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IMPACT OF URBAN HERITAGE ON SOCIAL VALUES IN HISTORIC URBAN PRECINCTS - PUBLIC PERCEPTION OF THE KUTTICHIRA COMMUNITY, KERALA

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Abstract

Historic urban neighbourhoods endure rapid transformation due to fast-paced development proposals seldom considering the urban heritage values associated with the local community. The study aims to examine the community perception of the impact of urban heritage on social values. The paper proposes a weighted contextual framework to maintain the social wellbeing of the community in historic urban precincts through a case study of Kuttichira. A framework constituting a set of social criteria that has an associational impact with the urban built heritage fabric was assessed and prioritized through a questionnaire survey on the perception of the Kuttichira community. The empirical results reveal relatively equal weightage across the gender groups, indicating the social impact's credibility within the community. The findings contribute to the practice of sensitive urban development catering to the community's social needs and assisting in policy-making.

Keywords

Urban heritage, historic area, urban conservation, community wellbeing, heritage values, social value, sustainability

1. *Introduction*

Urban heritage encapsulates social, cultural, and economic values associated with an urban area serving the community stakeholders' benefits (UNESCO, 2011). Heritage specialists and historians have extensively researched the concept of heritage (Manuela, Pereira, Ana, & Loupa, 2017) and further iterated through various international charters (Jokilehto, 2007).

For example, the Athens Charter initiated integrating built heritage and urban planning. Thus emphasizing the concept of development in historic precincts (Bandarin & van Oers, 2012; ICOMOS, 1931); and creating a paradigm shift in the notion of heritage from being a single entity to being a part of a broader and collective spectrum that needs to coexist with people and setting (Labadi & Logan, 2016; Udeaja et al., 2020).

Historic urban neighbourhoods endure sudden transformation due to insensitive development models seldom considering the associated heritage values (Steinberg, 1996). Urban development to cater to the community's demanding needs significantly impacts the heritage values imbibed in historic urban neighbourhoods (Bandarin & van Oers, 2012) (Park, 2016). Contemporary societies in historic urban communities are keen on enhancing the quality of life and sense of place within their locality, using available heritage assets as a resource (Greffe, 2004), except that there is a lack of awareness.

A sustainable and heritage-sensitive development trajectory is achievable by creating a dynamic cohesion between the heritage assets and the stakeholders within the community (Clark, 2001).

The paper aims to examine the significance and impact of urban heritage on the community's social characteristics. Through content analysis of published literature and expert opinion, ten criteria containing qualitative social characteristics has been extracted and further implemented in this study.

The framework is applied in Kuttichira, a historic urban precinct in Kerala-India, through a public questionnaire survey, as a case example to

devise a weighted social framework of the community.

The survey was conducted after the Covid-19 second wave subsided.

The study further intends to infer whether the gender aspect of the social strata impacts the overall perception.

2. Community perception and heritage appreciation

Public perception is "a collective summation of views and opinions obtained from random individuals of a random group in the public domain, collected over a specified period for a specific purpose, through a formulated public survey" (Dowler, Green, Bauer, & Gasperoni, 2006). The process aids in addressing common issues and agendas to attain sustainable goals, seldom marginalizing public interests (Aas, Ladkin, & Fletcher, 2005). Preconceived thoughts, ideologies, opinions and arguments of individuals or collective groups often determine the appreciation of heritage assets and their associated values (Amestoy, 2013; Frondizi & Frondizi, 1971; Mason, 2002).

Personal agendas are often weighted more than community benefits when approaching developmental plans in historic urban neighbourhoods, thereby rising to conflicts (Bakri, Yusuf, & Jaini, 2012; Yung & Chan, 2011). In such cases, the economic value associated with the heritage asset is often appreciated (Navrud & Ready, 2002).

Shared knowledge and ideologies within the community aid in formulating pragmatic solutions, thus evoking a sense of shared commitment in urban heritage conservation (English Heritage., 2008; UNESCO, 2011).

