AN EVALUATION OF THE CONSERVATION OF A SWAHILI TOWN: A CASE STUDY 
OF LAMU WORLD HERITAGE SITE

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A thesis submitted in fulfillment for the Degree of Doctor of Philosophy in
Architecture at the Department of Architecture and Building Science in the
University of Nairobi

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University

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APPROVAL

This thesis has been submitted for examination with our approval as University Supervisor(s).

Signed............................................. Date.............................................

Supervisor Professor Jerry Magutu

Signed............................................. Date.............................................

Supervisor. Professor Tom Anyamba
DEDICATION

This thesis is dedicated to the memory of my late parents, Omar Mackenzie and Zainab Kassim may Allah rest their souls in peace.
ACKNOWLEDGEMENT

I owe a lot of gratitude for the completion of this research study to a number of people and organizations and it may not be possible to mention all of them here. However there are some who played a key role in the success of this study. First and foremost are my two supervisors, Prof. Jerry Magutu and Prof. Tom Anyamba of the University of Nairobi’s School of the Built Environment who tirelessly guided me in this study. I wish also to acknowledge Prof. Hubbard Guillaud of the International Centre for Earthen Architecture – CRATerre ENSAG in Grenoble for his supervisory work while undertaking my research there. I also wish to acknowledge all the CRATerre staff through the CRATerre head Mr. Thierry Joffroy for creating for me a conductive environment for conducting my research.

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<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>UNESCO</td>
<td>United Nations Education, Scientific and Cultural Organisation</td>
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<tr>
<td>ICCROM</td>
<td>International Centre for the Study of the Preservation and Restoration of Cultural Property</td>
</tr>
<tr>
<td>ICOMOS</td>
<td>International Council of Monuments and Sites</td>
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<td>WHC</td>
<td>World Heritage Centre</td>
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<td>WHC</td>
<td>World Heritage Convention of 1972</td>
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<tr>
<td>COE</td>
<td>Council of Europe</td>
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<tr>
<td>AFRICA 2009</td>
<td>10 year Capacity Building programme for Sub – Saharan Heritage Institutions</td>
</tr>
<tr>
<td>CRATerr</td>
<td>International Centre for Earthen Construction (CRATerre) - Grenoble France</td>
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<tr>
<td>OUV</td>
<td>Outstanding Universal Value</td>
</tr>
<tr>
<td>LCC</td>
<td>Lamu County Council</td>
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<tr>
<td>LWHSCO</td>
<td>Lamu World Heritage Site Conservation Office</td>
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<tr>
<td>LSPB</td>
<td>Lamu Supervisory Planning Board</td>
</tr>
<tr>
<td>NMK</td>
<td>National Museums of Kenya</td>
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<tr>
<td>RIBA</td>
<td>Royal Institute of British Architects</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

DECLARATION ......................................................................................................................... ii
DEDICATION .......................................................................................................................... iii
ACKNOWLEDGEMENT ......................................................................................................... iv
ABBREVIATIONS AND ACRONYMS .................................................................................... v
ABSTRACT ............................................................................................................................. xiv

CHAPTER 1: INTRODUCTION ................................................................................................. 1
1.1.0 Background of the Study ................................................................................................. 1
1.2.0 Research study Focus ................................................................................................. 10
1.3.0 Research Issue ........................................................................................................... 11
1.4.0 Objectives of the research ............................................................................................ 12
1.5.0 Study hypothesis and assumptions ............................................................................. 13
1.6.0 Research Justification ................................................................................................. 14
1.7.0 Scope and Limitations of the study ............................................................................. 15
1.8.1 Structure of the study ................................................................................................. 18
1.8.2 Definition of terms ..................................................................................................... 20

CHAPTER 2: LITERATURE REVIEW - EVOLUTION OF A THEORETICAL FRAME
FOR THE RESEARCH ............................................................................................................. 24
2.1.0 Origin of conservation concepts .................................................................................. 25
2.2.0 History of International efforts towards conservation of cultural heritage ............. 30
2.3.0 The Conservation Charters ....................................................................................... 32
2.3.1 The Venice Charter .................................................................................................... 32
2.3.2 The World Heritage Convention ............................................................................... 35
2.3.3 The Burra Charter .................................................................................................... 37
2.3.4 UNESCO 1976 Recommendation concerning the Safeguarding and Contemporary Role of Historic Urban Areas .......................................................................................... 39
2.3.5 Council of Europe’s (COE) European Charter of Architectural Heritage or the Amsterdam Declaration ................................................................. 40
2.3.6 ICOMOS Charter for the Conservation of Historic Towns and Urban Areas (ICOMOS 1987) .................................................................................................................. 40
2.4.0 Recent debates and developments on Urban Heritage Conservation .......................................................... 41
2.5.0 Urban Heritage Conservation in Africa ........................................................................................................ 43
2.5.1 History of Conservation in Africa ............................................................................................................. 44
2.5.2 Legislative frameworks for Conservation in Africa ...................................................................................... 46
2.5.3 Indigenous conservation practices in Africa ......................................................................................... 47
2.5.4 Prevailing debates on integration of indigenous techniques in conservation ........................................ 50
2.6.0 Swahili Identity and Value systems ....................................................................................................... 53
2.7.0 Theoretical Framework ....................................................................................................................... 59

CHAPTER 3: METHODOLOGY ........................................................................................................ 66
3.1.0 Research Design ............................................................................................................................... 67
3.2.0 Unit of Study ..................................................................................................................................... 74
3.3.0 Sampling Procedure .......................................................................................................................... 75
3.4.0 Data Collection Methods .................................................................................................................. 77
3.5.0 Data Analysis .................................................................................................................................... 79
3.6.0 Interpretation of the data results ....................................................................................................... 80

CHAPTER 4: LAMU WORLD HERITAGE SITE ........................................................................ 81
4.1.0 Introductory background to symbolic elements of Swahili towns ......................................................... 81
4.1.1 Justification for selection of Lamu as a Case study ............................................................................. 91
4.1.2 Identifying the symbolic elements within Lamu Stone Town .............................................................. 99
4.1.3 Community’s perception of Symbolic elements within Lamu Stone town’s Architecture and Planning .................................................................................................................. 104
4.2.0 The Swahili house as a Symbolic element of Lamu Stone town Architecture and Planning. ........................................................................................................................................................................... 111

4.2.1 Swahili Indigenous Building Construction .......................................................................................................................... 117

4.2.2 Sample historical data.................................................................................................................................................. 135

4.2.3 Current situation.................................................................................................................................................. 138

4.3.0 Lamu World Heritage Site’s Conservation Plan ........................................................................................................... 142

4.4.0 The Status of the Conservation Plan’s Performance ........................................................................................................... 151

4.5.0 The Development Approval Process and Approvals incompatible to Lamu’s Historical Character ........................................................................................................................................................................... 150

4.5.1 Approvals Infringing on Privacy ................................................................................................................................................................. 153

4.5.2 Approvals that interfere with the Traditional Courtyard Layout ........................................................................................................... 154

4.5.3 Approvals Impairing the Functioning of Culturally Significant Elements ........................................................................................................... 155

4.6.0 Constraints Impeding the Conservation of Lamu’s Key Symbolic Elements ........................................................................................................................................................................... 156

4.7.0 Chapter Conclusion ................................................................................................................................................................. 161

CHAPTER 5:ANALYSIS OF RESEARCH FINDINGS ........................................................................................................................................................................... 168

5.1.0 Analysis of the Identity and Symbolic features of Lamu Stone Town ........................................................................................................................................................................... 170

5.2.0 Integration Status of Indigenous Building Techniques in Lamu Stone Town’s Conservation ........................................................................................................................................................................... 178

5.3.0 Areas of Integration of Indigenous Building Techniques ........................................................................................................................................................................... 187

5.4.0 Analysis of the Operational Support Environment for the Lamu World Heritage Site Conservation and Integration of Indigenous Building Techniques ........................................................................................................................................................................... 194

5.5.0 Chapter Conclusion ................................................................................................................................................................. 196

CHAPTER6:SUMMARY OF RESEARCH FINDINGS, CONCLUSIONS AND RECOMMENDATIONS ........................................................................................................................................................................... 206

6.1.0 Case Study Findings ................................................................................................................................................................. 206

6.2.0 Issues arising out of the Theoretical Framework ........................................................................................................................................................................... 212
6.3.0 Research Conclusions .......................................................................................... 217
6.4.0 Research Recommendations .............................................................................. 223
6.4.1 Impairment of the Functions of the Traditional Swahili House through blockage of the
       courtyard and daka plus other key areas............................................................... 224
6.4.2 Loss of Privacy through Placement of low level Large Windows ....................... 225
6.4.3 Regulation Of The Overall Building Height, Form And Massing...................... 227
6.4.4 Research And Integration Of The Indigenous Building Techniques .................. 228
6.4.5 African Conservation Plan Model Institutional framework.................................. 230

BIBLIOGRAPHY .......................................................................................................... 232

RECOMMENDED READING ....................................................................................... 244

APPENDIX I: LAMU WORLD HERITAGE SITE CONSERVATION PLAN .................. 247
APPENDIX II: LISTING OF LAMU ON UNESCO WORLD HERITAGE LIST ........... 252
APPENDIX III: KEY INFORMANT QUESTIONNAIRE .................................................. 259
LIST OF TABLES

Table 1, Showing the Identity and Symbolic elements in Lamu’s Architecture and Planning. 104
Table 2, Aggregation of Elements within Lamu’s Architecture and Planning ...................... 105
Table 3, Characterization of factors shaping the historic character and identity of Lamu ....... 125
Table 4, An illustration of the factors impacting on the historic identity formation in Lamu .. 125
Table 5, A highlight of the changes in factors impacting on the historic identity of Lamu town ........................................................................................................................................... 126
Table 6, Table showing plot size distribution ........................................................................ 135
Table 7, Showing availability of services in the sampled houses ........................................ 138
4.2.3 Current situation............................................................................................................. 138
Table 8, Table showing a comparison of service provision between 1975 and 2011 ..........141
Table 9, Table showing a comparison of the amenity provision between 1975 and 2011 ...... 141
Table 10, Table showing building classification during start of Conservation Plan .......... 144
Table 11, Table showing changes in Lamu stone town building height .............................. 149
LIST OF FIGURES

Fig. 1.1 Illustration of the different approaches to conservation .................................................. 9
Fig. 2.1 A summary of the minimal intervention ................................................................. 26
Fig. 2.2 Sankori Mosque, Timbuctu, Mali Source AFRICA ..................................................... 48
Fig. 2.3 A typical street in Pate .......................................................................................... 55
Fig. 2.4 Privacy considerations ......................................................................................... 57
Fig. 2.5 African Conservation Approach ........................................................................... 65
Fig. 3.1 Analysis of the Symbolic elements in space .......................................................... 71
Fig. 3.2 Research Design ................................................................................................. 73
Fig. 3.3 Analysis of the Symbolic elements over time ......................................................... 75
Fig. 4.1 Swahili Civilization location ................................................................................ 82
Fig. 4.2 Influences that impacted the Swahili Civilization .............................................. 83
Fig. 4.3 Wikio converted into a kitchen in Pate ................................................................. 86
Fig. 4.4 Qibla wall decorations ......................................................................................... 88
Fig. 4.5 Sheikh Mohamed Bin Ali Mosque, Lamu .......................................................... 89
Fig. 4.6 Takwa Mosque with its unique pillar atop the mihrab ..................................... 90
Fig. 4.7a Map of Kenya showing location of Lamu .......................................................... 95
Fig. 4.7b Lamu Archipelago .............................................................................................. 95
Fig. 4.8 Lamu today ........................................................................................................ 97
Fig. 4.9 Location of Lamu Island and the sand Dunes ................................................... 100
Fig. 4.10 Layout of Lamu showing one of the Symbolic elements - the Main street .... 101
Fig. 4.11 Map of Lamu showing Symbolic elements ....................................................... 103
Fig. 4.12 An illustration of the Mtaa with its mosque ..................................................... 106
Fig. 4.13 Community wide elements Friday mosque ..................................................... 106
Fig. 4.14 Typical Lamu side street ................................................................................... 107
Fig. 4.15 Relationship between Main Street and Side Street ........................................ 110

4.2.0 The Swahili house as a Symbolic element of Lamu Stone town Architecture and Planning. .................................................................................................................. 111
Fig. 4.16: Typical Swahili House Layout ................................................................. 112
Fig. 4.17 - Typical Master bedroom wall niche decorations ........................................ 114
Fig. 4.18 Spatial relationships, usage and privacy levels in a Swahili town .................... 116
Fig. 4.19 A Typical Swahili house cross-section ........................................................ 117
Fig. 4.20 Detail A ......................................................................................................... 118
Fig. 4.21A – Detail B ................................................................................................. 119
Fig. 4.21B – Ingredients for Coral rag wall and the creeper plant for strengthening and water proofing slabs ........................................................................................................... 120
Fig. 4.22 – Detail C .................................................................................................... 121
Fig. 4.23 Swahili house ceiling with ‘boriti’ and painted ‘banaa’ ........................................ 122
Fig. 4.24 Traditional mud on wattle frame construction common in early Swahili settlements ......................................................................................................................... 123
Fig. 4.25A – ‘Mutomo’ – during construction and when completed ................................ 124
Fig. 4.25B – Exposed ‘mutomo’ on an existing house and then covered in rough plaster .... 124
Fig. 4.26. Blocked Dakas ............................................................................................ 127
Fig. 4.27 A makuti thatched kiosk projecting into the street ............................................ 131
Fig. 4.28 Changes that have taken place in the Main Street or Usita wa Mui .................... 133
Fig. 4.29 Town Square showing some of the daily activities ......................................... 134
Fig. 4.30 Photo showing the sampled area .................................................................... 136
Fig. 4.31 Chart showing gallery distribution in the sample ............................................ 137
Fig. 4.32 Chart showing traditional feature distribution ................................................ 137
Fig. 4.33 Chart highlighting the changes in built-up area within sample ......................... 139
Fig. 4.34 Examples of house with extensions and penthouses on fourth floor .................. 140
Fig. 4.35 Chart showing number of traditional features in sample area ......................... 140
Fig. 4.36 Chart showing occurrence of incompatible materials in survey area ............... 142
Fig. 4.37 Casement glass windows, louvered windows and iron roof ............................. 142
Fig. 4.38 The open drain system in Lamu .................................................................... 146
Fig. 4.39 Lamu’s skyline ............................................................................................ 149
Fig. 4.40 A curved doors installed on a blocked daka and burglar proofing on the bazaar street ................................................................. 150
Fig. 4.41 Development approval flow chart ................................................................. 152
Fig. 4.42 Examples of House Approvals Compromising Privacy .................................................. 153
Fig.4.43 Approval showing conversion and covering of courtyard ................................. 154
Fig. 4.44 Narrowing of the Main Street through increased commercial activities .......... 156
Fig. 5.1 Illustration on the functions of the Swahili house and its relationship to the outside 173
Fig. 5.2 Illustration of Approvals that impair House and street privacy ......................... 175
Fig. 5.3 – Restricted Main and Side street space ......................................................... 177
Fig. 5.4 – Some of the modern reinforced concrete constructions ............................... 179
Fig. 5.5 Earth plastered wall panels showing the aesthetic qualities - Ville Fontaine France 190
Fig. 5.6 Similar plaster finishes achieved in Cement – Lime in Lamu .............................. 191
Fig. 5.7A The stabilized earth wall with its mode of production – Ville Fontaine France ...... 192
Fig. 5.7B Traditional means of sourcing inputs and application ...................................... 193
Fig. 6.1 Subdivision of a traditional Swahili house in a manner that respects it traditional functions .................................................................................................................. 224
Fig. 6.2A Recommended Privacy Enhancement .................................................................. 226
Fig. 6.2B Removal of commercial activities from the Side streets ................................ 227
Fig. 6.3A Lamu’s historic built fabric vertical growth as captured in the different survey periods .............................................................................................................. 227
Fig. 6.3B Existing Lamu Skyline ..................................................................................... 228
Fig. 6.4 Proposed Conservation model ........................................................................... 231
ABSTRACT

