

Continuity with Change: *Developing an Empirical Conservation Strategy for Historic Shimoni Town Using Confirmatory Factor Analysis*

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Abstract

Shimoni is a pre-colonial town along the East African coast distinguished by Swahili architecture and slave trade heritage. This study employed qualitative and quantitative approaches, including condition surveys and Confirmatory Factor Analysis (CFA), to examine the condition of cultural heritage and residents' perceptions toward conservation. Findings revealed deterioration of heritage resources caused by neglect, vandalism, inadequate maintenance, and uncontrolled architectural modifications. CFA confirmed nine key associative heritage values: economic, aesthetic, social, educational, historic, spiritual, symbolic, use, and sustainability values. The study further established a strong relationship between heritage preservation and community perceptions of heritage value. Despite strong community attachment, Shimoni's cultural heritage remains vulnerable to continued decline without deliberate conservation interventions. The study recommends participatory conservation planning, adaptive reuse of historic buildings, stronger planning controls, heritage documentation, and community stewardship initiatives. These measures can support sustainable preservation, strengthen local identity, promote heritage tourism, and safeguard the historic town from extinction while contributing to scientific conservation approaches for Swahili settlements along the East African coast.

Keywords: Built environment, built heritage, condition survey, confirmatory factor analysis, empirical conservation strategy, heritage values, historic town, lack of maintenance, Shimoni, Swahili Coast, Swahili architecture, urban conservation, vandalism

INTRODUCTION

Historic towns and urban landscapes are regarded as cultural heritage passed over from earlier generations and embody vital cultural values. They contain historic physical artefacts, buildings and spaces that create identity, and entrench significant social meanings. Urban cultural heritage infuses community togetherness, inspires planning, design and development of future urban places. It is a vital resource for economic and social development. Despite that, historic cities and city districts globally are facing an existential threat as a result of destruction and loss of irreplaceable built heritage. Rapid urbanization, unplanned growth, gentrification, neglect and lack of maintenance, vandalism and climate change induced degradation constitute the major agents of the rapid loss of critical cultural heritage within historic towns. The situation is worse in sub-

Saharan Africa.

Vulnerability of historic urban environments is not only about the threat of irrevocable loss of physical form and material fabric, but also concerns erosion of cultural heritage values that create meanings and identity for communities. Conservation projects have been tried across Africa but have yielded mixed outcomes of success. Top-down approaches; inadequate financing; exclusion of local communities; inadequate conservation experts; and deficiencies in the overall approaches to conservation have randomly been speculated to be the causes for such failures. The observation is that there still remains a gap between the theory and practice of conservation. Some heritage experts argue that there is minimal application of scientific approaches during implementation

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of conservation projects. However, there remains limited empirical research on scientifically derived conservation strategies for historic Swahili settlements along the East African coast. Along the East African coast where historic Swahili towns are situated, such projects have been few and far apart. Limited scholarly attention has been accorded to establish how to sustain the existence of Swahili coastal settlements – most of which are waning towards extinction. This study is an attempt to develop a scientific strategy for preservation of one of the ancient Swahili towns of East Africa. It seeks to bridge a research gap in heritage conservation practice by suggesting a scientifically derived strategy to conserve Shimon.

THEORY

Urban Conservation (UC) is a crucial element of sustainable urban development because urban heritage constitutes a significant resource for enhancing sustainable urbanity and livability of urban areas (Al-Saffar, 2018; Keitumetse, 2016; Rossi & Rabie, 2021). While Keitumetse (2016) emphasises the contribution of urban heritage to sustainable development, Rossi and Rabie (2021) associate conservation with enhancement of urban livability, whereas Al-Saffar (2018) focuses on preservation of historic urban identity. Urban cultural heritage can foster social inclusion and economic progress at the same time (Mekonnen et al., 2022).

The Contemporary Theory of Conservation advocates for the need to formulate and integrate responsive urban heritage conservation strategies that support both public and private actions. Such actions should be aimed at preserving and enhancing the quality of historic environments through a holistic approach that goes beyond preservation of individual architectural monuments (Muñoz-Viñas, 2005; UNESCO, 2011). UNESCO (2011) and Muñoz-Viñas (2005) therefore argue for a holistic conservation approach that extends beyond individual monuments to the wider historic urban environment. Conserving built heritage should involve balancing— intricately—between sustaining the heritage and current population's demands. As a result, it has to involve many stakeholders due to the impacts on livelihoods and how people maintain and use their private property. Central to it all is the continuity of the tangible and intangible historic fabric with

which people identify (Abdul Huq & Puthuvayi, 2024). Abdul Huq and Puthuvayi (2024) further emphasise continuity of both tangible and intangible heritage as central to community identity and sustainable conservation.

Although motives for cultural heritage conservation are diverse, compelling arguments justify that people-centered heritage preservation should be derived from the perception of heritage value that communities attach to cultural heritage (Wang et al., 2025). This study therefore adopts the Contemporary Theory of Conservation because it supports community-centred and value-based conservation approaches in understanding perceptions towards heritage preservation.

There is an inherent acknowledgement of value in cultural heritage. In many instances, it is regarded as a non-renewable resource that must be preserved for the benefit of future generations (Holtorf, 2018). Heritage value relates to the meanings and worth that individuals or communities bestow on tangible cultural heritage property including buildings, monuments, artefacts, archaeological sites, landscapes and intangible expressions of culture such as traditions, rituals and language (Díaz-Andreu, 2017; Hernandez & Vaquero, 2019). The perception of value is not only limited to the intrinsic historical or aesthetic qualities but also includes its immediate cultural, religious, or practical functions. Rather than monuments and artefacts being preserved for their role in religion or for symbology, their continuity goes beyond mere preservation of history (Avrami et al., 2019; Mteti et al., 2025). Ristic and Frank (2020) notes that values are an interpretation of intangible aspects that give a group of people a sense of continuity and strengthen their sense of collective self, belonging and attachment to a place or territory.

