and intangible heritage leaves to question what type of heritage should be preserved and why and who decides that. Consequently, heritage assets that have significant attached values to citizens are left out of local government efforts to raise awareness and promote heritage tourism. Without the acknowledgment and appreciation of Surat's culture and values, opportunities for establishing social cohesion and connectivity are missed.

Elected people, local leaders... They even do not bother about the value of these heritage buildings, they would rather demolish them and replace with new buildings. (I3, Heritage Consultant, Expert Interviewee)

So far, we have not been able to capitalize the value of the history and of the heritage, this city has been always well known for trade and commerce, not for its history. (I8, City Resilience Officer, Expert Interviewee)

A key informant pointed, as described above, that local politicians are not concerned with the value assigned to Surat's cultural heritage. Without political buy-in and commitment, heritage is left at the margins of urban development.

7.4 Lack of public awareness of heritage conservation

There was agreement in the findings that the public lack education, language and understanding about the values of tangible and intangible heritage and how to care for these heritage assets. Expert Interviewees highlighted the need for citizen participation in urban heritage conservation as illustrated by the quotes below.

Surat is experiencing constant dense growth of the CBD and acute migration. There is a need for an active dialogue with people and making them aware of our rich history. People's participation will bring awareness about the many layers of history. It will facilitate the connection of the footprints about history and the immediate past. (I6, Heritage Architect, Expert Interviewee)

The local community has a crucial role to play in promoting the pride of our heritage. There should be more involvement of various activities related to heritage. (I3, Heritage Consultant, Expert Interviewee)

The rise in modern practices leaves little room for recognition of traditional activities and processes. Some efforts to build heritage awareness has already been created as discussed in the sections above. However, there is no existing formal strategy to engage with urban communities about Surat's diverse heritage and how to preserve it. Increased awareness about history, story and the reality about heritage monuments and intangible heritage can instil a sense of pride in the local community.



Figure 32 & 33: Local practices embedded in urban fabric



Figure 34 & 35: Local practices embedded in urban fabric

The photos (Figures 32 to 35) above show how lively Rander historic area is and the role played by tangible and intangible heritage in shaping the place and in adding quality to the urban environment and in enabling the consolidation of the social bonds.

7.5 Loss of culture, belonging and sense of responsibility

Surat's urban fabric is under consistent pressure to "modernise", leading to the continuous disappearance of traditional skills and crafts which are part of the intangible cultural heritage. Expert Interviewees commented on the depreciation of a sense of place and belonging in Surat due to the various physical environmental challenges mentioned above and the increase in population.

Most of the heritage sites are present in the middle of the city, but due to blindly following the western culture, people neglect their own heritage and culture. (I9, Heritage Proprietor & Industrialist, Expert Interviewee)

Social connectivity and cohesion are weak and therefore there is a lack of interest in engaging with Surat's heritage. This challenge is exacerbated when considering migrant populations who have settled in Surat primarily for industrial activities and have no inherited sense of responsibility to conserve and value Surat's heritage.

7.6 Lack of skills, training and knowledge of heritage amongst decision makers

The fieldwork revealed that the compartmental thinking and fragmentation in Surat's heritage landscape is largely attributed to the absence of skills and knowledge amongst decision makers in

Surat's local Government and Heritage organisations. Few of the heritage experts and decision makers can use the digital technology needed for restoration and there is generally a lack of interest and awareness to learn these crucial skills. Therefore, heritage conservation strategies lack any digital innovation and technique. The current approaches to heritage conservation in Surat are described in the interviews as "artificial" and "copying the west". Without proper training that focuses on solutions and techniques catering to the uniqueness of Surat's urban context, heritage assets will continue to decay and vanish. There is a need to innovate and develop solutions through communication, cooperation and collaboration with multiple disciplines.

7.7 Underdeveloped Cultural Heritage Tourism Industry

A noteworthy challenge to the success of these project is Surat's underdeveloped heritage tourism industry which reduces the interest and exploration of heritage. Thus, contributing to the paucity of understanding of the significance and value of heritage [50]. Developing the tourism industry will also stimulate interest from the locals and urge them to understand and appreciate the value of the heritage.

Now tourists are coming to the city for business and go away after the visit, so we are trying to offer something that might induce those people to go with the family and to spend time and money around the city. Surat should not only be for business but also for tourism. If tourists were paying attention to the buildings, then the locals would understand and appreciate the value of the heritage. (I1 & I2, Surat Municipal Corporation Museum, Expert Interviewee)

Younger generations with digital access to global agendas on sustainability and heritage identity have a growing interest in visiting and taking steps to restore heritage sites in Surat.