This research study sought to evaluate how a Conservation plan based on the International Conservation Charters that has not been adequately contextualised and adapted to local conditions can lead to a sustainable conservation of the cultural fabric that reflects the community’s identity. Using Lamu as a case study, the study employed a combination of research methods including a desk top historical survey review, development approval record review, an actual sample survey and measured drawing exercises together with key informant interviews, focused group discussions and actual on site observations. The study found out that the current Lamu World Heritage Site Conservation Plan is not responsive to the key symbolic elements that not only make up the historic fabric of the world heritage site but also are the bearers of cultural and symbolic meanings. The study further found out that the plan lacked strategies for the documentation; updating and integration of the indigenous building processes into the conservation process so as to better express the cultural identity. The research study therefore recommends that the current Conservation Plan be reviewed so as to contextualise it by first, anchoring the plan through the protection of the key symbolic elements. Secondly to actively integrate the indigenous building technologies in the conservation process and to follow this up with an ongoing research aimed at modernising them so as to improve their viability and suitability to guarantee sustainability of the conservation process through a conserved fabric reflective of the society’s cultural identity.
CHAPTER 1

INTRODUCTION

1.1.0 Background of the Study

Efforts to preserve cultural heritage have gained new momentum throughout the world nowadays. The concept of cultural heritage care in Africa is exactly the same as any other country of the world. There is sufficient understanding that preserving and protecting the cultural heritage helps to shape the identity of the nation and local community. Protecting cultural heritage is economical as well as historical and also a cultural process. While cultural heritage consideration has not yet become firmly rooted in the Kenyan consciousness a great number of people and organizations see cultural resources as critical to the nation’s economic development through tourism, cultural heritage is based on the aspects of our past that we cherish, want to keep and pass on to future generations and outside world. However the economic benefits of conservation are secondary to the intrinsic value of that heritage which has been preserved. As rightly observed by Sekler,

“Tangible cultural heritage has great advantage over its intangible counterpart, such that with proper care it will remain authentic over centuries. As long as historic monuments remain without falsification and misleading imitations, they will even in a neglected state, create a sense of continuity that is an essential part of cultural identity.” (Sekler, 2001)

Sekler’s views especially on the importance of the tangible vis-a-vis the intangible is contrary to the situation in Africa where the tangible significance lies in the meanings attached to it. That is why developing regions such as Africa; the members of a tribe
or clan are bound together by their religion or culture, which operates the corporate intangible traditions of the group and is usually expressed in tangible terms by association with certain sites or constructions. Most of the nations in Sub-Saharan Africa do not possess written historical sources, so preserving oral traditions has great value. The cultural heritage of Sub-Saharan Africa includes historical towns, sites and monuments, and movable objects likely to be collected by the museums. It also includes the site and symbols used in art and literature as well as languages, traditions, beliefs and ceremonies. The valuing and conservation of the past is not something new and it has existed since people can remember. Throughout time and particularly for the major world religions, the past, present and future is one continuum whereby the past ought to inform the present and shape the future. The clamour for valuing and conserving the past in Europe started after the industrial revolution and gave rise to the initial ideas of conservation of historic buildings in the late 19th century. In England, according to Larkham, the initial concerns were to protect and restore important buildings or monuments due to rapid changes, adoption of new architectural styles and as unifying points against external aggression and conquest as in the case of Germany and France (Larkham, 1996). He also argued that this ‘looking back’ was a psychological necessity to provide stability against ‘future shocks’ and which can be met by historic areas that have survived relatively unchanged. Through this approach, the past, the present and the future are united to create a timeless atmosphere, in which our lives are but momentary.

In all these instances one sees a focus on the past as an identity anchor against impeding changes to the environment due to either voluntary replacement as in adoption of new architectural styles or forced changes occasioned by plunder during future wars. Sheriff noted that Islam played a fundamental part in the formation of
Swahili settlements, growth, and plays an important role in the lives of the residents (Sheriff, 2010). Thus the past as a continuum into the present and future is what continues to inform their world view. Moreover being residents of the African continent, the basis of their social institutions and traditions was African whose view of the past was also one that was still alive and connected to the present.

Jokilehto quotes Mehdi Hodjat who stated that from the Qur'an's point of view, the past, indeed, is not dead. It is a living factor that plays a significant role in the well-being of the individual and the betterment of social relations for any society (Hodjat as cited in Jokilehto, 2006b: 4). According to Watson, conservation is to satisfy a longing to anchor ourselves in time and relate ourselves to the continuum of our ancestors and society. He indicated that preservation of evidence of subsequent changes was necessary so as to educate society on the changes over time in history or rather the evolution of the community identity (Watson, 2013: 7). Therefore society’s orientation in times of stress occasioned by rapid transformation of the environment was guided by the society’s identity of who they were and which is symbolised by its past. It can also be further argued that the need for conservation reflected the society’s desire to turn to known identity symbols, those that had been agreed in society as representative of the identity and means of defence against the rapid transformation of their environment.

Throughout this early period of the conservation concepts evolution there were two divergent schools of thought on conservation. One of them viewed the past as a continuum into the present with each monument representing a stage in the society’s identity narrative thus irreplaceable as a marker and evidence of this historical expose. The main proponents, Ruskin and Morris, argued that the fact that a cultural
artefact reflects its period; its cultural, social and political situation thus becomes unique for a specific period in time (Jokilehto, 1994:15). The second one viewed architecture of the past as a reference point for learning, studying and analysing past outstanding works and their lessons to be applied to current problems in today’s architecture. It advocated for an approach that fashioned the identity in line with the development aspirations of the time in question. Kirby noted that when Ruskin looks at the past, he does so not as a romantic longing for days and things long gone, but as a realist who sees the past in the context of continuity with the present and future (Kirby, 1996: 9). Both viewpoints are in harmony with the African and Swahili view of the past and its relationship with the present. The major divergence emanates from the approaches that were subsequently developed out of these thoughts that seemed to have frozen the process in time.

According to Venice Charter (as published by the International Council of Monuments and Sites (ICOMOS)) the aim of restoration is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents (ICOMOS, 1965: Art 9). The evidential or fabric based approach which seems to be emphasized in the charter set the stage for the taking over of the conservation process away from the people whose past and memory was important to conserve and relate to and handed the same to the experts. Feilden in his explanation of the guiding principles of contemporary conservation, stressed that there should not only be an undertaking to ensure the right of future generations to re-examine the evidence by avoiding imposing subjective judgments which might possibly prejudice a future intervention but also retain maximum amount of existing material, evidence and respecting aesthetic and historical integrity (Feilden, 1982:6).
These measures were aimed at making the whole conservation process as objective as possible by removing any form of subjective interpretations and judgements. The statement of significance of a particular monument was meant to lay out the importance and justification of why it is to be conserved. However the statement’s derivation meant that in most cases it largely reflected the expert’s opinion. Mason notes that a “statement of significance” consolidates all the reasons justifying why a building or place should be conserved such as its usefulness, and what aspects require most urgent protection, further all decisions about significance are made by experts, whose mindsets are often unreflective of local context and meanings. By contrast, the imperative of conservation—as in the rest of society—should be to allow more voices to be heard (Mason, Online).

Moreover the static nature of the assessment of significance for building or places runs counter to the culture whose artefacts we aim to conserve. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) Cultural diversity declaration states that

“Culture as creation draws on the roots of cultural tradition, but flourishes in contact with other cultures. For this reason, heritage in all its forms must be preserved, enhanced and handed on to future generations as a record of human experience and aspirations, so as to foster creativity in all its diversity and to inspire genuine dialogue among cultures” (UNESCO, 2001: art. 7).

Given that culture is a record of human experiences and aspirations it is not only dynamic but changes all the time therefore a statement of significance of that culture’s heritage should be reflective of the process that generates the same.
Heritage conservation provides us with a greater understanding of our identity, of cultural continuity, of the human condition and of our place in the world and in time (Mason and Avrami, 2002: 13). In this sense greater opportunity should be availed to those who have produced and live with that particular heritage. More importantly it should be understood that heritage exists because of the values people attach to it (Hall and McArthur 1998: 220), and in this sense heritage belongs to the societies that value it (Pearson and Sullivan 1999: 33). The ultimate aim of conservation is to maintain the values embodied by heritage and associated to it by those whom it is intended to benefit (Avrami et al. 2000: 7).

Ramia argues that conservation of cultural heritage requires a thorough understanding of its history, continuity and relevance in present time and a foresighted sense of its interpretations by diverse viewers in changing time (Ramia, 1997). This foresightedness is only possible with the involvement of all stakeholders that value heritage as they possess an insider view on the relationships, elements and processes that carry those values. In another observation, Stovel stressed the importance of this by stating that in arriving at the significance of a monument it is essential to identify the values in relation to significance by taking into account the particular patterns, relationships, elements or processes that support and carry those values (Stovel, 1994:122).

Further, the Nara Document on Authenticity on judgments of values and authenticity of cultural heritage stated that

“Heritage properties must be considered and judged within the cultural contexts to which they belong and that conservation of cultural heritage in all its forms and historical periods be rooted in the values attributed to the heritage” (ICOMOS, 1994).
Wells argued that if places are conserved for the benefit of all people then methodology that determines historical significance should be based on how people value historic places rather than on the traditional expert assessment of values (Wells, Online). This would ensure that the conserved fabric benefits and improves human flourishing. Moreover, Ouf argued that there is need to focus on attaching a heritage meaning and function to the conserved place to enable the general public to value it either economically, culturally, socially or politically, to ensure that conserved places have meanings within the everyday lives of the communities and societies using or living in them (Ouf, 2001).

This is what seems to be lacking in the conserved fabric of African monuments and of Swahili settlements in particular. UNESCO Declaration on Cultural diversity further states in relation to culture that given that

"culture takes diverse forms across time and space, and that diversity is embodied in the uniqueness and plurality of the identities of the groups and societies making up humankind" (UNESCO, 2001: art.1).

Moreover, the most critical values that help to define a society’s identity and which would in essence be carried in the elements and processes that express it are the symbolic and cultural values. Demas defined symbolic values as the capacity of a heritage site for endorsing group identity and other social relations built through spiritual and cultural associations with the site (Demas, 2002: 37). Mason and Avrami pointed out that cultural values relate to social and religious values. Consequently, heritage supports and symbolises our sociability: the way in which different parts of a society live, work together and relate (Mason & Avrami, 2002: 16-17).

However the conservation programmes adopted for the conservation of the Swahili towns seem to have neglected the need to take into account the local cultural
heritage’s symbolic and cultural values in the conservation of these towns. These values are critical in expressing the community’s cultural identity in its conserved heritage fabric; therefore, for the conservation process to be sustainable they have to be taken into account. This has resulted in a conserved historic fabric that is not reflective of the community’s cultural identity of these Swahili settlements. The symbolic meanings of these towns were further enhanced by the role played by Islam in the evolution of their planning. Sheriff, noted that in connection to this aspect that Islam provided administrative, legal, educational and spiritual structures that underpinned not only the expansion of the Indian Ocean world global economy but also the structure of Swahili city states (Sheriff, 2010: 239).

Further, the towns and their corresponding architecture are laden with some key symbolic elements and characteristics which not only enhance the identity espoused by this architecture but also emphasises its uniqueness. The Swahili architecture is part of an identity that ties the Swahili towns economically to the cosmopolitan culture of the Indian Ocean basin, to the wider Islamic world to which they turned for inspiration and guidance while remaining residents of the African continent to which they owe the basis of their social institutions and building traditions. Horton showed that there are elements that attest to this triple aspect of the Swahili identity. He pointed out that inspiration in early architectural features of the coastal towns was indigenous which over time adopted new techniques but still retained essential early planning (Horton, 1996: 234). The overall design evolved to accommodate specific symbolic, ritualistic, and aesthetic functions of early Swahili society’s need to fulfil both African and Islamic ceremonial functions and spiritual beliefs.

However, the conservation programmes focussed mainly on the traditional Swahili architectural heritage, without understanding the identity aspirations of the local population and the symbolism in the formation process that generated this architecture. This has made them unsuitable for use in African cities and historic
Swahili towns in particular. This is because the origin and development of this type of heritage together with the cultural identity it represents may be different from where these original concepts developed (see Fig 1.1 below).

![Diagram](image)

**Fig. 1.1 Illustration of the different approaches to conservation of African Cultural Heritage (Author)**

In the next chapter, the international conservation charters and their shortcomings in conserving the symbolism and meanings associated with African heritage and Swahili architectural heritage will be discussed. This will highlight why they need to be adapted to the local context in order to take into account the symbolic and cultural values of the community and hence better express its cultural identity in the conserved built fabric.
1.2.0 Research study Focus

Several research studies have been done on Swahili towns and Lamu in particular. However, most of these studies have focused on general aspects of conservation and on the Swahili towns themselves. Two of the most recent studies looked at; the effects of international conservation policy documents on local aspects of conservation in Zanzibar (Syversen, 2007) while the other studied Swahili architecture of Lamu through oral traditions (Khan, 2010). However, none of the studies that have been undertaken on Swahili towns so far, have adequately researched on how the current Conservation Plan can be adequately contextualised and made conducive for the conservation of the symbolism and cultural identity embodied in the 18th Century. This research study attempts to fill this gap by choosing to evaluate the Lamu World Heritage Site Conservation Plan.

The choice of Lamu World Heritage Site as a case study was motivated by the following reasons; first it is a historic town which still survives as such and is faced with tremendous development pressures.1 Secondly, Lamu is the only remaining historic town with a nice collection of surviving 18th and 19th Century stone houses which have been sheltered from modern development pressures until recently. Furthermore, when compared to the other surviving Swahili towns, Lamu’s architecture is relatively unpolluted hence can allow for research on the indigenous and symbolic elements of Swahili architecture so as to develop ways of how these can be enhanced in the face of such immense pressures for their destruction. In addition, the fact that Lamu has a Conservation Plan that has been in place for a long time and coupled by the fact that its society to a large extent is considered to be predominantly

1 Lamu District Development plan 2008 - 2012
Swahili with a homogenous identity made it ideal for a study. Lastly, the listing of Lamu on the UNESCO World Heritage List is a testimony of the uniqueness of the Swahili cultural heritage and by extension the indigenous building technology and symbolism that led to its realisation.

1.3.0 Research Issue

Today, it is a challenge to conserve Swahili architecture to create a unique architectural heritage representative of the Swahili people to reflect the identity of the Swahili people which in the past was able to blend diverse and sometimes disparate cultural influences and their symbolisms. Partly this has arisen because of the current Conservation Plan’s inadequate recognition and acceptance of the local values and symbolism as a result of its inability to exploit the indigenous building processes. This research attempts to find ways of domesticating and contextualising International Conservation Charters by incorporating local values and symbolism. This is in response to the fact that, Lamu’s Conservation Plan, while attempting to implement the established International Conservation Charters and procedures, employed a top-down approach which alienated the Swahili indigenous building knowledge holders and hence missed the key tool of deciphering the cultural identity of the Swahili. Consequently, this robbed the Conservation Plan the local understanding and potential avenue for the adaptation of the conventions to suit the local context.

These knowledge processes and the architecture they spawned contributed immensely to the community’s identity, symbolised the indigenous cultural wealth and represented continuity in the community’s quest for a response that was harmonious with environmental conditions. Indigenous building knowledge and techniques, as practiced by the traditional masons were responsible for the modification, adaption
and codification of the various external influences so as to produce the Swahili architecture. Given that they represent the most sustainable approaches that have continuously been tested and adopted for that particular environment; the challenge is to find ways of re-invigorating these skills together with their supporting socio-economic and political process that will enable their deployment in modern day settings with a decline in the sources of this know-how. There is a need for the current Conservation Plan in Lamu, based on the International Conservation approaches, to incorporate these processes in order for it to be successful in restoring the Swahili architecture as per the society’s aspirations. Therefore in order to understand how the Swahili societal identity could be reflected in their conserved architecture and hence ensure the sustainability of this Plan; the key research question that the research addressed was, Can a conservation approach lacking local contextualisation contribute to a sustainable conservation of Swahili architecture and towns reflective of the identity and symbolism of the people?

1.4.0 Objectives of the research

The research focuses on how to integrate indigenous building techniques while evaluating the efficacy of the existing Conservation Plan in restoring the Swahili architecture to reflect the society’s identity.