The Faro Convention of 2005 recognized the public's participation in the effective management of cultural heritage resources (Fojut, 2018).

The involvement of the local communities and stakeholders in local development planning aids in yielding sensitive and sustainable development strategies (Günaydin & Yücekaya, 2020; Moroke, Schoeman, & Schoeman, 2019).

As a primary step, the public ought to recognize the values embedded in their historic neighbourhood through public appreciation. Heritage appreciation can be accomplished through active or passive interaction (Zube, Sell, & Taylor, 1982).

The values associated and attached to a heritage asset by a stakeholder is often determined by these interactions, which are further influenced by external factors such as political ideologies, socio-economic status, and climate, which may or may not be shared among a larger group within the public.

3. Social value attributes- conceptual framework

Social built spaces are interlinked concepts that help create meaningful environments with unique identities expressed through elements and features. These concepts help enjoy the living environment and evoke a sense of belongingness among the members of a particular community.

Understanding the relationship between built heritage and the social needs will aid in sustainable conservation of the region by social integration of the communities with the social fabric achieving long-term sustainable goals.

Social values signify a collective attachment to a place and associations to specific contextual characteristics embodied with community values and meanings (Australia ICOMOS, 1979; Jones, 2017).

Content analysis and expert opinions formulated a conceptual framework of criteria and sub-criteria.

Qualitative factors such as urban experience, urban character & identity, sense of ownership, urban landmarks, and tourist destinations can be wholesomely seen as pivotal in expressing the urban heritage area's 'sense of place'.

At the same time, life satisfaction, safety & security, social interaction & participation, social innovation, and property values express the community's 'quality of life' aspect.

Hence the social values associated with the built heritage environment are determined by attributes that address the community's sense of place and quality of life. Fig. 1 shows the conceptual framework that determines social criteria influenced by the built urban heritage.

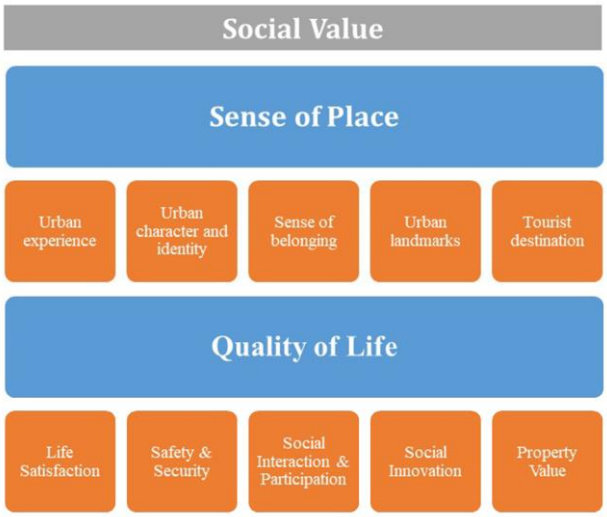

Fig. 1: Proposed social value conceptual framework (Source: Author)

4. *Case Study: Kuttichira*

Kuttichira is one of the distinctive historic urban areas located in Kerala in India. Fig. 2 shows the location map of Kozhikode district, where Kuttichira is situated towards the west. The area is imbibed with heritage values, showcasing multiculturalism, communal co-existence and social harmony. Kuttichira accommodates a Muslim majority, then followed by the migrated Gujaratis and Jain communities during the Zamorin reign for maritime trade. The *chira* or *kullam* (pond) is the heart and nucleus of the precinct. The central portion of the Kuttichira precinct constitutes the Muslim community, while the northwest and northeast portions constitute the Gujaratis and Jains, respectively. Fig. 3 shows a map of communities residing in the Kuttichira region concerning the *chira* (pond) located in the centre.