Muñoz-Viñas (2005) argues that contemporary heritage conservation practices should focus beyond individual objects and incorporate an understanding of communities' level of appreciation for heritage property. Swedberg (2016) emphasises that a cultural heritage object does not become important just because of its material components but rather derives its value out of the social meaning community ascribe to it. This attachment of value varies across communities and generations through other

influences including knowledge and changes in environment. A review of relevant literature reveals that cultural heritage values influence attitudes and preferences towards historical landscapes. While preference to historical environments is partly as a result of cognitive influence, perceived quality of the environment is a subjective derivative of how historical landscapes are seen to contribute to general appearance of the environment (Stamps, 2000).

Sustainable Development Goals, SDG 4 in particular, recognizes the unique contribution of culture to sustainable development. SDG 11 on the other hand, acknowledges the role of cultural heritage in sustainable urbanity and is oriented towards making cities safe, inclusive, resilient and sustainable (United Nations, 2015). Recognition of contemporary urban needs and the continuous changes happening within the urban space requires adoption of strategies that will accommodate the spatial needs of the current urbanization process yet still recognize the uniqueness and continuity of urban heritage. Conservation should be undertaken in a manner that will enhance benefits for future generations. This may be achieved through adaptive reuse of heritage property.

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heritage conservation practices should focus beyond individual objects and incorporate an understanding of communities' level of appreciation for heritage property. Similarly, Swedberg (2016) emphasises that a cultural heritage object does not become important merely because of its material components, but rather derives its value from the social meanings communities ascribe to it. This attachment of value varies across communities and generations through influences such as knowledge and environmental change. A review of relevant literature further reveals that cultural heritage values influence attitudes and preferences towards historical landscapes. While preference for historical environments is partly a result of cognitive influence, perceived environmental quality is a subjective derivative of how historical landscapes contribute to the overall appearance of the environment (Stamps, 2000).

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One of the central elements in conservation of cultural heritage is identification. Lack of information about heritage property and its significance can easily mislead conservation interventions and lead to irrevocable destruction and permanent loss. Participatory mapping and inventory taking can aid accurate documentation, promote preservation, and assist communities to make collective decisions regarding the future of their cultural heritage (Gireesh, 2024). This therefore suggests that an effective conservation plan should be grounded on communities' interpretation of meanings and the physical condition of heritage property.

This study has been guided by the following

theoretical underpinnings that emphasise the interlinkage between cultural heritage and urban development.

Sustainable Development: There’s an inherent link between sustainable development and heritage conservation. Sustainable development is built on the principles of continuity of benefit and intergenerational equity in relation to resources. Likewise, sustainability in preservation of cultural heritage focuses on fostering social sustainability, maintaining a sense of belonging, enhancing cultural meaning and identity, and promoting environmental stewardship amidst rapid urban change (Taqa, 2025). Preservation of historical buildings can arguably play a pivotal role in the sustainable development of a city, with adaptive reuse of architectural heritage being regarded as one of its core ethical practices (Shetabi, 2015).

Sustainable Urbanity: Kumar and Nigam (2023) describe sustainable urbanism as a placemaking concept centred on a holistic approach to city building. It involves recognising, facilitating, and maintaining linkages between ecosystems and human well-being through deliberate ecological, economic, and social actions. Sustainable urbanity further highlights the need

for cultural preservation, conservation of identity, encouragement of cultural diversity, and creation of distinctiveness of neighbourhoods as key objectives (Thorpe, 2025).

Urban Conservation: According to Urban Design Lab (2021), urban conservation is concerned with preservation and protection of built and natural environments within an urban area. These may include buildings—either collectively or individually—streetscapes, neighbourhoods, or natural landscapes. The concept includes rehabilitation, adaptive reuse, and development control programmes that guide new developments in a manner that respects and enhances existing heritage properties. In the midst of rapid and uncontrolled urban growth and development, urban heritage conservation can act as a strategy to effectively manage urban resources. In that case, conservation becomes a strategy for achieving balanced urban growth and enhancing quality of life (UNESCO, 2011).

As illustrated in **Figure 1**, the interrelationship between sustainable development, sustainable urbanity, and urban conservation collectively informs the Contemporary Theory of Conservation. The framework demonstrates that

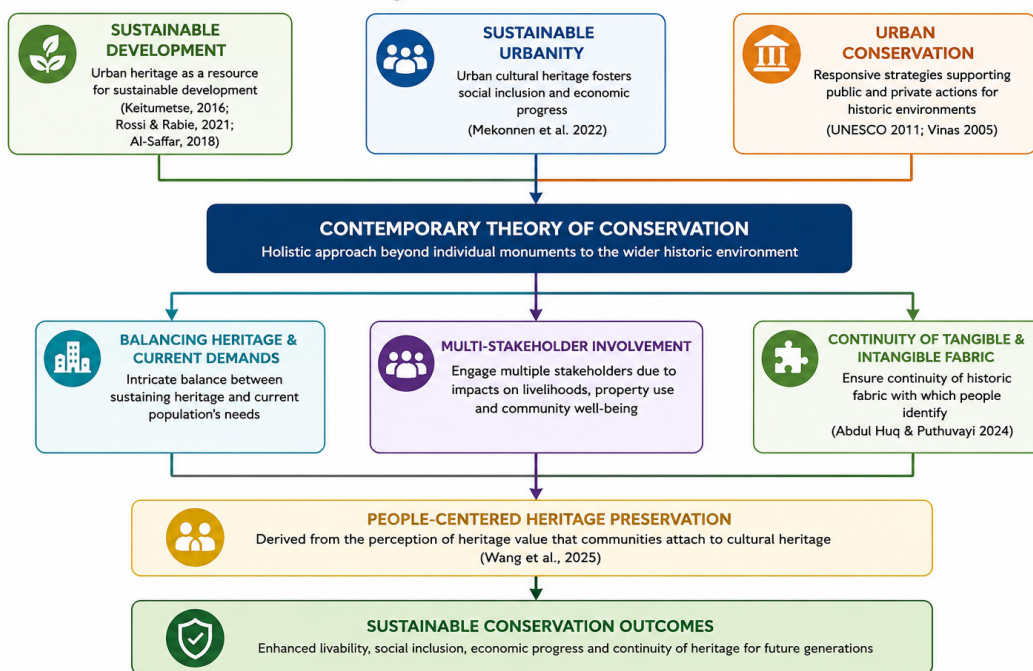


FIGURE 1
Theoretical framework for urban heritage conservation
Source: Author’s conceptualisation, 2026

conservation of historic urban environments should integrate adaptive reuse, scientific conservation, authenticity and integrity of heritage buildings, and meanings attached to place in order to influence community attitudes and preferences towards heritage preservation.