The specific research objectives included:

i. To unearth the cultural meanings that projects the society’s identity in the architecture.

ii. Establish the success of the existing Conservation Plan in the integration and adaptation of the indigenous building techniques in the conservation of the Swahili architecture
iii. To recommend an alternative Conservation Approach model framework that enhances the conservation of the Swahili cultural heritage.

1.5.0 Study hypothesis and assumptions

The research hypothesized that:

i. Given that Swahili architecture espouses an identity which has been internally generated through the indigenous building techniques and systems as a means of dialoguing with the external world, the current conservation approach cannot succeed in conserving Lamu’s Swahili architecture that is reflective of the community’s identity as it seeks to restore this identity from the outside without due regard to this internal generation processes.

In testing these hypothesise the study assumed that:

i. Swahili architecture is homogenous and displays similar characteristics over particular periods in time.

ii. The cultural influences that impacted on the towns all through the formation of this architecture affected all the Swahili towns in equal magnitude.

iii. That Indigenous building techniques, which as used in this research means all those techniques that came into being as a result of the convergence of and assimilation or adaptation of the various building styles and cultures which has given rise to Swahili architecture, are part of a larger rationale and principles that guides and informs on the values, order and logic of the architecture created by these techniques.

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2 In formulating this hypothesis the author has adopted and used aspects of Amos Rapoport’s unpacking of culture model as elaborated in Some Further Thoughts on Culture and Environment in IJAR Vol 2 issue 1 2008
1.6.0 Research Justification

The Conservation Plan of Lamu did not try to establish the reasons as to why the Swahili community wanted to conserve its past, or what aspects of the community’s past would be conserved, and how it would be conserved. According to Petzet, the spirit of a place relies on the living people of a particular place for its creation, survival and sustenance (Petzet, 2009). This means that for a place like Lamu, research was required to learn from the local community appropriate ways of conserving and sustaining the Swahili town’s identity or spirit of place. Other than the fact that the current Plan seems to be inadequately adapted to the local situation, there also exists a gap in terms of research undertaken to establish the Swahili society’s actual intention of conserving its past especially its architecture. This research offers an opportunity to fill this knowledge gap by trying to understand the underlying rationale of conserving Swahili cultural heritage.

The knowledge gap exists in the form of the need to understand the link between a society’s indigenous building technology and its cultural identity so as to facilitate the domestication of the International Charters and conservation approaches. Therefore this research seeks to fill this gap which according to Ndoro and Chirikure is necessary to domesticate the International Conventions and Charters (Ndoro and Chirikure, 2009), which form the backbone of the existing Conservation Plan in Lamu. Moreover, given the rapid changes in lifestyles evident in Lamu coupled with the lack of intergenerational transmission of these indigenous skills and knowledge, it was important to carry out this study at this point in time so as to document and preserve these skills before their disappearance. Hodjat noted that in order to ensure a vibrant

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3 *The concept of key symbolic element of identity of space and place is further expounded by Christian Norberg Schulz in his two books* *Genius Loci: Towards a Phenomenology of Architecture*(1980) *and Architecture: Presence, Language and Place* *(2000)*
and sustainable conservation of a monument of a particular culture, it is necessary to recognize and strengthen the authentic traditional and vernacular methods of conservation employed in that area and take deliberate steps to update them (Hodjat, 2009: 121). Therefore, it is crucial to go back to the traditional methods so as to learn appropriate means of conservation. Zancheti et al argued that in its constructive dimension, a city such as Lamu’s capacity to express its authenticity or identity is intimately linked to the processes of creation and reproduction of past practices which have come down to the present (Zancheti et al, 2009a: 167). Evidently, it can be concluded that, for any Conservation Plan to be able to conserve and express any town’s authenticity or identity, it must be able to integrate the processes of creation and reproduction of past practices.

The aforementioned Conservation Plan which is based on the International Conventions and Charters adopted a top-down approach resulting to a rigid assessment of what was culturally significant hence inadequately addressed the societal concerns as to what aspects of its past architecture it wished to be conserved. The results from this research, which adopted a bottom-up approach, would enable the development of elements of a model Conservation Plan framework that conforms with the cultural aspirations of not only Swahili society as regards its architecture but also to other communities with similar problems.

1.7.0 Scope and Limitations of the study

Swahili architecture has been at the center of interchange of various cultural influences throughout the history and which also influenced its transformation path. In the process,

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4 The concept of indigenous knowledge skills and their effect on the development of vernacular architecture is further elaborated by Lwamayanga in Lwamayanga Cyriacus, (2008), Phd: Constancy and Change. The Living Processes and Skills in the vernacular architecture of Kagera region, Tanzania. Oslo School of Architecture and Design, Norway
aspects of this architecture that were more in tune with the identity of the moment were retained while some became irrelevant and were discarded. Therefore the research uses Lamu World Heritage Site, to study the various elements of a Swahili town including the individual Swahili house as the basis of overall town planning. The study then focuses on the Swahili house’s spatial planning given that it is the unit of analysis of the study; facade treatment, overall form and massing so as to determine the elements that informed Swahili identity.

Secondly, the research then focuses on the courtyard and analyses how this has evolved over time and why? The relationships it has had with other spaces and the outside world so as to determine what aspects in the Swahili house architecture have been retained as part of the changing Swahili identity. This analysis is important as the courtyard is at the heart of not only the internal spatial interaction but also used to perform both social and economic functions and intermediation with the external space. Therefore it played and still should continue to play a key part in projecting the individual’s and society’s identity. Further analysis is in the form of a comparative analysis of this element in the Swahili house over different periods to try and understand the differences and variations of this spatial element. An analysis is also made of the indigenous building techniques that have been used to shape this identity taking note of any adaptations.

The research acknowledges that the Swahili houses in Lamu having undergone extensive modifications commensurate with the residents’ needs and priorities, it would have been difficult to effectively carry out a study based only on the surviving houses. Therefore in an effort to overcome this historical information on Lamu town is used to project the growth of the Swahili house which was the framework upon which the other relationships could be deduced from. The case study’s historical information on the Swahili house is derived from the 1975 inventory of Lamu undertaken by Usam Ghaidan and which is taken to be representative of the epitome of the growth of this typology commensurate with the peak of the Swahili
civilization. Another major challenge is encountered in reconstructing this growth path of the Swahili house over the different historical periods given the subjectivity in the diversity of the narrations. This limitation in terms of the diversity of the historical accounts on the development of Swahili towns from the beginning up to the time when Conservation Plan commenced, poses a challenge not only on how to develop a unified historical narrative but also on the actual research methodology used.

As a strategy to overcome the identified limitations, the study focuses on two stages of the historical data relating to the Swahili towns. In the initial stage the study looked at data on Swahili up to 1800AD which was the peak of Swahili civilization and also marks the collapse and disappearance of some of the settlements. The study uses this data to better understand the background and evolution of the attributes of this architecture which reached its maturity in the 19th Century. Therefore the effective study period for the case study is from the mid 20th Century to date whereas the initial period which covers the 11th to 19th Century was able to provide insights into how the Swahili civilization developed up to the time when it reached its presumed peak. The background was able to provide an understanding of the general characteristics of the Swahili settlements in general whereas the second stage covering mid 20th Century to date was confined to looking at Lamu Stone town. The second stage therefore, focuses on the case study and also as a verification of the information gathered in the first stage through the published material. It is important to note that for this stage there was a lot of information sources which could be relied on to understand this growth and change. This enabled the understanding of how these towns managed to adjust to the changing socio-economic arrangements as part of larger political and economic systems, as well as understand how the internal processes were impacted by the change and how the Swahili society managed to conserve their indigenous aspects under the circumstances.
The other limitation in this research was that many of the sources of the traditional building techniques were the older generation members in the community and in cases where these techniques were unfashionable to the youth there were chances that these skills may not have been passed on to the younger generation. However this constraint served as a major motivator to research and document from the surviving sources so as to provide a source for future reference and application. The study overcame this by documenting the actual end product of the skills and thereby tried to reconstruct the techniques from the available sources of information.

1.8.1 Structure of the study

The research study is structured as follows according to the major elements of the research. The first two chapters give an introductory background to the research and also a comprehensive literature review, more specifically the chapters deal with the following:-

The first chapter gives an introductory background highlighting the research study focus area. It also discusses the research issue together with the objectives which are intended to be achieved by the research study. The chapter also gives an introductory background of the research area that is Swahili towns and their architecture followed by a discussion of the relevance of the research and then the scope and limitations of the study. The chapter ends with an overview of what is covered in the whole thesis.

The next chapter looks at the origins and development of the urban conservation concepts and how these have developed over time. This serves to define the broader contextual setting of the research, to highlight the current thoughts and debates and how these are related to issues of sustainability in the urban environment together with elaborating on the possible approaches of analysis. It looks at the history and development of conservation in Africa with particular emphasis on case studies where indigenous techniques have been applied as key to the
rejuvenation of these areas. The chapter also looks at the symbolic and cultural values of Swahili architecture and at the debate on indigenous knowledge systems and how this is placed in the urban conservation debate before addressing the issue of traditional building techniques and their application on the African and on the East African coast in the context of the development of Swahili architecture and towns over the study period.

The third chapter first discusses the research design and then methodologies which are used in the research with a justification as to why they were selected. Chapter four relates to the case study which looks at the state of conservation of Lamu World Heritage Site in order to understand what the key issues are relating to the integration of indigenous knowledge techniques into conservation and how they have been managed so far. In this, the research limits itself to looking at only one ‘Mtaa’ or neighbourhood; the main focus being the study of the Swahili house as a basic building block of the town and how it relates to other key elements in the town. This is in the context of understanding how this element together with the attendant indigenous building techniques and socio-cultural support systems associated with it have evolved in the conservation agenda. The mtaa was purposively selected because it is the only mtaa which to date has not suffered from extreme alterations and still has not lost the typical Swahili elements which go towards defining Swahili architecture and which is subject of this study.

The chapter then examines and highlights the state of conservation of Lamu World Heritage Site, indicating what has been the successes so far in conserving key symbolic elements of the Swahili identity and hence determine which elements best embody this identity. More importantly it examines how the Conservation Plan has incorporated indigenous building techniques and the attendant socio – cultural support systems in its implementation and the constraints thereof. This eventually leads to a determination of the key cultural constraints
impeding the integration of the indigenous building techniques in the conservation of Lamu Stone town.

The last two chapters analyse the study findings and the last one summarises the research findings before concluding and offering recommendations on contextualization of the current Conservation Plan together with a theoretical model of integration of indigenous building techniques into the Plan. This also includes recommendations of possible areas of review of the Conservation Plan so as to make it sustainable in conjunction with highlighting the optimal changes in the operational support environment of this programme for an effective implementation and operation of the model.

1.8.2 Definition of terms

_The Swahili_ as used in this research will mean the inhabitants who started to inhabit, and continue to live in, the coastal towns of Eastern Africa from around 1300 AD when they are historically documented to have acquired a common linguistic language and identity. Further it will be used to mean the people who practice a culture that identifies them as Swahili and who may be practicing any religion including Islam.

_Swahili towns_ as used in the study will mean all urban centres that developed in the coastal areas of Eastern Africa from around 1300 AD upto 1800AD when there was a decline in the Swahili civilization

_Swahili architecture_ as used in this research will mean all that architecture that was produced in the Swahili historic towns from 1300 AD, when the Swahili are assumed to have acquired a common identity, up to independence.

_Swahili Identity_ in this research will mean the uniqueness of the Swahili people in the world which differentiates them from other ethnic groups.
Swahili house as used in the study will mean the traditional residential house used by
the Swahili and variations of which can be found in almost all the Swahili towns.

Swahili house courtyard will be used to mean the main open space which is usually
found at the heart of the Swahili house.

Indigenous building techniques and systems will be used to mean all those techniques
that came into being as a result of the convergence of and assimilation or adaptation
of the various building styles and cultures which has given rise to Swahili
architecture.

Conservation procedures will be used to mean any actions undertaken to retain,
enhance or preserve the values embodied in the Swahili cultural heritage and
associated to by the Swahili society.

Cultural significance as used in this study will mean the cultural importance
ascribed to a particular element or structure by the society in which it is to be found.

Symbolic values will be used to refer to the capacity of a heritage site for expressing
a society’s identity and other social relations built through spiritual and cultural
associations with the site.

Culture as used in this study will the whole way of life, material, intellectual,
emotional and spiritual, of a given people.

Cultural values will be used in this study to refer to social and religious values
associated to a site or building.

Cultural heritage as used in this study would include any artifacts, natural sites
arising out of the tangible or intangible culture of a society that contains significance
and value. It also embraces particular forms and means of tangible and intangible
expression.

Cultural identity will be used to refer to as a shared culture whereby a people with a
common history and ancestry share common historical experiences and cultural codes.
Social-functional integrity of a place will be used to refer to the identification of the functions and processes on which its development over time has been based, such as those associated with interaction in society, spiritual responses, utilisation of natural resources, and movements of peoples.

Intangible cultural heritage will be used to mean the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage.

A statement of significance in this study will mean a statement that highlights the reasons as to why a building or place should be preserved, why it is meaningful or useful, and what aspects require most urgent protection.

Symbolic element will mean in this study as a feature within a settlement’s architectural fabric that is a bearer of a society’s symbolic values

Dhaka(Daka) - This is a Swahili term meaning entrance porch in a typical Swahili House

Kawanda - This is a Swahili term meaning courtyard in a typical Swahili House

Msana Wa Tini - This is a Swahili term meaning lower gallery (1st Gallery) in a typical Swahili House

Msana Wa Kati - This is a Swahili term meaning middle gallery (2nd Gallery) in a typical Swahili House

Msana Wa Yuu(Juu) - This is a Swahili term meaning upper gallery (3rd Gallery) in a typical Swahili House

Ndani - This is a Swahili term meaning the inner most chamber in a typical Swahili House

Mutomo – This is a Swahili term and means Coral rag that is commonly applied to coral stone walls or mud walls in Swahili houses

Boriti - This is a Swahili term and is used to refer to the rough unplanned mangrove joists which are used to span a room to act as the main structural supports for the ceiling slab
**Banaa** – This is a Swahili term and is more or less like *boriti* above only that this is a square planned mangrove joist

**Khoe** – This is a Swahili name for a creeper that is added to the coral slab construction to strengthen it and make it water proof.
CHAPTER 2

LITERATURE REVIEW - EVOLUTION OF A THEORETICAL FRAME FOR THE RESEARCH

The first section of this chapter discusses the origins of the conservation concepts, highlighting the theoretical principles underlying their development together with the actors who played a formative role in their development while cross referencing with the African context. Thereafter, a history of the International Conservation Policies or Conservation Charters is outlined emphasizing on how these evolved with a particular reference to their treatment of the issue of living tradition and its link to the past which is of relevance to the African context and Swahili architectural heritage where applicable. The first part of the chapter ends with a discussion of the prevailing debate on urban heritage conservation and its treatment of living traditions, identity and collective memory in urban contexts.

The second section of the chapter then looks at the conservation situation in Africa first by giving a historical overview of the practice and analysis of the approaches employed and their results before discussing the legislative structures that guide the conservation of urban cultural heritage especially the treatment of indigenous heritage. An overview of indigenous conservation practices in Africa follows, broadly outlining the indigenous conservation trends and their relation to conserving important heritage features within communities. The chapter then looks at the prevailing debates towards integration of indigenous building techniques in urban heritage conservation highlighting the advantages and disadvantages of their integration before zooming in on the unique characteristics, identity and values of
Swahili architecture. This is then followed by an elaboration of the thesis theoretical framework.

2.1.0 Origin of conservation concepts

Conservation of the monuments was not only for their documentary value as reminders of the past or identity symbols but also as stability symbols against these rapid changes within the environment. Hubbard summarised the psychological debate by arguing that conservation of the familiar is of value in stabilizing individual and group identities, particularly in time of stress (Hubbard, 1993). In other words our orientation in times of stress or rapid transformation is guided by the identity of whom we are and which is symbolised by the past. However the education aspect was buttressed further by the notion that it was a moral duty to preserve and conserve the historic heritage so as to remember and pass on the accomplishments of the ancestors (Tuan, 1977: 197). Therefore preservation of evidence of subsequent changes was necessary so as to educate society on the changes over time in history or rather the evolution of the community identity. Therefore society’s orientation in times of stress occasioned by rapid transformation of the environment was guided by the society's identity of who they were and which is symbolised by its past. The research therefore argues that the need for conservation reflects a particular society’s desire to turn to known identity symbols, those that have been collectively agreed as representative of the identity, as a means of defence against the rapid transformation of their environment.