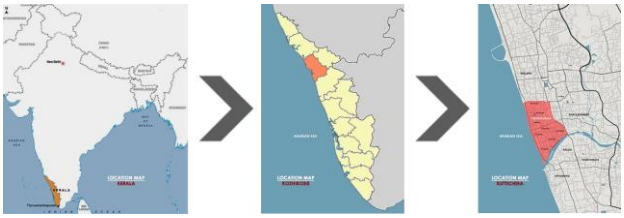

Fig. 2: Location map of Kuttichira (Source: Author)

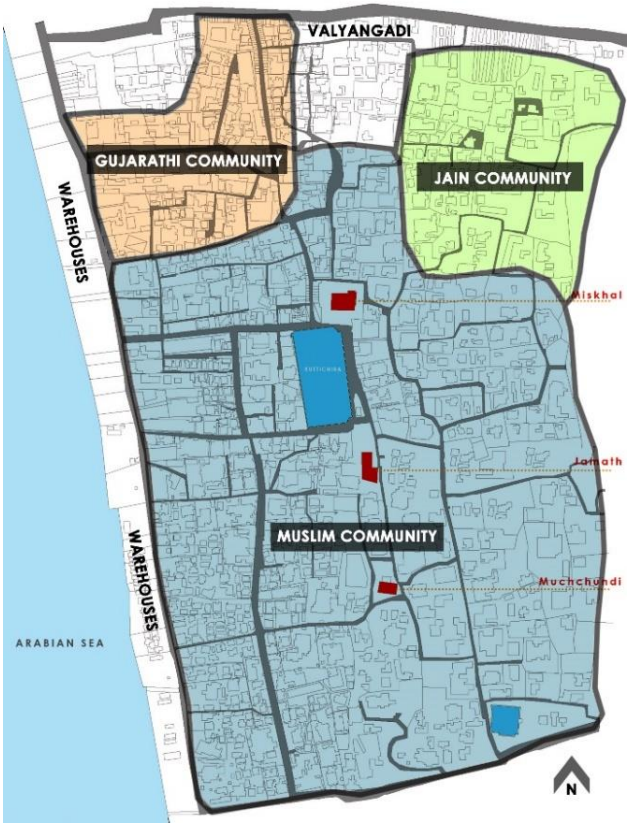

Fig. 3: Communities in Kuttichira area (Source: Author)

The pond (*chira*) is the central urban spot for social interaction. The built heritage of the Kuttichira area lies in the architecture of Kuttichira. The architecture showcases a unique character and identity that is a fusion of local vernacular architecture and Arabic traditions, predominantly seen in the mosques (Fig. 4). The region comprises urban elements that contribute to the social value of the community residing and vice versa. The social attributes such as the sense of place result from the spaces created by built heritage and how the social fabric interacts with the built urban fabric. This interaction further influences the quality of life.

Fig. 4: (a) Miskhal Palli -14th cent. (b) Jami Palli – 14th cent. (Source: Author)

5. Materials and Method

The identified criteria that form the conceptual framework of social value are qualitative, and the research objective intends to focus on addressing the weightage for each criterion. Hence, the qualitative criteria were translated into a questionnaire survey to obtain and collect objective and quantifiable responses from the population sample. The responses were subsequently collated and analysed to determine the weighted relevance for the respective criteria.

The questionnaire survey approach constituted close-ended statements for each sub-criteria to assess the level of agreement of the relevance to the overall urban built heritage as a catalyst for addressing and promoting the social value of a community. Using the average index technique (Majid & McCaffer, 1997), the respondent data was processed and given an AI weightage score to the criteria and sub-criteria to create a hierarchy structure to the proposed framework. The reliability was assessed using Cronbach alpha. Finally, the study data were analysed through SPSS software to generate descriptive statistics based on socio-demographics.

5.1. Questionnaire design

The questionnaire survey for the study was framed to assess the public perception of urban heritage as being social actors. The objective was obtained by evaluating the respondents' level of agreement to statements focussing on the social attributes of heritage that impact the community. First, a pilot survey was conducted; iterations were made to frame the final questionnaire survey.