RESEARCH METHODS

This study incorporated observational techniques to assess the state of built heritage within historic Shimoni town and an attitudinal evaluation to confirm the intrinsic cultural heritage values associated with the town. The data collection schedule comprised of a standardized questionnaire with one hundred attitudinal statements on aspects of cultural heritage value of the historic Shimoni town. The responses were ranked on a Likert scale of 7 based on the level of concurrence with such statements. The ranking was 1 for Strongly Disagree; 2 for Disagree; 3 for May Disagree; 4 for Neutral; 5 for May Agree; 6 for Agree and 7 for Strongly Agree. The Likert scale targeted specific heritage values including economic, aesthetic, social, educational, historic, spiritual, symbolic, use, and sustainability value. An observation check list was applied to aide in analysis of the townscape with a view to establish the actual physical state of built heritage properties.

Sampling

The study analyzed the entire population of the historical buildings and monuments within the historic town in order to establish the state of the built heritage within the historic town. Given the uniqueness of each historical structure within the area, the study preferred a total population sampling method to enable accurate deduction of the state of the built heritage within the area through a condition survey.

The sampling unit for the attitudinal evaluation was taken to be the entire Shimoni town whose population was estimated to be about 6,520 people. Both simple random sampling and purposive sampling were used to select participants in the study. Given the large size of the population, the study employed simple random sampling techniques to identify a representative sample. The sample size was determined using the formula;

$$n = \frac{N}{1 + N(e)^2}$$

where,

n = sample size

N = population size

e = acceptable sampling error of 5% using a confidence level of 95%.

Using this formula, the sample size was calculated as:

$$n = 6520 / 1 + 6520(0.05)^2$$

$$= 376.87 \text{ which is approximately } 377 \text{ persons}$$

Purposive sampling techniques were used to identify participants who had exceptional knowledgeable about the history of Shimoni and its people. This was done by singling out specific individuals for interviews. Participation in the study was guided by three major ethical principles; disclosure, consent and confidentiality. Participants were informed about the nature of study and prior consent was sought before administration of the data collection tools. The participants were made aware that their involvement in the research is voluntary and were further assured of their confidentiality and that of the information provided.

Study Area

The development of the old Shimoni town is credited to the influence of precolonial settlement by British European administration in the area. The town has a rich legacy of the colonial settlement and history of slave trade along the East African littoral. This is evident through the presence of memorial buildings and ruins of unique architectural works that include the colonial administration building; colonial prison – being the first incarceration institution in Kenya; historic graves of British soldiers who died in during the early struggles for colonization of the East African coast; Kyangai historical mosque; Shimoni slave caves and a natural botanical garden that has a collection of indigenous tree species and which acts as an urban open space in between the built-up area (Figure 2).

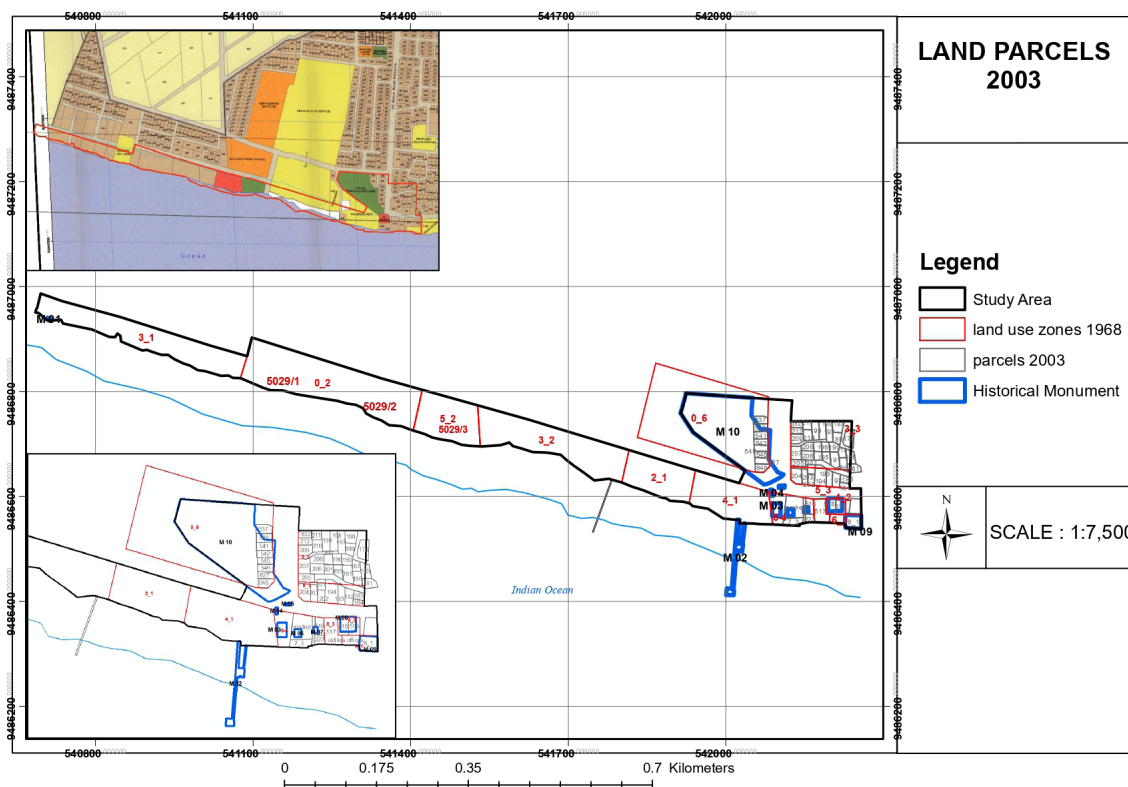


FIGURE 2
 Land Parcels within Historic Shimoni Town
Source: Department of Physical Planning, Kwale County – Kenya, 2026