The architecture of the period in Europe when there were the identity concerns during this era of rapid changes was Gothic and which was seen to be based on good craftsmanship; maintenance subsequently became one of the main principles of
conservation due to the fact that as a result of changing social conditions and methods of production it may not have been possible to restore faithfully these elaborately crafted monuments (Larkham, 1996: 36 - 37). Guidelines were subsequently formulated to guide this process and the key elements were; no attempt at restoration to the original but to be content with nearest to best, emphasis to be on the question of authenticity and avoiding deception; protection to be based on critical evaluation of the existing building stock not on specific styles, and that certain historic periods could only be represented by undisturbed authentic material and in-situ preservation (Jokilehto, 1999: 185). See Fig. 2.1 below which explains further this viewpoint where emphasis is on minimal changes to the exterior fabric of the building so as to preserve the authenticity and cultural identity which the fabric represents.

![Fig. 2.1 A summary of the minimal intervention (Author).](image)

Throughout England, France, Germany, Italy plus other parts of Western Europe the conservation debate eventually pitted those in favour of a minimal maintenance approach so as to preserve the identity and symbolism. The second viewpoint was in
favour of ‘artistic’, ‘archaeological’ restorations or conjectural enhancements that were alien to the structure or style but which ensured that improvements were minor and in the context of the overall safety and characteristic of the general appearance of the building. The minimalist intervention debate was heavily influenced by Morris who argued that monuments were to be considered holistically together with historic alterations or additions and not in terms of style; instead conservation ought to focus on the authentic material not disturbed in situ and to resist any attempts at copying or restoration which would result in the loss of authenticity (Morris, 1877; SPAB, 1903). Johkilehto quotes Adolphe Napoleon Didro supporting this view by castigating the alternative approach in stating that...

“Regarding ancient monuments, it is better to consolidate than to repair, better to repair than to restore, better to restore than to rebuild, better to rebuild than to embellish, in no case should anything be added and, above all, nothing should be removed” (Didro as cited in Jokilehto, 1999: 271).

In essence the minimalists favoured an appreciation of the historic identity due to their belief that prevailing conjectured conservation approaches given the changing production methods could not restore the building to be reflective of society’s identity.

The other viewpoint was heavily influenced by Violet – Le Duc who argued that architecture of the present must learn from the past but not a mere copying and that past outstanding works were to be studied, analysed and their lessons to be applied to current problems. Violet – Le Duc further advocated for the following approach; need to precede any restoration with careful archaeological survey and recording. Secondly, to accord due respect for the original style and to rebuild only in the event that it was impossible to conserve. Finally, all forms of innovations were to be
avoided and any replacement of lost features to be preceded by reference and research of the same period, style and country to reproduce them under similar circumstances (Watkins, 1977: 23-31). In summary this viewpoint advocated for an approach that fashioned the identity in line with the development aspirations of the time in question.

These approaches which prevailed in Western Europe though seemingly directly opposite to each other, but at the core of all of them was the fear that prevailing changes and styles were not capable of re-creating the identity espoused in the past monuments. By 1865 institutions such as the Royal Institute of British Architects (RIBA) had prepared some guidelines which adopted a middle ground which was influenced by both viewpoints and aimed at promoting faithful and authentic conservation of ancient monuments devoid of subjective judgements. The guidelines laid emphasis on prior scientific research on the historic and archaeological aspects of a building so as to reveal the actual state and configuration of the monument. Moreover, they also required maintenance of evidence of past periods including that of ancient work so as to maintain authenticity\(^5\) and preserve the historic value (RIBA in Architectural History, 1970: 63). These principles laid the ground for the ‘scientific’ restoration of monuments through a detailed knowledge and survey of the remains. Such a survey was to determine issues such as removal of all non-structural additions or functions and the need to restore to the original; any additions that were

\[^5\text{The whole notion of authenticity was motivated by the need to preserve past relics for stability from rapid global changes, as Rowney argues that globalization constitutes a subtle form of destruction of traditional cultures (Rowney, 2004). Therefore, authenticity reflects a search for the familiar and unifying elements in the environment that which can promote a sense of personal and group identities (Rowlands, 1994).}\]
left were to be justified from the point of view of history of architecture. It also brought the necessity of leaving evidence of past periods as a way of informing that certain parts of the building had been added later.

The foregoing clamour for authenticity was nothing but the society’s reaction at the time to the forces of change which were rapidly transforming the environment and which threatened to dispose them of stability symbols. Hence the call for retention or minimal alteration of the monuments that espoused this identity was aimed at restoration of this stability in society. The above is diametrically opposite to the African context where authenticity and stability is usually regarded in terms of everyday usage and renewal as per traditions. In Rowney’s argument, cultural traditions and practices influence the built environment and provide clues to not only the culture itself but also the correct form of conservation practice and hence the historic built environment as it is a reflection of the culture that produced it. Therefore its conservation should offer a cultural continuum is particularly relevant for African cultural heritage conservation (Rowney, 2004: 14 - 15). For the African context, the appropriate approach would be one that seeks to create a continuity of the cultural traditions in the context of the identity and needs of the community. This lack of cultural continuum is the dilemma that African cultural heritage finds itself in when conserved through the western derived conservation concepts.

However in the African context, and especially after the independence struggle, the retention of identity symbols has been driven by vested interests within the power structures and only those elements that confirm to the identity vision espoused by such a group have been retained. Munasinghe sounds a word of caution especially as regards the above process being advanced by a certain dominant group trying to
implement an agenda, heritage is a fundamental basis for human existence and its conservation should be in harmony over time between societal groups with their environment (Munasinghe, 2005: 259). Unfortunately, this has been the case for Africa’s cultural heritage, where after inheriting colonial conservation legislations, conservation has aimed at constructing a political desirable identity that may not be in harmony with the society’s identity and needs. Moreover this thesis argues that the abstraction of the conservation process into a scientific process devoid of any community input and hence meaning is what sets apart these approaches from the reality in Africa and has given the opportunity to these elite dominant group, institution or interests. More importantly the standardization process that eventually led to a scientific process served to alienate and overlook the community identity aspirations and hence for the African setting this aspect negated an opportunity to maintain the relevance of the monuments to the community.

2.2.0 History of International efforts towards conservation of cultural heritage

By the late 19th Century to early 20th Century most European countries were attempting to organise the protection and conservation of historic buildings under administrative and legal structures. It was at around the same time that the concept of universal heritage emerged and which eventually reached formal expression in international agreements. By 1900 AD there were various concerns on the issues concerning the protection of historic buildings which culminated in a meeting of the International Congress of Architects in Madrid in 1904 AD which drafted a recommendation concerning the preservation and restoration of architectural monuments and which strongly reflected the ideas of stylistic restoration.
These efforts were accelerated by the formation, after the end of First World War, of the International Committee on Intellectual Cooperation which was the forerunner to the United Nations Education, Scientific and Cultural Organisation (UNESCO). This was closely followed by the formation of the International Centre for the Preservation and Restoration of Cultural Property (ICCROM) also around this time a universal definition. Thereafter in 1964, at the 2nd International Congress of Architects and Technicians of Historic Monuments and attended by over 61 countries and other international bodies such as UNESCO and ICCROM, resolved and adopted the International Charter for the Conservation and Restoration of Monuments and Sites popularly known as the Venice Charter. This Charter had profound influence and went on to become a fundamental document in conservation theory and policy and has been reflected in many national conservation legislations and regional charters.

The Venice Charter, having been adopted in 1964 was heavily influenced by the formative influences identified in the preceding sections, concretized the key aspects of the conservation approach then which was the need to respect contributions by all periods, maintain authenticity and require a comprehensive documentation before any intervention. Due to an overly scientific approach laid out in this charter in determining the cultural significance of a monument as a basis of its conservation, there has been a growing awareness that established conservation approaches may be limited in their capacity to engage with local intangible aspects and practises as manifested in monuments (Harrington, 2004: 4). This is especially true for African cultural heritage where the monuments are laden with intangible values whose continuation contributes towards the monuments sustenance and relevance to the community. This research study argues that even though the Venice charter’s basis is
the sustenance of the identity represented in the monuments, the abstraction of the conservation process to a mechanical process devoid of any inputs and sensibilities of the community rendered it unsuitable for the African setting.

### 2.3.0 The Conservation Charters

The conservation charters are international policy documents that seek to orient the future of the conservation discipline by providing possible means for the most effective restoration of heritage that takes into account the particular monument’s significance or identity that it reflects. Charters seek to provide possible solutions to a variety of social, economic and broader cultural issues that may arise in the course of a conservation intervention.

When the Venice charter was launched in 1964, it was a reaction and a plea for a restrictive and scientific approach to restoration as opposed to the free interpretation of historic artefacts in attempting to re-establish some historic presence in the cities that were destroyed in the Second World War (Meurs, 2007: 53). Since then, a number of charters and recommendations dealing with various elements of the historic heritage have been adopted and came into force. It is beyond the scope of this thesis to review all the charters in force, only a review of the charters that have a direct bearing on the management of the urban historic heritage will be undertaken below.

#### 2.3.1 The Venice Charter

The Venice charter came into force thirty one years after the formal attempts by the International community to come up with a unified document to guide the conservation of the cultural heritage – the Athens Charter. The Athens charter,
adopted at the first International Congress of Architects and Technicians of Historic Monuments in Athens in 1933 and which was the initial charter, was quite limited in its coverage and concentrated mainly on the restoration of monuments.\(^6\) The charter further stressed the need for the preservation of the aesthetic nature of the monument which may include the enhancement of ornamental vegetation and suppression of surrounding developments that may impair it. The Venice Charter, adopted at the 2\(^{nd}\) International Congress of Architects and Technicians of Historic Monuments in Venice in 1964, was more inclusive and focused on the preservation practice, workmanship, issues of maintenance of authenticity, respect for the various historical periods and finally the importance of prior documentation and research on the monument.

The major criticism of this Charter, and probably one of the main shortcomings as regards its application on the African cultural heritage context, is its emphasis on a museological approach to monuments – preservation as historical evidence or for aesthetics. This is exhibited in the aim of this charter which states that

“The intention in conserving and restoring monuments is to safeguard them no less as works of art than as historical evidence.....to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documentation” (ICOMOS 1965, Article 3 & 9).

\(^6\)The Athens Charter for the Restoration of Historic Monuments (1931), \(\text{http://www.icomos.org/docs/athens_charter.html}\) - has seven resolutions that focus on restoration, protection, preservation and maintenance of monuments. It recommends strong legislative measures that can allow for treatment of monuments or objects individually.
This research argues that such an emphasis is contrary to a monument whose cultural
significance derives from the constant usage and renewal as per cultural traditions of
the community owning it. I am persuaded by Lamprakos who argues that

“Almost by default, it seems the conservation of historic cities is guided by
principles and standards that were originally developed for artworks and
monuments; they prohibit change, which is necessary for cities to remain alive”
...and that they may be suitable in the “Western context where a complete break
between the past and present exists but not where the past is contained in the
present” (Lamprakos, 2006, 396).

Rowney adds that other than their Eurocentric focus the charters in general, and
being limited to individual buildings, are not applicable to area and urban
conservation (Rowney 2004).

The museological approach is further enhanced by the fact that the charters focus on
the preservation of the exterior in terms of aesthetics, authenticity of materials and
form while being silent on the treatment of the interior spaces and the attendant
symbolism. Amorim and Loureiro argue that the interior spatial configuration
supports the materialization of social attributes and defines the field of possible
social interactions (Amorim & Loureiro, 2007: 8)⁷ According to this view, and
further supported by Larceda and Queiroz, the significance of a building or
monument goes beyond the exterior fabric but extends to the customs, traditions and

⁷ Amorim, L. and Loureiro, C. (2007), – They further highlight the paradox of the international charters
and concepts of conservation recognize and incorporate artistic and cultural manifestations of
different natives while the restoration theories on architectural objects do not observe certain
cultural values embedded in the formal and spatial architectural form.
other factors that occur in the spatial dimension that resulted in the formation of the physical structures (Larceda & Queiroz, 2005: 62). This thesis agrees with the arguments adduced above and as shall be shown later in this chapter, this is especially true for the significance in Swahili architecture where the identity is not only espoused in the physical structures themselves but also rests with the space it envelops and bounds. Further Seung-Jim Chung supports this viewpoint when he asserted that the Venice charter was too strongly based on European cultural values and hence not sufficiently universal for its outright application in societies outside Europe and European based cultures. He adds that European values emphasise mainly visual beauty, East Asian societies determine their values in relation to spiritual and naturalistic sensibilities (Chung, 2005: 68 - 69). This may be equated to the African cultural heritage situation where to conserve a monument means also to conserve the various customs and traditions including traditional techniques necessary to renew that particular form.

2.3.2 The World Heritage Convention

The World Heritage Convention (WHC) or the Convention Concerning the Protection of the World Cultural and Natural Heritage was adopted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) general conference in November 1972. While the Venice charter sets out the framework for protection and conservation groups of buildings and heritage sites, the most important addition in the World Heritage Convention is the natural heritage as one of the protected objects. It also introduced the notion of Outstanding Universal Value (OUV) as the cultural significance of a monument that transcends national borders. The WHC also established the World Heritage List, which is a list of world cultural heritage
properties with outstanding universal value, representing the cultural diversity of the world.

The WHC also sets out the test of authenticity which initially centred on four parameters namely; authenticity in terms of design, material, workmanship and setting. Subsequently revised\(^8\) so as to test authenticity in terms of the ability to convey the ‘significance’ truthfully and credibly and integrity through the ability to ‘sustain or secure’ the significance through wholeness and intactness as the key criteria through which properties could be included in the World Heritage list. The ‘test of authenticity’ criteria definition runs counter to the conservation of African sites which wholly rely on the enactment of traditions and customs, that have been passed down through various generations, for the effective maintenance of monuments in the traditional African setting. African monuments authenticity relies on indigenous knowledge skills, rituals and ceremonies which are continually enacted in monuments use and renewal. Conservation of African traditional architecture its construction and use is heavily interrelated with the cultural traditions and customs of the people. Its authenticity therefore revolves around its constant use and renewal as opposed to the criteria of test of authenticity as elaborated above.

This is due to the fact that the criteria for authenticity are static in nature and are in relation to a historical reference point thus referring to the identity based on a particular point in time of the formation of the monument. This puts at a disadvantage those sites whose significance and identity is constantly evolving or recreated; this is particularly true for sites rich in intangible values or sites based on living traditions. Living traditions being beliefs, statements, rules or customs that

\(^8\) UNESCO – WHC Operational Guidelines, 2005
have been handed down from one to another, or from generation to generation by word of mouth or practice but not in written form; this scenario implies some form of change and evolution of the identity projection process which seems not to be adequately provided for in the determination of authenticity.

Cultural inheritance and by extrapolation identity therefore, would entail some form of bequeathing and change over time; as Jokilehto argues culture in itself involves both continuity and change, and due to intrinsic human nature expressed in creativity, traditional handing down of know-how and skills would often mean some form of change while at the same time building up and keeping its cultural identity (Jokilehto, 2006b: 7). Therefore the concept of conservation as advocated in the Charters whereby a monument is viewed in terms of its historical authenticity, not only runs against the very notion of culture, as per its definition and attributes and given also that African monuments are part of a wider socio-cultural framework, but also runs the risk of destroying the same culture it purports to conserve. Therefore this study argues that the process for conserving the cultural identity espoused in the monuments should also not be static but be adaptable to the changing times.

2.3.3 The Burra Charter

This charter also known as the Australia ICOMOS Charter for places of cultural significance – first published in 1979 and last revised in 1999 - is notable for elaborating on the concept of ‘cultural significance’, which was mentioned in the Venice Charter in article 1 and a key requirement for sites to be put on the World Heritage List as per the World Heritage Convention of 1972, and also changing the way professionals understood significance by enlarging the scope of the values and associating their identification to the stakeholders involved in the conservation of the site. It defines cultural significance as …
“aesthetic, historic, scientific, social or spiritual value for past, present or future generations.” and further states that “embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects” (Australia ICOMOS, 1999: art. 1)

The Burra Charter has gone on to play a key role in conservation circles, especially in Western countries, where experts have regularly drawn on the set of definitions and operational procedures making adjustments where necessary to arrive at solutions appropriate for the different cultural, political, economical and social contexts. However, the Charter has not been without its fair share of criticism, notwithstanding the revisions it has undergone, critics have alluded to the fact that the static nature of the definition of ‘cultural significance’ has meant that it is not able to capture the dynamic nature of the instruments of construction of cultural significance, such as present values, meanings and collective memory of a society.