The first section of the questionnaire survey consists of a brief understanding of the survey's intention and an introduction about heritage for the respondent. The survey questions prepared for the questionnaire survey were structured into five broad sections. The first section informs the participant about the questionnaire survey and its sole purpose. The second section covers the socio-demographics of all the participants and comprises seven questions: name, age group, education, occupation and geographic location. Finally, the third section covers aspects focussing on the social value–addressing a set of criteria statements demanding a level of agreement from the participant. All statements were close-ended and structured to obtain general information from the public domain based on which inferences can be derived for the whole community. shows the questionnaire statements framed for each sub-criteria.

Tab. 1: Social value criteria questionnaire statements (Source: Author)

	Criteria	Sub-criteria	Statement
Social Value	C1. Sense of Place	C11. Urban experience	Built heritage creates quality ambient urban spaces & enhances the urban experience of the locality.
		C12. Character and identity	Built heritage creates a unique character to the locality and enhances the cultural identity of the community
		C13. Sense of belonging	Built heritage creates a sense of belonging among the local community.
		C14. Urban landmarks	Built heritage creates public landmarks for more ease in wayfinding and identification.
		C15. Tourist destination	Built heritage boosts tourism by creating tourist destinations and encouraging tourism activity.
	C2. Quality of Life	C21. Life satisfaction	Built heritage improves the quality of life and standard of living within the community.
		C22. Safety & security	Built heritage directly or indirectly evokes a sense of safety & security among people of all ages and gender groups.
		C23. Social interaction	Built heritage promotes social interaction and participation among the residents
		C24. Social innovation	Built heritage assists in social innovation and development within the locality.
		C25. Property value	Built heritage and heritage status are determinants that control the property value in the locality.

5.2. Data Collection

An online questionnaire survey specific to the study objective was devised by the author and circulated online through Google Forms® to handle large-scale survey data collection and assimilation (Andrews, Nonnecke, & Preece, 2003; Cobanoglu, Warde, & Moreo, 2001; Couper, 2000; Lazar & Preece, 1999; Yun & Trumbg, 2000; Zhang, 2019). The Google Form URL link was further circulated via social media platforms, such as Google Mail®, WhatsApp®, Facebook®, Facebook Messenger®, and Instagram®, to make it accessible and mobile-friendly to the public (C. B. Smith, 1997). The preliminary respondents were encouraged for their assistance in forwarding the google form URL link to their colleagues and contacts to reach a broader and diverse crowd by

5.2. Sample selection

Non-probability snowball sampling was performed for the sample selection process to attain a more diverse perspective of the public domain. The sample size can be determined for larger populations by using Equation 1 Cochran (T. M. F. Smith & Cochran, 1964).

$$N_0 = \frac{Z^2 pq}{e^2} \qquad (1)$$

Where N_0 is the sample size, Z^2 is the value obtained from the statistical table which contains the area under the standard curve of the desired confidence level, p is the estimated proportion of an attribute that is present in the population, q is (1-p) and; e is the desired level of precision. In this case, with the desired confidence level of 95%, ±5% precision, and assuming maximum variability p=0.5, we obtain N0 =384. According to Yamane, the required sample size for a population greater than 100,000 for ±5% precision levels (where the confidence level is 95% and p=0.5) is 400 (Yamane, 1967).

5.3. Data Analysis

Frequency analysis was used to measure the respondent frequency and percentage of similar statements. Likert Scale (Likert, 1932), ranging from 1 to 7, was found to be suitable by various researchers (Colman, Norris, & Preston, 1997; Finstad, 2010; Johns, 2010; Lewis, 1993; Miller, 1956; Symonds, 1924) and was used in this electronically distributed survey. Tab. 2 shows the Saaty scale ranging from 1 to 9 (T. L. Saaty, 1971; T. Saaty & Vargas, 2012).

Tab. 2: The fundamental scale or the Saaty scale (Source: Saaty & Vargas, 2001)

Rank	Description	Explanation
1	Equally Important	Two activities contribute equally to the objective
2	Weak	-
3	Moderately Important	Experience and judgment slightly favour one activity over another
4	Moderate plus	-
5	Strongly Important	Experience and judgment strongly favour one activity over another
6	Strong plus	-
7	Significantly Important	An activity is favoured very strongly over another; its dominance demonstrated in practice
8	Very Strong plus	-
9	Extremely Important	The evidence favouring one activity over another is of the highest possible affirmation order.