RESULTS

The target population for the study divided into two main categories. For the objective on establishing the built heritage within the historic town, all the listed heritage sites within the area were observed and analysed. The state of built heritage within the historic town was established by applying the Historic England (2016)’s observational criteria for surveying heritage buildings. Concerning identification of the heritage values associated with the area, 377 participants who were willing to participate in the survey were randomly identified from the resident population. The participants were interviewed using an attitudinal evaluation questionnaire. The data gathered was processed with the aim of confirming the associative heritage values. Multiple factor analysis was conducted to derive people’s attitudes and perceptions towards conservation of historical towns. Statistical Package for the Social Sciences (SPSS) software was used to analyse the responses. Responses were tested using Confirmatory Factor Analysis (CFA) with a confidence level of 95%. Responses

that yielded positive factor loadings above 0.5 were used to confirm validity of the statements and affirm the ascription of the specific heritage values.

The attitudinal statements used in the Confirmatory Factor Analysis were coded according to their original questionnaire item numbers. The numbering presented in the CFA tables therefore corresponds to the respective items from the standardized survey instrument.

Confirmatory Factor Analysis for Inherent Heritage Values of the Historical Town

The study sought to confirm nine heritage values that were identified beforehand. They were; economic, aesthetic, social, education, historic, spiritual, symbolic, use and sustainability values (Table 1).

i. Economic Value

Interpretation

The confirmatory factor analysis for "economy"

TABLE 1
 CFA Results for economic value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Economy	2. The historic town and buildings are an economic resource	0.694	0.039	17.807	< .001	0.617	0.770
	3. Sustaining the historical area has capability to create employment opportunities for the local community	0.770	0.040	19.199	< .001	0.691	0.848
	10. Without the historical town tourists would not be interested in coming to Shimoni	-0.307	0.036	-8.556	< .001	-0.377	-0.237
	11. Even without the historic town tourism activities in Shimoni would still have thrived	-0.123	0.038	-3.225	0.001	-0.198	-0.048

Source: Author’s analysis from survey data, 2026

revealed significant relationships between several indicators and the perception of economic impacts in historical areas. Indicators with strong positive factor loadings included the belief that the historic town and buildings are economic resources (0.694), sustaining the historical area creates employment opportunities for the local community (0.770), and tourism activities benefiting the local fishing industry (0.698).

Conversely, some items demonstrated negative associations, such as the notion that without the historic town, tourists would not visit Shimoni (-0.307), and skepticism about whether tourism would thrive without the historic town (-0.123). This emphasises the economic impact of the town directly through tourism and indirectly through promotion other local economic activities as presented in **Table 2**.

TABLE 2
 CFA Results for aesthetic value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Aesthetic	2. The material used to construct the historic buildings is unique and makes the townscape beautiful	0.763	0.018	43.458	< .001	0.729	0.797
	3. I enjoy spending time within the historic town	0.805	0.017	47.512	< .001	0.772	0.838
	5 The environment around the historic area is so relaxing, almost therapeutic	0.830	0.017	48.308	< .001	0.796	0.864
	6. The style of building within the historic area is foreign and is undermining our traditional architecture	0.207	0.021	9.690	< .001	0.165	0.249

Source: Author’s analysis from survey data, 2026

ii. Aesthetic Value

The aesthetic factor produced strongest loadings for the indicators relating to enjoying the historic town (0.805), the therapeutic environment (0.830), and the uniqueness of the materials used in the historic buildings (0.763). These findings suggested that the aesthetic appeal of the historic area was well represented by the indicators. The confidence intervals for each indicator were also narrow, indicating precise estimates. However, the indicator "The style of building within the historic area is foreign and is undermining our traditional architecture" had a lower loading (0.207), indicating that the architecture is not alien and does not affect the aesthetic appeal.

Table 3 presents CFA results for social heritage value indicators.

iii. Social Value

Indicators for the social factor showed strong, statistically significant loadings, with estimates ranging from 0.291 to 0.816, all having p-values below 0.001. The highest loadings were observed for indicators related to the historical town uniting the community (0.816), the town giving Shimoni an identity (0.763), and the ability to learn from the historic area (0.811). These findings suggest that the social importance of the historic area is a key factor, with community cohesion and cultural

value being central aspects. However, some indicators, such as "The historical buildings and ruins within the conservation area are ugly and have no use to our current generations" (-0.098) and "Our religious beliefs are hampered by the activities at the historic town" (-0.031), had weak or non-significant loadings ($p > 0.05$), indicating they may be less relevant to the social factor (**Table 4**).

iv. Educational Value

The education factor showed consistently strong and significant factor loadings across all indicators, with p-values below 0.001, confirming the robustness of the educational significance of the historic town. The highest loading was observed for the indicator "Every time I visit the historical town, I learn something new" (0.776), followed by "There are facts about the historical city that have not been uncovered to date" (0.797) and "The historical buildings contain learning lessons" (0.767). These results underscore the educational value of the historic town, with respondents viewing it as a continuous source of learning about past inhabitants, cultural heritage, and urban planning practices. Other indicators also showed strong loadings, such as "People visiting the historic town are also likely to be interested in learning about the local culture" (0.732) and "The historic area enhances the learning experience and