“The continuous transformation of sites, the stakeholders involved with them and the contexts in which they are set make cultural significance a concept that is potentially subject to a time limit, namely one that loses validity in the long term” (Zancheti et al, 2009b: 49).

This study notes that this may be particularly true for African cultural heritage whose vitality derives from the continued traditions and use, and where a monument’s cultural significance needs to be captured in the changing contexts of the habitants’ values. The research study further argues that this can be enhanced in a situation where the conservation process is contextualised to ensure it captures the symbolic and cultural values of the community. Avrami et al argue that the ultimate aim of conservation is to maintain the values embodied by heritage – and attributed to it by those whom it is intended to benefit (Avrami et al, 2000: 7).
2.3.4 UNESCO 1976 Recommendation concerning the Safeguarding and Contemporary Role of Historic Urban Areas

The UNESCO 1976, Recommendation concerning the Safeguarding and Contemporary Role of Historic Urban Areas (UNESCO Nairobi, 1976); Given that the Venice charter only dealt with single monuments and historic centres, this recommendation was instrumental in further elaborating on the definition of the historic urban areas and it also brought the issue of harmonious integration of historic areas into contemporary life. It states

“….Historic and architectural (including vernacular) areas’ shall be taken to mean any groups of buildings, structures and open spaces including archaeological and paleontological sites, constituting human settlements in an urban or rural environment, the cohesion and value of which, from the archaeological, architectural, prehistoric, historic, aesthetic or socio-cultural point of view are recognized” (UNESCO, 1976: art. 1)

The recommendation also came up with a number of practical measures in the management of the cultural heritage including the maintenance of inventories of the cultural assets. It states that

“...a list of historic areas and their surroundings to be protected should be drawn up at national, regional and local level” (UNESCO, 1976: art. 18).

The recommendation also makes a number of useful points in safeguarding the integrity of historic urban areas such as ensuring the maintenance of views from and to historic areas and also preserving the universal value of such areas through not use of technical globalized building forms but maintenance of the culturally varied expressions that have been safeguarded in older historic areas (UNESCO, 1976: art. 5; Jokilehto, 2007: 25). Even then, the study notes that the same theme of regarding
monuments as a work of art and which required it to be preserved for appreciation was still carried through in this recommendation.

2.3.5 Council of Europe’s (COE) European Charter of Architectural Heritage or the Amsterdam Declaration

Another useful international conservation policy document is the Council of Europe’s (COE) European Charter of Architectural Heritage or the Amsterdam Declaration; this raised the attention to the conservation of groups of lesser buildings in the old towns and villages in their natural and man-made settings, introduced the notion of ‘integrated conservation’ which depends on the legal, administrative, technical and financial support and it is to be based on cooperation of all stakeholders (COE Amsterdam, 1975).

2.3.6 ICOMOS Charter for the Conservation of Historic Towns and Urban Areas (ICOMOS 1987)

The ICOMOS Charter for the Conservation of Historic Towns and Urban Areas (ICOMOS 1987) was instrumental in the definition of the historic urban areas beyond architecture by defining urban communities as

“All urban communities whether they have developed gradually over time of have been created deliberately, are an expression of the diversity of societies throughout history” (ICOMOS, 1987: art. 1).

The charter further made a useful addition in the definition of conservation of monument as those steps necessary for not only their protection, restoration, as well as their development and harmonious adaptation to contemporary life.
The above Charters and recommendations enabled the formulation of conservation policies that could regulate the management of historic urban areas including all the social productive processes undergoing within these areas and which themselves are always dynamic and are continually being transformed. However the development and adaptation to contemporary life is only possible if the symbolic and cultural values of the society are taken into account in the formulation of the Conservation Plan. In all the Charters reviewed above advocate for an approach that cannot adequately engage and take into account the community’s socio-cultural values - especially the intangible values, hence meaning that the resultant conserved fabric would be devoid of relevance and meaning. The African situation requires an approach that not only takes account of the community’s symbolic and cultural values but adopts techniques which are in harmony with the traditions so as to create a cultural continuum between the past and the present.

2.4.0 Recent debates and developments on Urban Heritage Conservation

There has been agreement in conservation circles that international conservation policies have not been completely successful in translating theory to practice as most international conservation charters seem to be out of touch with the actual realities in the field, and given the revisions that the Burra charter has had to undergo, they may be in serious need of revisions, a fact that has been alluded to by a number of authors such as Zancheti et al; Meurs; Chapagain; De Marco; (see Zancheti et al, 2009b: 52; Meurs, 2009: 60; Chapagain, 2007: 64; De Marco, 2009: 13 -16).

Moreover, when authorities are faced with the choices between conservation versus development, culture versus business growth and job creation conservation invariably loses out and this is because as Kulikauskas argues that
“..Charters are almost universally written from the perspective of conservation, not that of responsible development”. Further adding that what is needed is “....to stop confronting conservation to development, and to work together with, not against new development, helping channel it into continuous and responsible development instead of attempting to hinder the change”. (Kulikauskas, 2007: 62).

This reinforces the earlier argument in the preceding sections in this study that Conservation Charters are static in nature and do not accommodate the ever changing aspirations of the communities whose monuments are being conserved. The static nature arises due to the statement of significance, which lays out the justification for the monument’s or urban area’s conservation, not being able to take into account the patterns, relationships, elements or processes that carry the society values. The elements referred to in this case would be the various symbolic features that make up the socio –cultural functional whole of the particular monument or urban area and the processes being the traditional renewal practices of those symbolic features.

These revisions are called for in the context of not only the differences in the practical application contexts, where each intervention might have to be guided by specific contextual considerations, but also different cultural contexts where the issues of authenticity and hence projection of the specific community’s identity rely on the continuous use and renewal with traditional craftsmanship something which is true for cultural heritage of a non-European origin. Chapagain further notes that

“true identity of historic settlements can only be maintained and sustained through ensuring that inhabitants’ needs are met and feel comfortable in living in those conserved environments’. He further adds that the Charters need to ‘be responsive to and recognize inhabitants’ active role in value assessment,
Moreover the values can be implemented to set priorities in distinguishing what might be conserved from what will not (Clark, 2001: 12), and in establishing the extent and nature of interventions (Feilden, 1994: 6). Further when these identified values align to the society’s symbolic and cultural values then the resultant conserved fabric will be reflective of the community’s cultural identity. Hence, values first need to be identified and understood, so as to ensure that heritage ownership is a rich experience for stakeholders, while preserving heritage for the future (Hall and McArthur, 1998: 220). It is through such a process that the community would feel that they are valued in the conservation process and would accept the outcome given that it will be in tune to their aspirations and identity.

2.5.0 Urban Heritage Conservation in Africa

Heritage conservation in Africa is a preserve of urban centers which developed with the advent of colonialism or were historic trade centers located on major trade routes. This is especially true for the major urban centers on the East, North and West Coast of Africa. The North African urban centers, especially Cairo in Egypt, Casablanca and Rabat in Morocco, Tunis in Tunisia and Algiers in Algeria have a long history of conservation not only due to the fact that their programmes were initiated by colonial powers long before the countries got independent but also given their close historical connection with the countries where the Charters were developed. For Sub-Saharan Africa in general these programmes were initiated in the recent past after the countries gained their independence. They were by default run under legislative regimes inherited from the colonial period and as a rule these legislative systems privileged the modern techniques against the traditional techniques. The
representation and protection on the national list of monuments was in favour of western
derived and defined monuments with minimal or none representation from the African
traditional monuments. In addition traditional methods of construction were dimmed inferior
or primitive hence did not enjoy any form of recognition except as a temporary solution. This
study would be incomplete without an overview of the history of conservation in Africa
together with the legislative frameworks in place for conservation including a discussion of
the indigenous conservation practices. While discussing these practices it would be in order to
also look at the prevailing debate on the integration of indigenous conservation techniques in
mainstream conservation.

2.5.1 History of Conservation in Africa

The urban conservation practice in Africa is of a fairly recent past, especially for Sub –
Saharan Africa, and much of this dates back to less than 30 years. Therefore in general, for
Sub- Saharan Africa, the conservation programmes were initiated under colonial legislative
regimes and were originally started and run by Western expatriates before being turned over
to local conservation experts who had spent some time understudying them. In almost all the
cases of urban conservation, programmes were formulated along the lines of the Venice
charter and other international guidelines which in a majority of the cases disenfranchised the
communities and museified the built heritage due to the abstraction of the process and hence
lack of involvement of communities concerned. This set up was beset with problems one due
to increased poverty leading to a deterioration of the built heritage due to inadequate
maintenance and two alienation of the indigenous building techniques which not only created
these monuments but also best expressed the community’s identity in favour of modern
techniques. Some have argued that the initial approach to heritage management marginalized
the indigenous populations and who could not use the sites for their ritual ceremonies (Ndoro,
2005) thus leading to alienation of the indigenous peoples and their values in heritage
management (Chirikure and Pwiti, 2008). This state of affairs often resulted, for the case of urban conservation, in neighbourhoods devoid of the symbolic elements that projected the community’s identity. Therefore the community in the end did not feel any attachment to the conserved neighbourhoods as they were not representative of their cultural identity.

Moreover, the end result in most cases was the freezing of whole neighbourhoods often robbing such areas of the vibrancy and life that used to be experienced. This was as a consequence of not only the demise of the traditional activities that used to renew these areas, as the new socio-cultural programming could not accommodate such activities, but also the fact that society was robbed of its traditional mode of renewal of the built fabric due to the imposition of foreign techniques which had not had the benefit of being tried, tested and assimilated by the communities. This process of testing, modification and assimilation of foreign influences and techniques is necessary so as to attach the cultural meanings and symbolism that serve to project the community’s identity on its built fabric. It is argued in this research study that what is required, for African heritage and Swahili architectural heritage in particular, is a conservation process that is anchored in the traditional renewal processes so as to be able to capture the cultural meanings that would enable the conserved fabric to express the community identity aspirations in order to maintain the urban neighbourhood relevance and vibrancy.

However anchoring of the conservation process in traditional renewal practices would not have been feasible for many countries since in most countries traditional building techniques are not recognized as being capable of deployment in conservation. This has necessitated substitution, during conservation of some key monuments, with modern methods often with disastrous consequences. This has led some countries to review their legislations but even this has had some mixed results.
2.5.2 Legislative frameworks for Conservation in Africa

The above scenario has often been inherited along with colonial legislations which were skewed in favour of the museological based conservation of monumental and aesthetic architecture. These are the legal frameworks that are necessary for the actualization and local contextual implementation of the various international conservation policy guidelines. We do find that most legal frameworks were not only ineffective but also failed to cover the whole range of the continent’s cultural patrimony due to either being outdated, weak and out of touch with the existing situation (Joffroy, 2005). However, this has slowly changed with some countries such as Zimbabwe, Mozambique, Namibia, Kenya and Angola already having redressed this situation, while many others are in the process. The reviews were necessary given that most of the continent’s inherited cultural heritage legislative regimes gave emphasis to the scientific and research fields or environmental aesthetics, given that the definitions which were the basis of these legislations downplayed the traditional perspective in favour of the western one that emphasised monumentality, aesthetic considerations or modern traditional aspects in the heritage, hence the need for review to accommodate more of the African cultural heritage. The legislative reviews were important so as to redress the apparent neglect of monuments of traditional values and origin which had been overlooked in favour of monuments that were of western derived values.

Ndoro et al argue that the present inherited colonial legislations were not only outdated but also failed to appreciate, re-organise and use customary value systems that should be the basis of African heritage legal systems (Ndoro, Mumma and Abungu eds, 2009: 1). Most of the inherited legislative systems not only concentrated the management of the heritage on the central government away from the communities
but did not clearly outline the benefits that these communities could accrue and how they could be involved in the management.

The legislative reviews, though adopting broader definitions of monuments to include other types of cultural heritage, in retaining the existing principles and procedures of monuments’ protection and documentation meant that much of the traditional architecture built using indigenous know-how still could not qualify for protection especially vernacular architecture, intangible and spiritual heritage. The above, while protecting the colonial or other modern monuments, failed to protect the traditional architecture whose techniques and materials did not allow it to qualify for such categorization and protection. However its protection is necessary so as to allow for the continuity of the intangible values associated with the building culture and hence promote the community’s identity. This is particularly important for African heritage where the intangible heritage is central to the understanding and appreciation of the tangible heritage. This research study argues that modes of definition and means of protection in inherited legislative frameworks failed to recognize and accord adequate protection to the processes that could best express the African cultural identity and which were the indigenous building and conservation practices. This is crucial as these processes and the attendant intangible cultural heritage that they are associated with are the carriers of the cultural meanings and symbolism that serves to express the community identity in its architecture.

2.5.3 Indigenous conservation practices in Africa

The preamble of the Venice Charter states that monuments as evidence of authentic sources of cultural history among other things are man’s creations and should evoke the remembrance of something (ICOMOS, 1965). In the African context this remembrance is a continuous process that has been ritualized so as to guarantee the sustenance of the indigenous conservation processes that created these monuments. The continent is replete with examples of such rituals
and ceremonies that not only accompany this process but also serve to solidify the meanings and execution of the same in the minds of the younger generation. Indigenous conservation activities were mostly community wide activities and every community member was obliged to participate and in some cases each gender or clan had its own responsibility. The techniques themselves were transmitted from generation to generation through symbolism, traditions and taboos and were embedded in a complex social system of behaviour.

As noted by Hodjat, the use of poems, proverbs and tales is in reality an intelligent application of conservation methods for transferring the values from one generation to the next one (Hodjat, 2009: 117). Therefore it is evident that the ultimate aim of the indigenous conservation processes, of which rituals, ceremonies and dances were part of, was not only renewal of the cultural heritage but also offer a continuity of the cultural meanings, 

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9 This was indeed the practice even in the context of Lamu where it was revealed in a dialogue with a group of masons how the graduation of a new member was an elaborate ceremony with songs and dance complete with a sample of his work, representing the most delicate and complex part of the house built by the graduate – the inner wall decorations, that had to be signed off by the Master mason.
significance and symbolism inherent in the particular heritage. The rooting of indigenous conservation practices in symbolism and belief systems of the community concerned meant that the practice was a social and religious duty for every member of the community. This was the case of the annual repair and conservation of the Sankori mosque in Fig. 2.2 above, this ritual enabled the master craftsmen to pass on to the younger generation and enable the conservation skills to remain alive and hence ensure continuity of the monument. The symbolism and beliefs also sometimes influenced the choice of materials and in the long run imbued a sense of unity among the community and enhanced its identity. In some instances, the architecture that was to be conserved itself was an adaptation of nature and the environment to create a product that blended with the surroundings, where the design and location was dictated by a variety of factors such as local social needs, traditions, symbolism. In short these processes therefore represented the whole repertoire of methods that were the most suited to express that particular community’s identity. Moreover these indigenous conservation practices are in agreement with modern conservation practice as noted by Stovel et al who state that the overall objective of conservation is continuity itself, based on the renewal processes which continually reuse cultural meanings, symbolism and significance associated to the heritage (Stovel, Stanley – Price and Killick eds, 2005: 1).

However, there are a number of problems faced in the preservation of these traditional knowledge skills in conservation in the modern setting which include the fact that these traditional conservation practices had a reduced capacity and also the communities had to review their needs and priorities as a result of new social trends. The changes of lifestyles also affected the belief system causing a reduction in the number of community members still holding the traditional beliefs resulting in difficulties in mobilization of labour and resources which in turn had the effect of destroying the traditional chain of transmission of these skills hence a decline in their usage.
Other factors such as changes to the governance structures had profound effects on labour patterns and family ties which were necessary in the sustenance of the traditional mobilization structures. Moreover weaknesses of the oral form of transmission, presence of new religions and rural – urban exodus due to socio-economic changes have all led to a lack of interest in the youth further reducing the pool of free labour for possible training and who now had to be paid to undertake the traditional conservation tasks.