8. Discussion

Surat's heritage conservative efforts need to be located within the context of the city's socioeconomic and physical infrastructural urban pressures, needs and demands. The diverse challenges discussed in the section above indicate the crucial necessity for a holistic focus on heritage conservation in Surat. As highlighted by the UN Sustainable Goals (SDG 11), cultural assets represent an essential resource for sustainable and inclusive human development and to progress cities' social resilience [7]. On a national level, heritage policies need to be integrated with planning interfaces. The national Planning Act has good capacity for spatial control and regulation but needs to broaden when dealing with cultural assets [51]. Surat has committed to becoming a resilient, smart and sustainable city facilitated by international and national programmes and therefore, the protection of cultural heritage should be central to fulfilling these goals. To this extent, the recognition and appreciation of both tangible and intangible cultural heritage will enhance social cohesion and create a sense of place and belonging. These benefits can only truly be actualised through the development of urban heritage policies that integrate heritage protection into urban planning legislation and practice. Surat's local policies must go beyond monumentalism and instead address the heritage and its urban fabric as well as associated interdependent intangible heritage. This can be financially viable by combining in an integrated strategy the concepts of resiliency, heritage conservation and smart city. Intersections across digitalisation and heritage (Smart City and heritage conservation), between social cohesion and resilience and local identity (Resilient City and heritage conservation) may support pilot interventions leading to a better appreciation of the value of traditional housing and local heritage and eliciting a more responsible approach from developers / local owners. Still limitations and constraints to the demolition of traditional buildings must be included in the local planning policies, in support of (1)a

better understanding of what must be valued by the community and (2) to make sure that conservation policies are endorsed consistently in the two historic areas of Rander and Gopi Surat.

Heritage buildings are perceived for the most part as a financial liability and non-priority topic in Surat's investment discourse. This is partly due to the costs, skills and resources needed to restore the buildings and the surrounding urban fabric. Surat's heritage practitioners lack a strong evidence base for their decision-making in heritage improvements and the quantification of damage to historic materials [51]. The effective use of technology in the heritage sector in Surat has significant potential to contribute to an accurate and informed understanding of the heritage sites, buildings and interiors. Therefore, heritage professionals and decision-makers need to gain skills and knowledge to identify innovative solutions as well as to seek synergy with other disciplines and fields of work [8]. Organisations such as the ASI and INTACH need to develop formal systems that recognise and support the conservation of heritage as an interdisciplinary effort [8].

A vital part of any sustainable approach is to recognise and understand the values linked to Surat's heritage. Thus, moving away from a material-based approach, also referred to as "authorised heritage discourse" [23, 52] or an expert-driven approach which places the conservation of heritage solely in the hands of heritage authorities. Universal solutions that solely focus on monuments and do not embrace the intangible associations with heritage sites, nor their management systems and practices tend to oversimplify the complex reality of Surat's heritage landscape. A values-based approach places the people of Surat at the core of conservation. This approach is largely based on the Burra Charter (ICOMOS) and has been further developed to recognise the plurality of values, voices and perspectives in the practice and interpretation of heritage conservation. The inclusion of the local community in decision making about Surat's heritage is prioritised in the discussions of solutions. This is with the view to democratise heritage and increase community participation. Initiatives such as U-Turn awareness programmes reflect significant action from the local people of Surat to organize resistance to prevent the demolition of heritage buildings [21]. In this context, a values-based approach builds on the growing momentum and makes concerted effort to engage the whole range of stakeholder groups throughout the conservation process [29]. The youth have a crucial role to play in the success of community awareness. Intergenerational approaches encourage older people and the younger generations to share and learn about heritage together and in a meaningful and impactful way. Surat's educational institutes, schools and colleges can facilitate this learning and allow for a high level of engagement with tangible and intangible heritage.

9. Conclusions

This paper has examined the context of the challenges in Surat and the efforts made with the view to make heritage an integral of part of urban planning and management processes in accordance with the practices and processes of sustainable urban development. The paper has presented a conceptualisation of urban heritage conservation within the context of India and more specifically the city of Surat. The discussion is situated in the context of a growing global discourse on the crucial role culture plays in sustainable urban development. Examples of national programmes and initiatives in India aligned with this discourse have been explored. Therefore, highlighting the commitment rhetoric made by India at a national and local level. The city of Surat is explored as an exemplar case study through qualitative fieldwork. Although, Surat has made deliberate steps in addressing its urban heritage, the existing challenges are considerable. The findings from this study highlight the need for decision-makers in the heritage sector to comprehend Surat's heritage as a multi-layered resource and an embodiment of indigenous knowledge that needs to be preserved through the active engagement of community. The absence of structured approaches can be presented as an opportunity for the design of locally defined participatory processes, where the transformation of cultural heritage takes place. Thus, facilitating community-based negotiation of urban cultural representation [53]. The inclusive development of urban heritage has the potential to foster a shared cultural identity experiencing both material (tangible) and socio-psychological (intangible) remnants of the nation's past and bringing pasts, peoples, places and cultures into performative contestation and dialogue. Unifying these

separate elements to present a coherent story and sustainable representation of Surat's urban heritage, however, remains a priority area for future research. Learning from the case study of Surat, more general recommendations can be drawn, applicable to heritage cities challenged by rapid urbanisation, as follows: (1) not only monuments but also traditional housing and local heritage should be targeted by local planning policies, by embedding heritage conservation principles within the local planning instruments such as plans and guidelines. It should not be expected that the real estate market will acknowledge the value of heritage unless constraints and limits are imposed by local authorities, when a gap in the national conservation policies exists; (2) in rapid urbanisation conditions, local communities are often replaced at rapid pace too, by becoming less resilient to change and therefore not capable to advocate for their own identity preservation. Again, it should not be expected that disenfranchised local communities will be strong enough to advocate for local heritage conservation, it is a duty of local authorities to impose limits and constraints to the demolition of local heritage; (3) digitalisation, resilience building, smart city actions can be combined and associated with heritage conservation, to empower local administrators in their role of endorsing heritage conservation.

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