TABLE 3

CFA Results for social value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Social	4 Our religious beliefs are hampered by the activities at the historic town	-0.031	0.024	-1.322	0.186	-0.078	0.015
	5 The historical area gives Shimoni town identity	0.763	0.019	39.879	< .001	0.725	0.800
	6 The historical town unifies our community	0.816	0.019	43.895	< .001	0.779	0.852
	8. The historical buildings and ruins within the conservation area are ugly and have no use to our current generations	-0.098	0.024	-4.020	< .001	-0.146	-0.050

Source: Author's analysis from survey data, 2026

TABLE 4
 CFA Results for educational value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Educa-tional	2. The historical buildings contains learning lessons	0.767	0.014	53.263	< .001	0.739	0.795
	4. Every time I visit the historical town, I learn something new	0.776	0.015	53.148	< .001	0.748	0.805
	6 There are facts about the historical city that have not been uncovered to date	0.797	0.015	51.759	< .001	0.767	0.827
	10. People visiting the historic town are also likely to be interested in learning about the local culture	0.732	0.016	46.404	< .001	0.701	0.763
	11. The historic area enhances the learning experience and assists in teaching about cultural heritage	0.802	0.015	52.091	< .001	0.772	0.832

Source: Author's analysis from survey data, 2026

assists in teaching about cultural heritage" (0.802). **Table 5** presents CFA results for historic heritage value indicators.

v. Historic Value

Interpretation

Factor loadings for the historic factor indicated the deep influence of the historical town on modern growth, with items such as "The old city has influenced the way the current town is growing" (0.737) and "Current planning of Shimoni should consider the history and urban structure of the old town" (0.779) demonstrating the connection between the past and present urban planning. The analysis also highlighted the value of physical heritage, with indicators like "It is fulfilling to learn about the past while you can see its evidence through the built heritage" (0.773) emphasizing the importance of preserving historic sites for education and identity. The historical role of Shimoni in the region was underscored by high loadings for statements like "Shimoni largely contributed to the growth of other coastal towns along the East African coast" (0.726), and the significance of Shimoni's history, particularly related to slavery, was illustrated with the item "I have come to understand the history of slavery

in East Africa through the Shimoni slave caves" (0.782). However, the item "The history of the place can be conserved even without maintaining the physical heritage" (0.054) showed a lower factor loading (**Table 6**).

Results for the spiritual factor revealed that respondents strongly associated the Shimoni slave caves with spiritual significance. High factor loadings indicated the belief in spiritual presence, such as the item "When I pray at the caves my prayers are answered and I get what I pray for" (0.878), which had a particularly strong loading. Similarly, "Occasionally I carry offerings to the caves" (0.845) highlighted the practice of offering items at the caves as part of spiritual rituals. The belief in supernatural forces also emerged with "Some days or times are unsafe to visit areas within the historic town because of bad spirits" (0.707) and "Ruined and old buildings attract ghosts and evil spirits and are not worth keeping" (0.579), reflecting concerns about the negative energy associated with certain places. However, items such as "The belief of spiritual powers at the slave caves is contrary to our religious beliefs" (0.394) and "The historical town does not represent anything spiritual to the people" (0.403) had lower loadings, suggesting some respondents

TABLE 5
CFA Results for historic value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Historic	1. The old city has influenced the way the current town is growing	0.737	0.019	38.079	< .001	0.699	0.775
	3. Current planning of Shimoni should consider the history and urban structure of the old town	0.779	0.019	41.325	< .001	0.742	0.816
	5. Shimoni largely contributed to the growth of other coastal towns along the East African coast	0.726	0.020	37.135	< .001	0.688	0.764
	6. I have come to understand the history of slavery in East African through the Shimoni slave caves	0.782	0.020	38.921	< .001	0.742	0.821
	7. It is fulfilling to learn about the past while you can see its evidence through the built heritage	0.773	0.019	40.144	< .001	0.736	0.811
	10. The history of the place can be conserved even without maintaining the physical heritage	0.054	0.026	2.061	0.039	0.003	0.106

Source: Author's analysis from survey data, 2026

viewed the spiritual beliefs as conflicting with their own religious views. As shown in **Table 7** the results also indicated a personal and emotional connection to the site, with items like "I have a personal life story linking me to this place" (0.558) and "Whenever I visit the historic town my connection with the people living within and around it is strengthened" (0.637), suggesting that for some, the experience at the historical town was connected to social aspects.

vii. Symbolic Value

Responses under this value recorded high factor loadings for items like "The historic town is a common good for enjoyment by everyone in the current and future generations" (0.866) and "Conservation of the historic town can help develop a sense of wellbeing and belonging for the local community" (0.828) indicated that the symbolic value of the town is widely recognized as a community asset. The emotional connection to the town was reflected in indicators like "When I visit the historic town, I get the feel of one of its early inhabitants" (0.686) and "The environment

around the historic town in Shimoni always reminds me of something/someone important in my life" (0.485). Conversely, some items related to the darker aspects of the town's history, such as "The historic town represents a dark past due to the history of slave trade" (0.353) and "I hate listening to tales of slavery and slave trade related to Shimoni town" (-0.190), had lower or negative loadings, reflecting discomfort with certain aspects of its past (**Table 8**).

viii. Use Value

Under the use factor the results revealed a generally positive perception of the functionality and accessibility of the historic area. Indicators like "The historic town is useful even without modification and restoration" (0.569) and "There are adequate communal spaces within the historic town for use by members of the public" (0.663) highlighted the practical value of the area, with respondents seeing the space as functional even without further development. The loadings for "I am free to use any space within the historical area for my benefit without any restriction" (0.629) and

TABLE 6
 CFA Results for Spiritual value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Spiritual	1. When I pray at the caves my prayers are answered and I get what I pray for	0.878	0.018	47.804	< .001	0.842	0.914
	2. Occasionally I carry offerings to the caves	0.845	0.018	46.815	< .001	0.810	0.881
	3. Some days or times are unsafe to visit areas within the historic town because of bad spirits	0.707	0.018	40.020	< .001	0.672	0.741
	4. The belief of spiritual powers at the slave caves is contrary to our religious beliefs	0.394	0.023	17.149	< .001	0.349	0.439
	5. The historical town does not represent anything spiritual to the people	0.403	0.022	18.208	< .001	0.360	0.447
	6. Ruined and old buildings attract ghosts and evil spirits and are not worth keeping	0.579	0.021	27.007	< .001	0.537	0.621
	7. I have a personal life story linking me to this place	0.558	0.022	25.273	< .001	0.515	0.602
	8. Whenever I visit the historic town my connection with the people living within and around it is strengthened	0.637	0.022	29.073	< .001	0.594	0.680