Finally other than the fact that there was lack of adequate protection due to over-reliance in the belief systems, and given that most of the material inputs were fragile there were sustainability and availability issues which often led to some difficulties in the access of the required traditional materials. Possible solutions may include more research, documentation and harmonization of the traditional conservation methods so as to create a standardized process. This might also include the consideration of sustainable methods to enable their conservation over the long term plus training on site on new updated techniques that are in line with modern trends coupled with their integration into the main stream conservation practice.

2.5.4 Prevailing debates on integration of indigenous techniques in conservation

Petzet argues that the authentic spirit of monuments and sites normally only finds expression in combination with specific contexts, a space encompassing a particular environment or as a cultural landscape or cultural route and also that we conserve so as to maintain historic continuity – continuity which should be protected and which of course is embodied in our monuments (Petzet, 2004: 37)

Miri further adds that regardless of its physical dimensions, the excellence of cultural heritage depends entirely on its meaning and importance. It carries an intrinsic
message from its time to the future generations (Miri, 2012: 177). Given that the principle aim of any conservation action is continuity as noted above, then any conservation intervention should be implemented in such a way that it preserves the message, spirit or essence of that particular monument. Bell notes that the key question that we should be asking in any conservation action is….

“are we conserving the spiritual message of the monument which has been entrusted to us?” (Bell, 2009: 67).

Paraphrasing Bell’s argument, we should question whether our conservation actions are able to express the cultural identity espoused in the monument as it was expressed when it was entrusted to us? The conservation of the spiritual message, hence expression of the cultural identity, would only be possible if the original techniques used in the construction of the monument, or techniques which are based on a deeper understanding of the essence of the monument and which out of necessity have to be mirrored on the original techniques, are employed in the conservation of the monument. It is also important to note that this spiritual message or cultural identity of a monument or place is transmitted by living people in their everyday settings and experiences and therefore depends on them entirely for its transmission and sustenance (ICOMOS, 2008). Therefore, it is clear that the authentic transmission of the spiritual message of a monument depends first on the people using it and the indigenous building techniques that produced it. Hodjat notes that every culture’s conservation methods are specific to that culture and constitute its repertoire of cultural heritage management tools, he further adds that any conservation methods employed on a monument must be in harmony to the origin of those methods (Hodjat, 2009: 117 – 123) This implies that authentic conservation and transmission of the cultural identity of any monument, must rely on the local people to employ not only conservation methods particular to that culture but also must be in harmony to the origin of those methods. This is particularly true for the African monuments, where the local people are a living indigenous skills’ library with a rich knowledge of the
techniques necessary to both conserve the particular monument and also to offer continuity of the symbolism, significance and meanings of the same within their local contexts. Further as Mason adds that historic conservation theories and tools need to reflect the notion that culture is an ongoing process, at once evolutionary and inventive—not a static set of practices and things (Mason, 2002: 14). This buttresses the need to acknowledge that the traditions, customs and other related processes will also be evolving, therefore the conservation of that culture’s heritage needs to take into account the society’s symbolism and values attached to their heritage so as to remain alive to this evolutionary process.

Miri further adds that cultural heritage can be viewed as a work of art representing its own time. It represents the culture and techniques of time along with the sentiment, intent and conscience of its designer, artist or craftsman. Essential to any work of art or piece of cultural heritage is the recognition of its values and significance by the individuals or the society (Miri, 2012: 179). Therefore the way forward as advocated by a number of authors is in recognition, preservation and strengthening of these processes or indigenous conservation practices coupled with their updating and integration into mainstream conservation practice (Hodjat, 2009: 121; Ndoro and Chirikure, 2009: 71) Part of the integration campaign has already been started by the Africa 2009 programme, which was a programme meant to train Sub –Saharan heritage managers on better conservation practices that are appropriate for African heritage. The programme was implemented from 1999 to 2009 and it trained the managers on some selected sites in Africa where indigenous conservation practices were integrated into the conservation of those sites. Similarly, another initiative that has sought to recognize and integrate indigenous conservation practices is the World Heritage Centre’s Global Strategy on the increase of under-represented sites on the World Heritage List. Through this initiative, which had to review the ‘authenticity’ and ‘integrity’ definitions and modes of testing the same so as to make them representative of all world cultural
heritages, the number of sites from Africa were 74 by 2008 of which cultural sites were 38 (Assi, 2008). Further at a meeting of the International Council of Monuments and Sites (ICOMOS) in 2008, it was agreed that there is need to promote the conservation of built heritage of traditional construction because of the longevity of the materials, which are regionally specific as they not only use locally available materials but are also a direct response to local environmental conditions (ICOMOS, 2008)

2.6.0 Swahili Identity and Value systems

Hall defines cultural identity in terms of …

“a shared culture which a people with a common history and ancestry hold in common or that an identity reflects the common historical experiences and shared cultural codes which provide the people a stable and continuous frame of reference” (Hall, 1994: 392).

In the context of Swahili towns such an identity would be one that enables the people to identify themselves as one through a commonality of historical experiences, cultural experiences and other forms of cultural endeavours. There are other factors that impact on identity, and as Baines adds further

“that identity is a factor of not only culture and history but also language, ethnicity, gender and locality” (Baines, 1998: 7).

Just as culture is not static, identity as noted by Martin being a socio-historical construct is also not fixed and therefore continually repositioning (Martin, 1995). Hall stresses this fact by arguing that cultural identity reflects the point of identification and in this sense a ‘positioning’ in the realm of actual history (Hall, 1994). Identity of the Swahili people as exhibited in the Swahili towns therefore would be a totality of the cultural influences derived from the social interactions and experiences from such a diverse and expansive region resulting in their current identification and positioning through elements in their environment
such as unique town structures and buildings on one hand and unique cultural lifestyle as exhibited in the language, mode of dressing and general lifestyle on the other. This identity and the accompanying values of a Swahili town were exercised on three levels namely; the individual level, communal or neighbourhood level and finally the community wide level. Each of these identity positioning were exercised within particular elements of the town, whose structure, material finish and layout allowed for optimal expression of the particular level of identity.

From the foregoing discussion the Swahili identity was manifested at three levels; first there was the individual identity level where an individual was free to express their individuality and this was expressed within the house domain allowing one the freedom to express oneself to the maximum. It is this house environment which equipped and inculcated in an individual the core beliefs and values that enabled one to accurately position within not only the neighbourhood but the community as a whole. The cultural codes were inculcated through a series of cultural activities, rituals and ceremonies mediated through the house courtyard as the principal staging point of this frame of reference. This formative environment was insulated from the external world except through the daka where this individual identity was projected to the outside world.

The Communal or neighbourhood level was the next level for the expression of identity in a Swahili town. This allowed an individual to identify himself or herself as a member of a neighbourhood or *mtaa* by participating and sharing in cultural activities and experiences that were staged within the neighbourhood. The platform of development and staging of this identity started at the home dakas and extended into the side streets connecting houses within the *mtaa*. This culminated in the neighbourhood mosque which was a nucleus of the *mtaa* socio-cultural activities from burials, special *mtaa*-wide prayers, weddings, communal meetings, mediation of disputes and for prayers. This was an important reference and meeting
point for members of the *mtaa* and played a crucial bonding role for the members enabling them to identify themselves as belonging to that *mtaa*. The neighbourhood platform was insulated from the individual level by the fact that the individual houses turned their backs to this area and access was only through the daka. Hence they functioned as public lounges of the *mtaa*, with scale commensurate to the intimacy required, whereby the male members of the lounge knew one another and could easily identify any outsiders. In this regard it retained a scale commensurate with the intimacy and involvement required. Refer to Fig. 2.3 below for typical Swahili town Side street with minimal house openings.

![Fig. 2.3 A typical street in Pate (Author)](image)

The final level of identity of the Swahili town was at the community or town-wide level. This level brought together all the residents of the town and allowed them to exercise an identity commensurate with the aspirations of the town. This was made possible by some certain elements within the town namely; the town square, market, the town’s main street or Bazaar
Street and the Friday mosque(s) as the main socialization points for the whole community except the women folk. As pointed out by Allen, each Swahili settlement had at least one open-air market (Allen, 1979). The community thus daily interacted in these areas as they transacted their daily needs. This in a way brought solidarity among the residents of the town and hence played an important role in shaping the social and political identity of the community in a Swahili town.

Arising from the identities espoused in the above discussed levels, there are some key symbolic values that emerge in a Swahili town which are important in not only defining and understanding a Swahili town but also set it apart from other Islamic towns. The first and foremost symbolic value in a Swahili town is privacy which was a key consideration in both the planning and use of a Swahili traditional house and the various elements of the town. Moreover the need to shield women from the public view coupled with the need to shield the residential areas away from the public activities greatly influenced the planning of the Swahili town. Elements like the ‘wikio’ or overhead footbridge, evolved due to the need to provide for privacy of womenfolk within the public areas of the town. Swahili women as a tradition were never allowed to venture into the public domain, unless it was absolutely necessary, especially the town market and bazaar street. Due to privacy, the Swahili ensured that both internally inside the house and on the street no two doors faced each other; instead doors were staggered so that they don’t face each other. Ghaidan quotes Garlake while describing Gedi 15th-16th Century house plans that…

“...almost always ensure that the doors of outer rooms are never placed directly opposite the doors leading on to inner rooms.” (Garlake as cited in Ghaidan, 1975: 74 – 75) see illustration and photo below.

![Diagram of privacy considerations](image1)

**Fig. 2.4 Privacy considerations (Illustration Adapted from Ghaidan, 1975, Photo Field Survey, 2011)**

Similarly, due to this consideration for privacy, the town’s residential areas did not open directly onto the main commercial areas and secondly, the town’s side streets were like vast
windowless halls with some minimal openings at very high levels that not only guaranteed the privacy of the house residents but also the people on the street.

The second key symbolic value is community participation and involvement among the community members. The whole organization and structure of the Swahili town made it conducive for the involvement of the community members for instances the building of the individual household was often a joint neighbourhood effort. Further the abutting of the various houses within a mtaa and also the co-joining of some houses meant that there had to be some cooperation among the neighbours who in some cases were family members. Therefore the town’s layout was heavily influenced by the consideration of this key value in Swahili society. Furthermore most of the community activities that were done in these areas such as burial prayers, weddings, dances and sacrifices meant that the layout had to be on an intimate scale so as to facilitate these activities.

The third key symbolic value that emerges from the foregoing discussion on the Swahili town elements and which played quite an important role in the planning and layout of overall town is communication. Firstly the mtaa layout was informed by the need for not only ease of communication and visitation by the womenfolk but also enable the men folk to go to the mosque for daily prayers. Secondly, the heavy traffic that usually patronized the town’s market and the commercial street meant that there had to be a direct and easy communication to these town elements. Arising from this and due to their nature and use and to satisfy the first value above, they were usually placed away from the residential areas.

Security is the final key symbolic value found in a traditional Swahili town and is implied in the nature of construction of the Swahili house; the solidity of the walls of the Swahili house portrayed permanence and security that acted as a guarantee in commerce as alluded to by Allen (Allen, 1979). This security was also manifested in the making and layout of the house themselves. Furthermore the Swahili town was deliberately layout so as to ease identification
of strangers, neighbourhood watch and ease of defense, escape and concealment from enemies as noted by Khan (Khan, 2010).

2.7.0 Theoretical Framework

From the foregoing literature review of this research study, it has emerged that at the heart of the initial attempts at conservation of monuments was the desire to preserve and sustain the society’s cultural identity in the built architectural fabric. Cultural identity has been defined in terms of a shared culture whereby a people with a common history and ancestry share common historical experiences and cultural codes. It can be impacted also by language, ethnicity, gender and locality. Identity in the case of the Swahili people may be defined as a totality of the cultural influences derived from the socio-cultural interactions and experiences resulting in its expression in their environment.

In the present circumstances, conservation of Swahili past monuments may be motivated by the rapid changes in the environment occasioned by the rapid uptake of new diverse styles or destruction of key traditional elements within the architectural fabric that in turn leads to a loss of symbols that reflect the society’s sense of cultural orientation and reference. Conservation therefore in the current situation, should attempt to sustain these identity symbols as informed by present Swahili society values as an anchor to its cultural growth against changes that threaten the ordered evolution of its identity. This view may be contrasted to the origin and growth of the conservation concepts in Europe and in particular England, France and Germany; where they sought to conserve their key monuments as a pointer to the past societal achievements so as to serve as the inspirational direction that the society can align itself towards and provide a solid basis for future endeavors. As argued by Adedeji and Fadamiro the built environment is the history of man. The undying stones of monuments are the tables from which this history can be read. Thus, the life of man in the
past, its values in the present and directions for the future are embellished on these stones. (Adedeji, and Fadamiro, 2011: Online). In essence the future of any society is rooted in present values embedded in their environment. The conservation of the same should form a continuum between the past and present where the running link between them are the symbolic and cultural values as carried through by traditions and key symbolic elements within that environment. Therefore the loss of this orientation base for the present Swahili society would amount to their losing the foundation on which to build future cultural identity projections and hence loss of the ability of creating environments or neighbourhoods reflective of their identity. Conservation of the key identity elements, which being the major bearers of cultural meanings and symbolism that best expresses the community’s cultural identity ought to be facilitated by the Conservation Charters in a manner that respects this symbolism hence result in the conservation of the same devoid of subjective interpretations.

The Charters were meant to be objective approaches that could provide the best way to conserve the universal aspects or key symbolic elements of any community’s architectural heritage or in this instance the Swahili’s architectural heritage. The objectivity in these approaches was meant to remove individual biases in the judgment of what ought to be significant or symbolic in the conservation of the identity aspects in the architecture. However in practice, the objectivity led to an impersonal nature in their application and often resulted in the exclusion of the community concerned in the conservation actions. However we note that for any given community’s architectural monuments, it is that particular community itself that best understands which techniques and processes would be effective in conveying that particular society’s cultural and symbolic values in those
There is, therefore, a need for a holistic approach to the conservation and management of cultural sites in Swahili communities. This involves understanding the social and cultural significance of monuments and their role in the identity and livelihoods of the community. It is imperative to involve local communities in decision-making processes to ensure that conservation efforts are culturally sensitive and sustainable. This approach not only respects the historical and cultural values but also ensures the long-term preservation of cultural heritage.

The inclusion of local knowledge and traditional practices in the conservation process is crucial. It ensures that traditional methods and materials are used, which are significant in maintaining the authenticity and integrity of the cultural heritage sites. This approach also promotes community engagement and enhances the sense of ownership and stewardship among the community members.

Moreover, it is essential to address the challenges posed by external factors such as climate change, urbanization, and tourism. These factors have significant impacts on cultural heritage sites, requiring adaptive management strategies. The incorporation of contemporary methods and technologies in conservation planning and monitoring can help in addressing these challenges effectively.

In conclusion, the conservation of cultural heritage sites in Swahili communities is a complex endeavor that requires a multifaceted approach. It involves understanding the cultural and social significance of monuments, involving local communities in decision-making, and addressing the challenges posed by external factors. This approach can help in ensuring the long-term preservation of cultural heritage and its continued relevance to the community in the face of modernization and global changes.


11 This was ably demonstrated in the restoration of Leven house, a 170 year old building that was in ruins, in Mombasa where the Author was the leader of the restoration team; however throughout the restoration process the team was advised by a Master mason of over 45 years experience who pointed out what was most suitable for every stage of the process – leading to a restored building that is in harmony within its context.
Moreover the end result of the conservation expert influenced conservation interventions, which often over rely on the individual’s interpretation of the significance of the monument to the exclusion of the community concerned, is conserved monuments that are at variance to the community’s identity aspirations. There are efforts being made to redress this state of affairs by involving local communities in the conservation of their monuments but these endeavours have had mixed successes and more time may be required in order to gauge their effectiveness and hence crystallize them into universally adopted approaches such as the charters.