The scale is adopted to develop an Average Index Rating Scale that measures the level of agreement with '1' representing - strongly disagree; 2- disagree; 3- moderately disagree; 4- neither agree nor disagree; 5- moderately agree; 6- agree, and 7- strongly agree. The degree of agreement for the provided statements was determined using the average index technique (Bakri, Ibrahim, Ahmad, & Zaman, 2015; Majid & McCaffer, 1997).

The average Index rating scale for different levels of agreement based on the Likert scale is shown in Tab. 3. The average Index value is calculated using the formula shown in equation 2.

$$\text{Average Index, } AI = \frac{\sum (wi\ X\ ni)}{N} \qquad (2)$$

Where w_i is the weight given to each statement by respondents; n_i is the frequency of the respondents for the particular weight, w_i; N is the total number of respondents. In this research study, w_i is the Likert scale value.

Tab. 3: Average Index rating for levels of agreement. (Source: Adopted from Majid and McCafer, 1997)

Likert	Description	Explanation
1	Strongly Disagree (SD)	1.00 ≤ A.I. < 1.50
2	Disagree (D)	1.50 ≤ A.I. < 2.50
3	Moderately Disagree (MD)	2.50 ≤ A.I. < 3.50
4	Neither Agree nor Disagree (NAD)	3.50 ≤ A.I. < 4.50
5	Moderately Agree (MA)	4.50 ≤ A.I. < 5.50
6	Agree (A)	5.50 ≤ A.I. < 6.50
7	Strongly Agree (SA)	6.50 ≤ A.I. ≤ 7.00

6. Results

6.1. Demographic Analysis

A non-probability snowball sampling was conducted, from which 572 responded to the questionnaire survey. In terms of gender, 53% of the sample constituted female, and 47% constituted the male group. Based on age-wise distribution, most of the respondents fall under 25-34 years with 291 respondents (50.9%) and 15-24 years with 232 respondents (40.6%). The remaining was found to be distributed under 35-44 years with 29 respondents (5.1%), 45-59 years with 16 respondents (2.8%), and 60 years & above with four respondents (0.7%). The majority of the respondents, i.e., 275 (48.1%), have completed their graduate level of education, 207 respondents (36.2%) have completed their post-graduate level and (10%) have completed their formal education up to senior secondary. In terms of employment, 278 respondents (48.6%) fall under the employed category and 30 respondents (5.2%) under the unemployed category. The remaining was distributed among the student group with 233 respondents (40.7%), 27 respondents being homemakers (4.7%), two respondents being retired (0.3%), and two being unable to work (0.3%). Tab. 4 shows the demographic overview of the respondents.

6.2. Average Index and Level of Agreement

The level of agreement for each criterion was interpreted by calculating the average index (AI). The level of agreement for all the criteria and their corresponding average index value is shown in Tab. 5. In addition, the level of agreement was analyzed gender-wise to examine the disparity in the average index value separately.

Tab. 4: Demographic overview of respondents

Variable	Frequency	Per cent
Gender		
Male	269	47
Female	303	53
Age		
15 - 24 yrs.	232	40.6
25 - 34 yrs.	291	50.9
35 - 44 yrs.	29	5.1
45 - 59 yrs.	16	2.8
60 yrs. & above	4	0.7
Education		
High school	5	0.9
Senior secondary	57	10
Diploma degree	18	3.1
Bachelor's degree	275	48.1
Master's degree	207	36.2
Doctorate degree/ PhD	8	1.4
Post-doctorate or higher	2	0.3
Employment		
Employed/self-employed	278	48.6
Student	233	40.7
Homemaker	27	4.7
Retired	2	0.3
Unable to work	2	0.3
Unemployed	30	5.2

6.3. Reliability Analysis

IBM SPPS Statistics Version 21 was used to conduct reliability analysis by calculating the Cronbach's Alpha (α). The Cronbach alpha values obtained for criteria C1 and C2 are 0.792 and 0. 517 respectively. The response obtained from the Quality of Life (C2) criteria shows a lower alpha value (α=0.517), which would increase to α=0.776 if C24 (social innovation) is omitted. Tab. 6 shows Cronbach's alpha values for all the criteria.