Source: Author's analysis from survey data, 2026

"We conduct community functions and events within the historical area" (0.639) reflected a sense of openness and community engagement with the area. However, certain indicators, such as "Most buildings within the historic towns are beyond repair and cannot be salvaged or restored in any way" (0.568) and "If offered an opportunity I would like to invest within the historic area" (0.312), suggested more critical views on the potential for restoration and investment. **Table 9** presents CFA results for sustainability heritage value indicators.

ix. Sustainability Value

For the sustainability value the results revealed that the historic town was strongly associated with various environmental and social sustainability benefits. Indicators such as "The building technology used on the historical buildings and monuments is more energy efficient" (0.748) and "The historical buildings cause less visual

pollution than newer buildings" (0.760) suggested that the town's architecture contributes to energy efficiency and aesthetic sustainability. Furthermore, "Conserving the historic town will prevent urban gentrification" (0.758) and "Conservation of urban heritage enhances social cohesion and inclusion and promotes preservation of community identity" (0.767) highlighted the social sustainability aspect, emphasizing the role of conservation in fostering community unity and protecting local heritage. The analysis also revealed strong support for the idea that conservation helps promote resource efficiency, with indicators like "Re-use of the historic buildings will promote resource efficiency" (0.639) and "Conserving the historic town will sustain transfer of knowledge from current generation to future generations" (0.786), pointing to both environmental and educational sustainability.

TABLE 7
CFA Results for symbolic value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Symbolic	1. When I visit the historic town I get the feel of one of its early inhabitants	0.686	0.018	38.169	< .001	0.651	0.722
	3. The historic town represents a dark past due to the history of slave trade	0.353	0.020	17.314	< .001	0.313	0.393
	2. I hate listening to tales of slavery and slave trade related to Shimoni town	-0.190	0.023	-8.362	< .001	-0.235	-0.146
	7. The environment around the historic town in Shimoni always reminds me of something/someone important in my life	0.485	0.021	23.371	< .001	0.444	0.525
	8. Conservation of the historic town can help develop a sense of wellbeing and belonging for the local community	0.828	0.016	50.441	< .001	0.796	0.861
	9. The historic town is a common good for enjoyment by everyone in the current and future generations	0.866	0.017	49.650	< .001	0.832	0.900

Source: Author's analysis from survey data, 2026

TABLE 8
CFA Results for use value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Use	2 The historic town is useful even without modification and restoration	0.569	0.028	20.252	< .001	0.514	0.624
	3 I am free to use any space within the historical area for my benefit without any restriction	0.629	0.028	22.740	< .001	0.575	0.683
	4 There are adequate communal spaces within the historic town for use by members of public	0.663	0.028	23.326	< .001	0.607	0.719
	8 If offered an opportunity I would like to invest within the historic area	0.312	0.028	11.217	< .001	0.258	0.367
	9 Most buildings within the historic towns are beyond repair and cannot be salvaged or restored in any way	0.568	0.028	20.172	< .001	0.513	0.623
	10 We conduct community functions and events within the historical area	0.639	0.029	21.770	< .001	0.581	0.696

Source: Author's analysis from survey data, 2026

TABLE 9
 CFA Results for sustainability value

Factor loadings							
Factor	Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Sustainability	3 The building technology used on the historical buildings and monuments is more energy efficient	0.748	0.018	40.903	< .001	0.712	0.784
	4 The historical buildings cause less visual pollution than newer buildings	0.760	0.018	41.426	< .001	0.724	0.796
	5 Historical buildings contribute less to generation of urban waste	0.678	0.018	37.218	< .001	0.643	0.714
	7 Re use of the historic buildings will promote resource efficiency	0.639	0.018	35.412	< .001	0.604	0.675
	8 Conservation of the historic town will prevent urban gentrification	0.758	0.017	44.051	< .001	0.724	0.792
	9 Conserving the historic town will sustain transfer of knowledge from current generation to future generations	0.786	0.019	41.153	< .001	0.748	0.823
	10 Conservation of urban heritage enhances social cohesion and inclusion and promotes preservation of community identity	0.767	0.019	40.912	< .001	0.730	0.803

Source: Author’s analysis from survey data, 2026

State of Built Heritage within Historic Shimoni Town

Analysis of the built heritage revealed the list and state of historical buildings and sites located within the conservation area as shown in **Table 10**.

DISCUSSION

The findings of the study reveal a paradox of a historic town to which the local community ascribe value and favour its preservation, yet no ongoing nor planned actions have been purposed to sustain its existence. The findings therefore demonstrate a disconnect between community appreciation of heritage and actual conservation practice. Similar observations have been made by UNESCO (2011), which argues that historic urban environments continue to face deterioration where conservation approaches fail to integrate local participation, planning controls, and sustainable urban management strategies. The deterioration observed in Shimoni further supports the argument

by Muñoz-Viñas (2005) that conservation should extend beyond preservation of individual monuments and instead incorporate the broader social and urban context within which heritage exists.

An array of conservation challenges became apparent out of the study. Manifestation of the challenges was in a number of ways including neglect and a complete lack of maintenance of heritage buildings, which has exposed them to natural decay. Vandalism and physical destruction of heritage property was also evident. These findings correspond with observations by Abdul Huq and Puthuvayi (2024), who note that ineffective conservation management and lack of stakeholder involvement contribute significantly to deterioration of urban heritage. Similarly, Mekonnen et al. (2022) identified neglect, inadequate maintenance, and weak institutional support as major challenges affecting conservation of cultural heritage sites in Africa.