Therefore lack of meaningful community involvement in the conservation of their architectural monuments, which is a situation where we find Swahili architectural monuments, has thus robbed the Swahili town’s historic neighbourhoods of their traditional vibrancy brought about by the Indigenous conservation practices that served to renew these areas. This being a consequence of the community being denied an opportunity to participate in the appraisal of their cultural heritage’s significance hence inability to inform on the values on which the Conservation Plan is based. Simultaneously, this development has also denied Swahili society of its traditional means of renewal and replacement of the cultural built fabric due to the adoption of foreign techniques without the benefit of local contextual adaptation. The Swahili indigenous conservation practices were time tested traditional construction techniques which were often community wide activities and that were transmitted from generation to generation through symbolism, traditions, taboos and rituals as a way of cementing them in the society.

It has been shown that a community’s monuments are best conserved through the local building techniques that initially produced them, as they are usually unique to a particular culture and form a repertoire of that culture’s cultural heritage management tools, it therefore follows that Swahili indigenous building techniques are ideally suited in the expression and conservation of the society’s identity espoused in its architecture. This is more so given the
fact that for the Swahili whose identity is continually evolving due to the changes in the culture, it is only the indigenous building techniques that can best conserve and expresses this identity as they are not only anchored in the same culture but also they are the bearers of the community’s symbolism and meanings.

The obtaining legal environment in most African countries is also ill-suited to promote and guarantee the conservation of traditional monuments due to the fact that as it cannot provide adequate protection for monuments of indigenous building techniques’ origin. Therefore, it fails to provide a basis for the conservation of the community’s identity in its architecture by not recognizing the tools that are necessary for its continued sustenance. This together with the conservation expert biases that crept into the conservation interventions seems to have further alienated the monuments from the daily life of the communities concerned. It is from such considerations that some experts have advocated for the domestication of the Conservation Charters and the recognition of the critical role to be played by indigenous building techniques in the conservation exercise (Ndoro and Chirikure, 2009).

For the Swahili context domestication implies first the acknowledgement of the society’s symbolic and cultural values in their cultural heritage and thereafter the integration of the processes or indigenous techniques that support and carry the values in the conservation of the key symbolic elements of the heritage. This would not only contextualise the western based local conservation programmes but also ensure the authentic transmission of the spirit or essence of the monuments embodied in its symbolism, significance and meanings. The contextualisation would also go a long way in acknowledging the knowledge held by Swahili customary knowledge holders in the conservation of their cultural heritage and hence ensure that the conserved fabric resonates with the society’s identity aspirations. This is because the Swahili were able to encapsulate their identity and values in their architecture by use of local building technology and materials which have evolved over time. Further, the Swahili
people’s cultural identity was expressed in the town’s layout, architecture and use. It also found expression in the way people used the various elements within the town in the course of their daily interactions. Therefore any conservation approach aimed at conserving the Swahili architecture must seek to preserve the Swahili community’s way of life and use of its architecture so as to ensure a conserved architecture that not only embodies the Swahili spirit or essence but also that it expresses the society’s identity.

The foregoing demonstrates that Swahili architecture and the identity it espouses, that evolved through locally specific indigenous building technologies, can only be conserved and sustained through a process anchored in the same techniques that best understand the conservation and sustenance of this identity and also are the bearers of the society’s cultural and symbolic values. Conservation through such techniques would be able to capture the community’s aspirations and their identity in their architecture and ensure the sustainability of such endeavours. Conservation through such an approach would be able to maintain a continuum between the past and present by not only acknowledging the community’s symbolic and cultural values but also adopting techniques that are anchored in the traditions. This approach, while remaining alive to the community being a repository of knowledge of its cultural heritage, is able to take into account of the community’s values while at the same time employ techniques that are in harmony to traditions in the context of current realities. Fig. 2.5 below illustrates this approach which has been called the African Conservation Approach due to the fact that it is an approach model which best illustrates the situation in Africa where monuments are part and parcel of the daily life of the communities concerned.
Fig. 2.5 African Conservation Approach (Author)
CHAPTER 3

METHODOLOGY

The main approach of this research study entailed an identification of the anchor symbolic element together with its support network that give identity to Lamu stone town as a Swahili town and whose conservation would enable the sustenance of the society’s identity in its architecture. Further examination was then done to determine how these elements have changed over time and how the changes have affected the perception of the people of not only the identity of the town but also their own identity. Thereafter an analysis of the historic evolution of changes of the Swahili house was carried out, which was identified as the anchor element in the identity shaping process, including its relationship with the street and other nodes of societal interaction as a basis of understanding these changes in perception. The study further looked at how the Swahili house spatial layout and form changed over time including its façade treatment and relationship versus the street and how that impacted its role in the identity formation and expression process.

The study sought to understand the various functions of this societal interaction node, which was a key area of intermediation and communication to the outside world, and how its changes affected the people’s perception of their identity. These relationships were analysed through various forms such as historical studies, mapping, archaeological research results, photos and sketches to decipher the key identity coding elements. To this end, most of the data gathering was collected through maps, sketches, drawings, photos and digital capture of the development of the Swahili house versus the street. Much of the current state of the various indigenous techniques and structures was also digitally captured in the same way and also interviews were with the people involved in the actual use of these techniques. To help the understanding of these elements key informant interviews coupled with focused group interviews were carried
out to shed some light on the importance of the identified trends and to understand the significance attached to these changes.

Most of the research that has been done on Swahili towns including those done in Lamu has mainly concentrated on the overall architecture or planning of the town. This research employed a different approach by focusing on one important element of the Swahili architecture, which is a key building block in Swahili town planning, the Swahili house. Therefore the research aimed at understanding the various hierarchies of relationships in the articulation of identity and how they related to both internal and external elements. The research design that follows elaborates on the approach used that enabled decoding of the evolution of spatial attributes of the symbolic elements and their relationships and thereafter inform on the identity projected to the exterior. This approach used the traditional Swahili house plus its courtyard and the street as the main anchor area of intermediation of the various spatial relationships.

### 3.1.0 Research Design

Research methodology may be classified as either qualitative or quantitative. Qualitative methodology generally is often unstructured but also may employ a structured tool in the interviews. This methodology is mostly naturalistic in nature and also considers subjectivity or interpretation to be important and aims to provide supporting information which is individually focused rather than considering the individual as a representative of a sample. Causation, association are considered to be of less importance than the individuals’ experience. Whereas the quantitative methodology, is more rigorous and proceeds on clearly defined rules based upon previous results. This is due to the fact that it employs statistical tests and data analysis which have rules. It normally considers objectivity as being of great
importance and above all it aims to reject a (null) hypothesis in its most basic form. This research study employed a qualitative methodology which was thought to be the most suitable and more particularly by using a case study that best exemplified the variables that were critical for the research enquiry.

Case study has been defined variously as;

“a method for learning about a complex instance based on a comprehensive understanding of the instance obtained through extensive description and analysis of that instance taken as a whole and in its context” (Morra & Freidlander, 1990: 2)

whereas it has also been referred to as by Johansson as a phenomenon specific to time and space (Johansson, 2003: 4).

In the actual selection of a case study, Stake states that a case study may be selected analytically or purposely due to it being rich in information, critical, revelatory or unique (Stake, 1995). This was the main reason why Lamu and in turn the Swahili house were selected. The selection of Lamu stone town as a case study and the Swahili house as a unit of analysis was done due to the following reasons; Lamu Stone town as a case study was due to; firstly it still survives as a historic town which is faced with tremendous development pressures. It is forecasted that by 2015, Lamu will be home to four out of every ten people of the district’s urban population and this will be further worsened by the proposed development of the second port. Secondly, given that Lamu is the only remaining historic town with a nice collection of still surviving 17th and 18th Century stone houses and which has been sheltered from
modern development pressures until recently\textsuperscript{12}, this offered an opportunity to study this collection in depth. In comparison to other surviving Swahili towns of Mombasa Old Town and Zanzibar Stone Town, Lamu’s architecture and culture seems to be relatively unpolluted hence can allow for research on the indigenous elements of Swahili architecture.

Lamu also has a Conservation Plan that has been in place for about twenty years to date which allowed for a review of the programme’s performance so as to gauge its effectiveness in managing the historic fabric in the modern context. Moreover, Lamu society being relatively unpolluted and shielded from rapid urbanisation unlike other Swahili towns may still be considered to be predominantly Swahili and hence it may be assumed to espouse a homogenous identity, therefore making it ideal for a study on the indigenous elements that give the town its identity. Lastly, the listing of Lamu on the UNESCO World Heritage List is a mark of recognition of the town as an embodiment of a unique cultural heritage and by extension a unique indigenous building technology\textsuperscript{13}.

On the other hand the justification for the Swahili house being the unit of analysis include the fact that it occupied an anchor space in the evolution of Swahili civilization as it was the focus of the various cultural exchanges that have characterized the growth of the Swahili society and hence was an integral element in the articulation of the people’s identity. Secondly, it also forms an important building block in a Swahili town’s planning and lastly at

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\textsuperscript{12} This fact is further buttressed by the Comparative analysis done during the application for listing of Lamu on the UNESCO World Heritage List (see appendix II)
\end{flushright}

\begin{flushright}
\textsuperscript{13} The main criteria of listing – Criteria highlights the importance of the indigenous building technology in the synthesis of various cultural influences into a unique Cultural Heritage (refer to Appendix II)
\end{flushright}
a local level, the Swahili house was and continues to be a node of society’s social interactions. Moreover the Swahili house forms the basis of the identity construction and projection process of the Swahili people; hence any study that aims to understand how the Swahili express themselves in the built environment must address itself to this element.

The research having acknowledged the existence of diverse available methodologies and after evaluating the various strengths, the case study methodology was adopted in the investigation as this was felt that it was the best methodology for the circumstances given the multiple variables and qualities and the need to have an in-depth explanation of the research issues. In this investigative study, the multiple variables are in the form of studying the traditional Swahili house as an anchor symbolic element and its support elements that ensures its socio-cultural functional integrity over time. Therefore for this scenario either qualitative or quantitative methods alone would not have provided the desired results, a combination of both was necessary to better understand the relationships. Tellis argues that case study methodology by combining both quantitative and qualitative data techniques helps explain both process and outcome of a phenomenon through complete observation, reconstruction and analysis of the case under investigation (Tellis, 1997). For the this research study a methodology that could explain the various process and outcomes, in terms of the spatial relationships, in the reconstruction the growth path of the Swahili house over not only time but also space. Given the foregoing any other methodology would have fallen short in dealing with the multiple variables and outcomes and as noted by Zaidah quantitative methodology may be limited in providing in depth and holistic explanation of social and behavioural problems (Zaidah, 2007: 01).

The research therefore employed an explicative strategy in first determining the case study and second to focus on the Swahili house, to try and see the various hierarchies and their
relationships both within Swahili house’s internal attributes and also how these relate to the exterior. The research design thereafter adopted a set of approaches that enabled analysis of these internal spatial attributes and thereafter how these inform the physical presentation of the element on the outside together with the identity projected to the exterior. Towards understanding these relationships the courtyard was used as the main area of intermediation of the various spatial relationships. The research was specifically interested in the anchor symbolic element that is the traditional Swahili house together with its supporting elements of the mtaa mosque, network of streets, Main Street, Friday mosque and town square. Therefore the methodology entailed analysis of these spatial relationships and meanings at three levels whereby it looked at the individual Swahili house internally first and how it is organised internally, the next level was how it relates to the street and neighbourhood mosque at the mtaa level and finally how it also relates with the Main street, Friday mosque and Town square at the town level. This spatial analysis is illustrated in Fig 3.1 below

![Diagram](image)

**Fig 3.1 Analysis of the Symbolic elements in space (Author)**

Further advantages in case study methodology include the ability to use data in the context of its use (Yin 1984) and finally detailed qualitative accounts often help explain or describe the data in real-life environment and therefore help explain the
complexities of real-life situations something that may not be possible in experiments
or survey methodologies. This was indeed the case, and what made this methodology
even more effective, as data from the historical surveys of 1975 and 1985 were used
to gauge the community’s perception while comparing with the actual situation
during the field survey and cross referencing with data from interviews. Therefore
historical data was not only combined with current data but also qualitative accounts
of key informant interviews, focused group discussions and participant observations
to better understand the relationships at all the three levels and their implications in
the cultural identity formation and expression on Lamu’s conserved architectural
fabric.

However the case study method has its own draw backs which include; its lack of
rigour and thus might allow equivocal evidence or biased views to influence the
direction of findings and conclusions (Yin, 1981: 21). Secondly, the fact that a case
study is dependent on a small number of subjects render the methodology to have
very little basis for scientific generalization or make it difficult to come out with a
generalizing conclusion (Yin, 1981; Tellis, 1997). In view of the above scenario
some steps that were taken in this study to improve the validity of case study
methodology and hence improve the veracity and reliability of the findings was
through use of data from multiple data sources and the validity of findings obtained
through agreement from these various sources. Denzin is quoted by Johansson that
validation is through triangulation where most often collection methods also are
triangulated and also in addition to that data sources, theory or investigations might
also be triangulated (Denzin as cited in Johansson, 2003: 4).
Moreover, the consistency of the data across the multiple sources further aids in the verification (Morra & Freidlander, 1990). Therefore for the Lamu case study validity of the research study was ensured through use of data from multiple sources such as; interview of key informants whereby the qualitative explanations obtained served to confirm or disapprove patterns observed in other data source especially from the literature reviews. Further actual observations obtained from a random survey of houses in the study area was compared to literature data obtained from surveys done in 1975 and 1985, which served as cross-sectional studies, to understand the Lamu town’s growth and other trends. Other data sources included the use of focused group discussions, the data resulting from this method aided in the explanation of the trends observed in other data sources especially in the literature review and the physical information recorded in the random survey. The overall research design process is therefore as per Fig. 3.2 below.

![Fig. 3.2 Research Design (Author)](image_url)
3.2.0 Unit of Study

Johansson states that a case study focuses on a unit of analysis (which in itself is a case), but simultaneously takes into account the context and so encompasses many variables and qualities (Johansson, 2003). For the Lamu case study the unit of analysis in the study was the Swahili house; this was selected because not only is it the basic building block of the Swahili town and rich in information but also it is unique as a house typology. Further from the preceding chapters it has been seen that this unit plays a crucial role in the formation of an individual’s identity and hence it was felt that this would be an important basis to study and understand the Swahili identity formative environment. This unit was therefore used in the study to understand the various relationships obtaining within the town elements and how they have changed over time.

The study initially created a benchmark by looking at the Swahili house spatial layout internally and what this portends in terms of the symbolism and meanings it carries not only of the house itself and its occupants but also as it is spatially laid out in the Lamu townscape. This was aimed at understanding the symbolism and meanings of the anchor element in a historic sense with a view to examining how this has been impacted over time. Thereafter the study looked at how the Swahili house spatial layout and form has changed overtime including its façade treatment and inter – relationships with other support elements identified within the town. This analysis in time is illustrated in Fig 3.3 below. Therefore in essence the methodology employed involved a spatial – temporal investigation of the unit of analysis to better understand the evolution or otherwise of symbolism and meanings associated to this element and its support elements in the Swahili way of life.
This information was captured in the form of maps, archaeological research results, photos and sketch drawings so as to understand this evolutionary process. Therefore observations were done of this unit from literature sources and during the random survey. The findings from this exercise were analyzed and any subsequent emerging trends were explained through interrogation of key informants, observations and focused group discussions so as to shed more details on the significance of the identified changes within the symbolism and values of the Swahili people.

3.3.0 Sampling Procedure

The main unit of research for Lamu town was the Swahili house and which was externally organized as a neighbourhood or ‘mtaa’. Lamu being a Swahili society the ‘mtaas’ were organized along clan lines and each clan occupied a ‘mtaa’ or neighbourhood with the various ‘mitaas’ forming a town. Further the neighbourhood in turn was also the basic planning unit of the Swahili town complete with own societal ordering featuring a mosque as the main gathering place. Other places that were centers of social interactions of the people in the town
were the town square, Friday mosque for many ‘mitaas’ and the market. The research tried to understand the Swahili house’s relationship with these support features as identity elements of the town. Therefore the random survey study sample entailed selecting a mix of 40 houses in the Stone town nearer the major ordering elements of the town which are the Town square, Friday mosque and Town’s main street.