6.4. Weighted framework

Since the level of agreement between both genders were found the same, the final weighted structure was taken without gender distinction. The average index values obtained were normalized for assigning weights to the criteria and their respective sub-criteria. The normalized AI weights for the criteria and their respective sub-criteria are shown in Tab. 7. The final hierarchical structure with assigned local and global weights is shown in Tab. 8.

Tab. 5: Gender-based level of agreement and average index scores

Gender	Criteria (ni = no. of responses)		Level of Agreement (wi) SD (1)	D (2)	MD (3)	NAD (4)	MA (5)	A (6)	SA (7)		Average Index AI= (∑ (wi X ni))/N	
Male	Sense of Place (C1)	C11	7	3	16	49	50	73	71		5.36	MA
		C12	2	4	5	17	29	78	134		6.11	A
		C13	2	5	7	37	36	88	94	N=269	5.75	A
		C14	2	2	6	17	28	73	141		6.16	A
		C15	2	2	5	25	32	69	134		6.07	A
			Level of Agreement: Agree								AI= 5.89	
Female		C11	8	10	7	36	56	90	96		5.56	MA
		C12	2	0	1	13	26	75	186		6.40	A
		C13	2	3	3	34	34	93	134	N=303	6.00	A
		C14	0	2	1	13	33	71	183		6.37	A
		C15	3	2	2	12	30	67	187		6.34	A
			Level of Agreement: Agree								AI= 6.14	
Male	Quality of Life (C2)	C21	5	6	12	45	60	72	69		5.38	MA
		C22	6	14	19	76	72	48	34		4.76	MA
		C23	0	6	14	30	54	97	68	N=269	5.58	A
		C24	20	32	41	50	34	46	46		4.37	NAD
		C25	2	3	7	61	61	72	63		5.39	MA
			Level of Agreement: Moderately Agree								AI= 5.10	
Female		C21	4	4	8	50	70	91	76		5.49	MA
		C22	4	16	23	94	71	50	45		4.79	MA
		C23	2	3	8	32	74	103	81	N=303	5.66	A
		C24	21	28	40	64	48	46	56		4.49	NAD
		C25	1	1	4	67	67	87	76		5.52	MA
			Level of Agreement: Moderately Agree								AI= 5.19	

Tab. 6: Cronbach's alpha reliability analysis

Criteria	Cronbach's Alpha (α)	Sub-Criteria (item)	(α) if item deleted
Sense of Place C1	.792	C11	.806
		C12	.729
		C13	.750
		C14	.737
		C15	.744
Quality of Life C2	.517	C21	.265
		C22	.397
		C23	.313
		C24	.776
		C25	.413

Tab. 7: Normalized A.I. scores

Criteria	A.I.	Normalized	Sub-Criteria (item)	A.I	Normalized
Sense of Place C1	6.02	0.539	C11	5.467	0.1816
			C12	6.264	0.2081
			C13	5.885	0.1955
			C14	6.273	0.2084
			C15	6.215	0.2065
Quality of Life C2	5.15	0.461	C21	5.441	0.2114
			C22	4.776	0.1856
			C23	5.624	0.2185
			C24	4.434	0.1723
			C25	5.460	0.2122