TABLE 10
An analysis of the state of built heritage within Shimoni historic town

Historic Building/Structure	Status of Building Elements										Overall Condition	
	Roof	Wall Structure	Rainwater Goods	Structural Stability	Door & Windows	Architectural Details	Interior	Walls	Occupancy	Ownership Type		Trends
Kyangai Mosque	Missing	Missing walls, eroded masonry, vegetation growth	Plant growth on walls	Structural defects and bulges on remaining walls, stability of remaining part of structure is threatened	Missing	Majority of architectural details have been lost through dilapidation; some details still remain	Interior details missing	Only one wall remains	Not in use	Private	Declining	Very bad
Colonial DC's Residence	Leaky iron sheets, warped beams	Patina stained walls	Plant growth on walls and gutters	Missing beams,	Most are missing		Visible interior damages,	Decaying wood, patina-stained walls	Vacant	Public	Declining	Poor
Colonial Administration Building and Fish Market		Patina stained walls	Plant growth on building remains	Visible cracks,	Missing	Majority architectural details have been lost through dilapidation and modifications	Interior details missing	Partial walls remaining	Partially occupied	Public	Declining	Very bad
Colonial Prison Building	Missing	Eroded coral walls,	Plant growth on walls	Visible cracks, bulges, eroded walls	Missing	Original architectural style visible but impacted by material decay	Visible interior damages,	Partial walls remaining	Partially occupied	Public	Declining	Very bad
Slave Caves	Present in its natural rock	Shows signs of natural wear of rocks	Plant growth on walls and algae		Natural entrance but pathways	Natural	Show signs of decay	Undergone natural corrosion	Partially occupied	Community owned	Declining	Fair
Old Jetty	Corroded	Corroded with rust	Rust	Unstable	Not Applicable	Rusted	Not Applicable	Undergone rust Corrosion	Abandoned	Public	Declining	Very bad
Historic Graves	Not roofed	Maintain-ed	Discolored surface	Stable	Vandalised commemorative plaques	Intact	Only external walls are visible	Visible cracks on some graves	Tombs are intact	Public	Declining	Fair

Source: Analysis adopted from Historic England. (2016). Understanding historic buildings: A guide to good recording practice. Historic England.

The study further established that lack of clear spatial designation of the conservation area creates ambiguity regarding the actual limits of the historic zone. Unplanned and unauthorised building works are gradually modifying building facades without consideration for the built fabric and material integrity of the heritage environment. These findings reinforce UNESCO's (2011) recommendation that conservation of historic urban landscapes should integrate planning controls, zoning, and management of urban growth in order to protect authenticity and integrity of heritage environments. The findings also support the Contemporary Theory of Conservation, which advocates for holistic conservation approaches that integrate urban planning, adaptive reuse, and continuity of historic fabric within changing urban contexts (Muñoz-Viñas, 2005).

The lack of custodial authority by the local community over the heritage has placed the burden of conservation solely on government authorities. This finding is significant because the Confirmatory Factor Analysis (CFA) results revealed that residents attach multiple values to the historic town, including economic, social, symbolic, educational, spiritual, and sustainability values. The findings therefore affirm Wang et al. (2025), who argue that people-centred conservation should derive from communities' perception of heritage value and attachment to place. Similarly, Ristic and Frank (2020) note that heritage values strengthen collective identity, belonging, and continuity within communities. The strong associative values identified in this study therefore suggest that the local community already possesses a foundation for community-led conservation initiatives.

The findings also demonstrate that heritage conservation within Shimoni extends beyond preservation of physical structures alone. Respondents strongly associated the historic town with identity, social cohesion, learning, spirituality, and sustainability. This observation supports Swedberg's (2016) argument that heritage significance is derived not only from material fabric but also from the meanings communities attach to heritage places. The findings further correspond with Díaz-Andreu (2017), who emphasises that heritage values are socially constructed through cultural interpretation and collective memory.

The combination of physical deterioration and strong community attachment therefore presents both a conservation challenge and an opportunity. While the historic town remains vulnerable to continued decline, the strong heritage values associated with Shimoni suggest potential for participatory and community-centred conservation approaches. This aligns with UNESCO (2011), which advocates for integrated urban heritage management approaches that balance conservation needs with contemporary urban demands. The findings further support sustainable urbanity principles advanced by Kumar and Nigam (2023), who emphasise the importance of cultural preservation, identity, and inclusivity within sustainable urban development frameworks.

CONCLUSION

This study has revealed a critical need for conservation of Shimoni as a historic coastal town. The findings demonstrate that both built and natural heritage within the historic town remain vulnerable to continued deterioration due to neglect, lack of maintenance, vandalism, and uncontrolled urban modifications. The study further established a strong relationship between preservation of cultural heritage and community perception of heritage value. Through Confirmatory Factor Analysis (CFA), the study confirmed that residents associate Shimoni with economic, aesthetic, social, educational, historic, spiritual, symbolic, use, and sustainability values.

The findings further demonstrate that community attachment to heritage alone may not be sufficient to guarantee long-term preservation of cultural heritage. Sustaining the continuity of both tangible and intangible heritage therefore requires deliberate and systematic conservation interventions supported by empirical evidence, planning controls, and community participation. The study additionally confirms the relevance of the Contemporary Theory of Conservation by demonstrating that effective conservation should extend beyond preservation of individual monuments to include broader urban, social, cultural, and environmental dimensions.

The study concludes that conservation of historic urban environments should integrate scientific conservation approaches, adaptive reuse,

participatory planning, and community-centred management systems in order to strengthen stewardship and ensure continuity of heritage for future generations. The findings therefore contribute towards development of sustainable and empirically informed conservation strategies for historic Swahili settlements along the East African coast.

RECOMMENDATIONS

Participatory Mapping and Spatial Delineation

The study recommends implementation of participatory mapping and spatial delineation of the conservation area in order to establish a clear and publicly accessible conservation zone capable of supporting land use regulation, zoning, and development control.

Conservation Zoning and Heritage Documentation

The study further recommends re-gazettement of the historic town as a continuous conservation landscape rather than isolated listing of individual heritage properties. Compilation of a comprehensive cultural heritage database documenting both tangible and intangible heritage resources should also be undertaken to strengthen inventory management, documentation, and future conservation planning.

Community Stewardship and Heritage Management

To strengthen local stewardship and sustainability of conservation initiatives, the study recommends establishment of a local heritage management office and increased involvement of the local community in administration and custodianship of heritage resources. Such community-centred approaches are expected to strengthen ownership, encourage maintenance, and promote continuity of indigenous knowledge and cultural identity.

Adaptive Reuse and Urban Regeneration

The study additionally recommends adaptive reuse, restoration, and rehabilitation of deteriorating heritage buildings in order to enhance functionality of historic structures while preserving authenticity and integrity of the historic urban fabric. Replanning and urban regeneration initiatives should further be undertaken to improve physical linkages, regulate uncontrolled development, and enhance the overall quality of the historic environment.

Heritage Branding and Tourism Promotion

Finally, branding, public awareness, and heritage tourism promotion should be strengthened to increase recognition of Shimoni's cultural significance and enhance the contribution of heritage conservation towards local economic development.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

CITED REFERENCES

Abdul Huq, S., & Puthuvayi, B. (2024). Assessing the performance of urban heritage conservation projects: Influencing factors, aspects and priority weights. *Built Heritage*, 8(4). <https://doi.org/10.1186/s43238-024-00116-5>

Al-Saffar, M. (2018). Urban heritage and conservation in historic centre of Baghdad. *International Journal of Heritage Architecture*, 2(1), 23–36.

Avrami, E., Macdonald, S., Mason, R., & Myers, D. (2019). Values in heritage management: Emerging approaches and research directions. Getty Conservation Institute.

Díaz-Andreu, M. (2017). Heritage values and the public. *Journal of Community Archaeology & Heritage*, 4(1), 2–6. <https://doi.org/10.1080/20518196.2016.1228213>

Gireesh, K. T. (2024). Identification, documentation and promotion of cultural heritage: Problems and prospects in the Indian context. *Journal of Cultural Heritage Management and Sustainable Development*, 14(6), 950–962. <https://doi.org/10.1108/JCHMSD-03-2022-0043>

Hernández, M., & Vaquero, M. (2019). Urban heritage. Oxford Bibliographies. <https://doi.org/10.1093/obo/9780199874002-0208>

Historic England. (2016). *Understanding historic buildings: A guide to good recording practice*. Retrieved from Historic England website: <https://historicengland.org.uk/images-books/publications/understanding-historic-buildings/>

Holtorf, C. (2018). Conservation and heritage

as future-making. In C. Holtorf, L. Kealy, & T. Kono (Eds.), *A contemporary provocation: Reconstructions as tools of future-making* (pp. xx–xx). ICOMOS.

Keitumetse, S. O. (2016). *African cultural heritage conservation and management: Theory and practice from Southern Africa*. Springer International Publishing.

Kumar, C. S., & Nigam, P. (2023). Placemaking and sustainable urbanism: Strategies for creating liveable and resilient cities. *Engineering Proceedings*, 53(1), 48. <https://doi.org/10.3390/IOCBD2023-15989>

Mekonnen, H., Bires, Z., & Berhanu, K. (2022). Practices and challenges of cultural heritage conservation in historical and religious heritage sites: Evidence from North Shoa Zone, Amhara Region, Ethiopia. *Heritage Science*, 10, 172. <https://doi.org/10.1186/s40494-022-00802-6>

Mteti, S. H., Mpambije, C. J., & Manyerere, D. J. (2025). Unlocking cultural tourism: Local community awareness and perceptions of cultural heritage resources in Katavi Region in southern circuit of Tanzania. *Social Sciences & Humanities Open*, 11, 101295. <https://doi.org/10.1016/j.ssaho.2025.101295>

Muñoz-Viñas, S. (2005). *Contemporary theory of conservation*. Routledge.

Ristic, M., & Frank, S. (2020). *Urban heritage in divided cities: Contested pasts*. Routledge.

Rossi, C., & Rabie, S. (2021). Towards the Egyptian charter for conservation of cultural heritages. *Journal of Contemporary Urban Affairs*, 5(1), 101–111.

Shetabi, L. (2015, October). Heritage conservation and environmental sustainability: Revisiting the evaluation criteria for built heritage [Conference paper]. *Australia ICOMOS Conference—Fabric: Threads of Conservation*, Adelaide, Australia. Retrieved from Australia ICOMOS website: <https://www.aicomos.com/wp-content/uploads/Heritage-Conservation-and-Environmental-Sustainability-full-paper.pdf>

Stamps, A. E. (2000). *Psychology and the aesthetics*

of the built environment. Kluwer Academic Publishers.

Swedberg, L. (2016). Contemporary conservation theory for sustainable development of cultural heritage objects. *The International Journal of the Inclusive Museum*, 9, 1–8. <https://doi.org/10.18848/1835-2014/CGP/v10i01/1-8>

Taqa, A. (2025). The role of cultural heritage in sustainable development. Retrieved from ResearchGate website: https://www.researchgate.net/publication/388869475_The_Role_of_Cultural_Heritage_in_Sustainable_Development/citation/download

Thorpe, D. (2025). The 12 rules of sustainable urbanism. Retrieved from Smart Cities Dive website: <https://www.smartcitiesdive.com/ex/sustainablecitiescollective/12-rules-sustainable-urbanism/239556/>

UNESCO. (2011). *Recommendation on the historic urban landscape*. UNESCO General Conference.

United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. Retrieved from United Nations website: <https://www.un.org>

Wang, L., Nordin, J., & Liu, H. (2025). Participation intention in cultural heritage conservation across generations: The influence of differential heritage value perception and place attachment. *International Journal of Urban Sustainable Development*, 17(1), 336–357. <https://doi.org/10.1080/19463>