Tab. 8: Final weighted social value framework for Kuttichira community

Factor	Criteria	Local Weight	Global Weight	Global Rank	Sub-Criteria	Local Weight	Global Weight	Global Rank
Social Value	C1. Sense of Place	0.52	0.260	1	C11. Urban experience	0.182	0.0228	9
					C12. Character & identity	0.208	0.0260	4
					C13. Sense of belonging	0.196	0.0245	7
					C14. Urban landmarks	0.208	0.0260	5
					C15. Tourist destination	0.207	0.0259	6
	C2. Quality of Life	0.48	0.240	2	C21. Life satisfaction	0.211	0.0264	3
					C22. Safety & security	0.186	0.0233	8
					C23. Social interaction	0.219	0.0274	1
					C24. Social innovation	0.172	0.0215	10
					C25. Property value	0.212	0.0265	2

7. Discussion

The survey showed maximum participation of 91.5% from the age category of 15 to 34 years old, which indicates the active involvement of the community. The results also show that the urban heritage in their locality has a pivotal role in creating a 'sense of place' within the community. The public considered urban heritage to directly or indirectly promote 'social interaction' and participation the most within the public. Further, informal interviews with the residents justify and validate this point by emphasizing the impact the public heritage structures has on the community, in this case, the Miskhal mosque and the adjacent pond. There is not much significant change between the weighted scores for life satisfaction and property value. It indirectly shows equal preference in enriching the quality of life through means of economic generation with the aid of the built heritage. In this case, it is the sale of properties associated with the community's heritage or within the vicinities. A mutual relationship is seen between the sub-criteria-character & identity; and urban landmarks as they have a negligible difference in their weightage.

Similarly, results show a significant relationship between 'urban experience' and 'safety & security'. The survey results also indicate that the community did not support the statement that heritage would assist in 'social innovation' within their society. However, the inclusion of its weightage showed relevance in the study, accounting for the need to address the possibilities of heritage assets to act as potential drivers for social innovation and development. There was no significant variation in the average index values across gender groups for all the sub-criteria, thus concluding with the same level of agreement for all the statements. The framework's application on the case study yielded a weighted conceptual framework that helps identify the most and least heritage-impacted social criteria within the Kuttichira community.

8. Limitations

The in-depth details of the identification, shortlisting and determining attributes of the sub-criteria are beyond the paper's scope. Snowball sampling technique was adopted as an effective method for ease in distribution, collection and achieving diversity within the community and not just focussing on the key stakeholders. Due to which, though the approach has its limitations due to its subjectivity, it addresses the relevance of the discussed criteria and sub-criteria.

9. Conclusion

Including the concept of urban heritage and its associated values into planning frameworks can be a paradigm shift in crafting a novel prototype for heritage-sensitive urban development and local heritage management. Heritage is seen as an opportunity to drive-in economic benefits for the local public through local employment and tourism. The public needs to be aware of the social relevance values associated with urban heritage; and the possibilities of achieving a better quality of life symbiotically with heritage. There is scope for expediting public discussions regarding local urban heritage. Public involvement ought to be encouraged through heritage awareness programs. The questionnaire survey conducted for this study also served the purpose of creating awareness among the respondents.

The local communities are the primary stakeholders in protecting and managing their local heritage assets. However, recognition and awareness of their associated values imbibed are seldom done voluntarily. The research study conducted was to understand the impact of urban heritage on the community's social wellbeing. Although the study determines the critical social criteria, the contextual and distinctive nature of various historic urban precincts and their residing communities can influence the perception and the necessity to iterate the conceptual framework further. Time, demand and external influences often determine one's perception; hence the study is non-conclusive.

Based on the weighted structure developed for a particular area, development proposals can study the impact of every criterion and be utilized by policy-level makers and architects. They can employ iterations in their approach to suit heritage-led sustainable urban conservation and development. Alternative approaches can be made considering the social aspects of the community and their association with the built heritage fabric. Urban heritage can be used as sensitive catalysts for the development process, thus creating a palimpsest that can be passed on to for further generations.

Further studies can focus on other associated heritage values and investigate the impact on the community. Apart from the gender variable, further study can be performed and inferred based on the other demographic variables. The developed conceptual framework should be considered a starting point for further iterations and not be regarded as conclusive. There is scope for conducting a comparative analysis of multiple case studies related to the social values and studying the variations in the weighted structure, yielding contextual inferences that could be further explored.

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