This number was arrived at while taking into account Thompson’s study on appropriate sample sizes in cases where grounded theory is used where it is indicated that the optimal size should be 35 to allow for full development of the patterns, concepts, categories, properties and dimensions of the given phenomena (Thompson, 2011: 1). The study employed use of data sets generated from the first comprehensive study of the Lamu done in 1975 and in 1985 during the survey for inception of the conservation programme plus the random survey done during the research study as cross-sectional studies to try and understand the town evolution through the years and also to try and determine the emerging trends and also use of the data generated in 1975 and 1985 served also to validate the data generated in the survey.

Given that the data generated in 1975 and 1985 were through studies of the whole town; the random survey due to time limitation confined itself to only a section of the 18th - 19th century section and along the above mentioned town elements due to the following reasons; firstly this is the section that one can see the Swahili house, which is the unit of analysis, at its highest point of development and maturity. Secondly the section has the highest concentration of well preserved Swahili houses that best depict the expression of the Swahili identity. Thirdly, the section best illustrates the various spatial relationships that exist between the unit of analysis and supporting town elements that the research study was interested in such as the bazaar street, Side streets, the neighbourhood mosques, town square and Friday mosque. Fourthly, the
section has a high concentration of houses that are still well preserved that depict the various Swahili house styles available in Lamu. Finally, the section encompasses the town’s historic origin (*Mtaa Muini*) and the political seat of power (*Yumbe*); which would help at understanding not only the growth of the town but also the relationship of the unit of analysis with political instruments.

In an attempt to enhance understanding of the unit of analysis in relation to the various elements of the town, the sampling was done to ensure there were houses that related to the various aspects of the town such as the bazaar street, the town square, side streets and the neighbourhood mosques. It helped to understand the attitude of the Swahili house towards these elements and see whether there have been any changes over time in the historical relationship that the unit of analysis had with these.

### 3.4.0 Data Collection Methods

Data used in this research study was obtained from a variety of sources and through a number of methods to aid in improving the validity of the data through triangulation. Data was obtained from review of archival records that existed before the inception of the conservation program in 1975 and used as reference point of the 19th century Swahili house development. The other reference point was taken from 1985 before the advent of the conservation program in Lamu. These two cross-sectional data-sets served to set a bench mark for the unit of analysis at its maturity and explain the town’s growth pattern as observed through the unit of analysis before the inception of the conservation programmes. The researcher used libraries, internet and conservation offices and documented in the form of maps, drawings, photos and reports in the archival research method to collect data on the changes of the Swahili house and its town’s growth. This established the basis of measuring how the Conservation Plan has been undertaken to
manage the transformation and transmission of the indigenous elements within this Swahili towns. The archival research was conducted at University of Nairobi, National Museums of Kenya (NMK) and at International Centre for Earthen Construction (CRATerre) - Grenoble France. The final cross-sectional data-set which was done in 2011 through the random survey evaluated the Conservation Plan. The growth patterns in terms of massing, cultural features; planning, construction methods and use of modern amenities were compared through the three reference points. Thus, most of the data was collected through maps, sketches, charts, drawings, photos and digital capture of the development of the Swahili house versus the street. Much of the current state of the built fabric and the indigenous techniques used to construct them were also captured through a digital camera and a digital recorder used to record the interviews with the people involved in the actual process of use of these techniques.

The data was subsequently cross-validated through interview of key informants. The explanations obtained served to further illustrate or dispute trends observed in the archival research. The cross – validation was achieved through qualitative observations together with interviews of key personnel at the institutions. Data on the indigenous knowledge systems and traditional building techniques was obtained by use of digital recorders and also as sketches, photographs and drawings.

This triangulation of the data was further enhanced through use of focused group discussions. The group interviews were especially important for the organized interest groups such as the masons, artisans and community leaders to gain insight on the origin and development of the Swahili house but also their views on the Conservation Plan Lamu. This was felt to be important as it would afford an alternative view of the situation on the ground and to sound out the social concerns to the Conservation Plan. The information gathered
was critical in enhancing the narrative emanating from the data obtained in both the archival research and the random survey especially as in regard to the community’s perception of the changes in the built environment and their feelings on whether that is representative of the community’s identity. This data was complimented by actual on site observation which was quite useful in informal discussion groups especially in public areas. This was critical for the cultural issues especially as it affords an inconspicuous vantage point but more importantly because they were ideal given the culture and setting of the selected case study’ areas.

Actual documentation was done through photos and sketches during site visits to areas where actual conservation was in progress. This was necessary to understand the community’s perceptions on the techniques being employed at present.

3.5.0 Data Analysis

The data gathered was subsequently analyzed through tables and charts to first determine the key elements within Lamu architecture and the key factors that affect the town architecture and growth. Comparisons were thereafter made in the form of charts and tables between the data obtained from 1975, 1985 and 2011 during the random survey to understand the town’s developments in light of the understanding of Lamu’s key symbolic elements and then factors that are critical to their development. The analysis together with the explanation gathered through the interviews, observations and discussion was able to illustrate whether the conserved Lamu’s architecture reflects the community’s cultural identity and therefore confirm or dispute the theory that has been developed in this study. Therefore analysis was carried out through multiple data sources such as interviews of key informants,
participant observation, physical information and archival research to establish the patterns and build the theory.

3.6.0 Interpretation of the data results

Johansson states that there are three ways of generalizations or interpretation of results in a case study that can all be combined in a case (Johansson, 2003: 5), which are testing of the hypothesis (theory) within a case (Yin, 1994) or conductive theory generation which is based on data from within the case (Glaser et al, 1967) whereas the third is naturalistic generalization whereby generalization are made from known cases and applied to an actual problem situation by making appropriate comparisons (Stake as cited in Johansson, 2003: 5).

As regards this research study, the main approach used in interpretation of the results was through testing the theory that conventional conservation methods are ill-suited for the conservation of African and specifically Swahili identity espoused in Swahili architecture and hence confirm that conservation methods must be indigenous value based to better reflect the community’s identity in their conserved architectural fabric for it to be sustainable.

The findings from this research will be able to inform us on what indigenous features in Swahili architecture are worthy of conservation as per the identity aspirations of the Swahili society. The importance of this lies in the fact that, conservation efforts could be designed so as to reflect the prevailing societal aspirations hence ensure the continuity of the Swahili identity and thereby guarantee the program’s sustainability. Moreover the research findings would not only find use in Eastern African Swahili towns but could also form the basis for more research and adaptation to towns exhibiting similar characteristics in other parts of the world.
CHAPTER 4

LAMU WORLD HERITAGE SITE

This chapter relates to the case study of conservation of Lamu World Heritage Site in order to understand what the key issues are relating to the integration of indigenous knowledge techniques into conservation and how they have been managed so far. In this study the chapter focuses on the Swahili house as a basic building block of the town and how it relates to other key elements in the town. This is in the context of understanding how this element together with the attendant indigenous building techniques and socio-cultural support systems associated with it have evolved in the conservation agenda. The chapter then examines and highlights the state of conservation of Lamu World Heritage Site, indicating what has been the successes so far in conserving key symbolic elements of the Swahili identity and hence determine which elements best embody this identity. It further examines how the Conservation Plan has incorporated indigenous building techniques and the attendant socio-cultural support systems in its implementation and the constraints thereof. This eventually leads to a determination of the key cultural constraints impeding the integration of the indigenous building techniques in the conservation of Lamu Stone town.

4.1.0 Introductory background to symbolic elements of Swahili towns

Lamu Stone Town is one of the surviving Swahili towns that covered the East African coast from the 12th Century to late 17th Century. The Swahili people, trace their origins from the Shungwaya area prior to the 9th Century; an area which most Bantus of Eastern Kenya associate their origin with, an area situated along the southern Somali coast and subsequently over time came to fuse with Persian and Arab traders and immigrants (Allen, 1993; Knappert, 1979: 3). The sharing of commerce ties via the Indian Ocean by these peoples crystallized the formation of the Swahili civilization with a unique identity unified by a common language and culture. The Swahili civilization and its accompanying towns thus exhibit similar
characteristics due to the fact that they are a common product of the confluence of a variety of cultural influences brought about by their being at the nucleus of the lucrative trade that existed between the raw material rich hinterland and the Far East, India and the Arab world.

All Swahili towns including Lamu, exhibit a very unique architecture, which was a mixture of traditional building styles and external techniques acquired through trade contacts helped by the vast raw materials and resources available. The geographical footprint of the civilization’s culture stretched as far as the South coast of Arabia, the Persian Gulf and the western seaboard of India, whereas to the interior it went deep up to the great lakes as depicted in Fig 4.1 below. Indeed the cultural traces of the civilization and the trade that spread it reached as far as Indonesia and the Maldives (Horton, 1996 as quoted by Syversen, 2007:58)

![Image of Swahili Civilization location](http://www.mrburnett.net/apworldhistory/maps/africanswahilicoast)

Fig. 4.1 Swahili Civilization location (Map Source: http://www.mrburnett.net/apworldhistory/maps/africanswahilicoast)

The Swahili architecture therefore represented part of an identity that connects the Swahili people and towns as economically part of the cosmopolitan culture of the
Indian Ocean basin which they were linked through trade and commerce; and also ideologically to the wider Islamic world to which they turned for inspiration and guidance, while remaining residents of the African continent to which they owe the basis of their social institutions and building traditions as graphically depicted in Fig 4.2.

**Fig. 4.2 Influences that impacted the Swahili Civilization (Map Source: World Sites Atlas)**

The illustration in Fig. 4.2 above attempts to highlight the geographic spread of the interactions and the influences arising from these which extended to architecture and general lifestyle as well. Some authors have attributed the influences to the many centuries of social, political and religious interactions from various groups of people from not only the East African region but also across the Indian Ocean (Momanyi,
2001: 98). While others have pointed to the fact that societies of the Indian Ocean rim seem to bear cultural imprints of one another as a clear testimony of the persistent and pervasive cultural contacts that existed throughout the ages and which were fostered by the regularity of the monsoon winds (Bang, 2009) The cultural influences derived from these interactions were reflected in the adoption and use of new materials such as coral in buildings, appearance of mosques, large quantities of Islamic and Chinese pottery and imported glass beads. The shift of building materials from mud and thatch to coral was an attempt at the projection and manifestation of the new identity by the inhabitants of the Swahili towns.

In general for all Swahili settlements, as trade and commerce increased among themselves and the outside world, the simple mud-thatched settlements were slowly transformed into harbour towns, resort towns, workshop towns or plantation towns. The transformation also brought about a unique symbolism attributable to each of these towns within the Indian Ocean trading systems that was woven into the identity that was projected. The symbolic meanings of these towns were further enhanced by the role played by Islam in the evolution of their planning. Sheriff notes in connection to this aspect that Islam provided administrative, legal, educational and spiritual structures that underpinned not only the expansion of the Indian Ocean world global economy but also the structure of Swahili city states (Sheriff, 2010: 239).

The Swahili architecture has elements that attest to the variety of influences and which have been synthesized to form the identity it represents as Horton states for instance, inspiration in early architectural features of the coastal towns was indigenous which over time adopted new techniques but still retained essential early planning (Horton, 1996: 234). This Swahili architecture, which was previously thought by many scholars to be essentially of Arabic or Persian style and origin; however archaeological, written, linguistic, and cultural evidence instead suggests a predominantly African birth and sustenance. However some early architectural
influences have been attributed to a variety of sources including Shirazi immigrants especially stone building, use of lime and wood carving skills (Hollingsworth, 1974: 34 – 40) and recognizing that most of these skills played an important part in the development of the Swahili architecture and towns.

Furthermore, the Islamic influence is demonstrated by the presence of elements such as arches, courtyards, isolated women's quarters, the mihrab, minaret towers, and decorative elements on the buildings themselves which could be attributed to influences from other areas such as the Persian Gulf and India among others. Nevertheless, there are a number of features which are directly attributed to the African origin of this architecture. These features include the pillar tomb, a monumental grave the central feature of which is a single prominent pillar or column originally built of coral rag but later of stone. These features are to be found in and around Lamu. This practice was borrowed from African traditional beliefs of ancestors being intermediaries with god, a practice that could also have been influenced by pre-Islamic tradition in Asia and Arabia (Lewcock, 1978: 16 – 17). Their integration to domestic structures, their decorative nature, panelling with pillars and placement of porcelain bowls is unique to East African Swahili cities. The overall design evolved to accommodate specific symbolic, ritualistic, and aesthetic functions of early Swahili society’s need to fulfil both African and Islamic ceremonial functions and spiritual beliefs.

The influences notwithstanding, the East African Swahili towns and their corresponding architecture are laden with some symbolic key elements and characteristics which not only enhance the identity espoused by this architecture but also emphasises its uniqueness. Despite the fact that there was expansion of Swahili settlements and growth followed different routes, there was common identity and symbolism
among these towns that linked them. First and foremost, the growth pattern of settlements followed a process whereby groups of interlocking houses established by kin or lineage groups of long standing within the settlement would form a series of mtaas (Allen, 1979: 4). This unit, singularly known as the mtaa in Kiswahili, represented the basic planning block of the settlement and was to be found in any of the Swahili town especially Lamu where to date one can find the various mitaa each with its own mosque still in existence. Therefore daily life revolved around this unit and would form a social unit within the towns. The mtaa (s) is not an external adaptation but is attributable to the pre – Islamic settlement practice of different clans coming together to form one settlement as was the case of Shanga an early pre – Islamic Swahili settlement on Pate Island and is further evidence of the building traditions and symbolism that the Swahili had in common with other Bantu groups (Horton, 1996). Moreover as the settlements expanded, the expansion was sometimes catered for vertically and this coupled with the need for womenfolk to visit their married daughters and neighbours without venturing on to the street led to the development of the (wikio) footbridge system in Swahili houses as seen in the Fig. 4.3 below.

![Fig. 4.3 Wikio converted into a kitchen in Pate (Author)](image)

Fig. 4.3 Wikio converted into a kitchen in Pate (Author)
These features, where one can find several examples exist in Lamu to date, in the overall Swahili town planning not only transformed the streets into a man’s space but also there were deliberate attempts to transform the street spaces through sizing and wall fenestrations, from the formal and public environment of the street to the more private and intimate environment of the residential house. Ghaidan notes that the streets were a usable space, a transition space that was essentially a man’s space that served to mediate between the formal environment of the street to the more private and intimate house atmosphere (Ghaidan, 1975: 67 - 68) This symbolism in the Swahili town planning is what sets them apart from any other type of town and played a crucial role in projecting the Swahili identity.

The next two symbolic elements include, first the *mtaa* mosque which acted as the symbolic focus of the neighbourhood due to the fact that Islamic men were obligated to perform their prayers in the mosque five times a day. This aspect of the daily life of the Swahilis heavily influenced the early planning and development of the Swahili towns. Several of the mitaas would also be symbolically linked to a larger mosque, which is the next symbolic element, the Friday mosque; this would be where all the men of the town would congregate for weekly Friday prayers.

Further, the plan of Swahili architecture’s mosque, as was common for both the neighbourhood and Friday mosque, consisted of an enclosed prayer hall without courtyards which was contrary to the usual practice in other parts of the Islamic world and which demonstrated the local synthesis and adaptation to suit an area with two seasons of monsoon rainfall. Moreover the unique mihrab decorated with concentric arches in an architrave as seen in Fig.4.4 below attests to the local efforts towards fashioning and projecting an identity that was commensurate with the community’s aspirations. Ghaidan notes that the decoration and finishing at the mihrab were unique to this region’s mosques, especially the semi circular arch over
the mihrab in earlier mosques and trifoliate with double and single cusps in later mosques (Ghaidan, 1975).

Fig. 4.4 Qibla wall decorations (Author)

This is indeed the case as most mosques did not have normal Islamic features such as minarets initially but later included conical minarets with staircases inside for access that could have been adapted from mosques from other regions. The development of the Swahili mosque as depicted in Fig. 4.5 below reflects, just like other architectural features, not only a well-established architectural tradition of adaptation and synthesis but also a process of indigenous development to a point where a design was perfected that met local conditions and satisfied the identity needs of the community.
Lewcock supports this view by arguing that up to the 13th century, the mosque architecture and layout reflected a local technological development as evidenced by their ‘notable characteristic of the mosques of having their longest dimension being not parallel to the qibla wall as one would expect, from the precedent of most of the courtyard mosques of the Islamic world, but at right angles to the qibla wall’ (Lewcock, 1978: 14). The Takwa mosque found on Manda island as seen in Fig.4.6 below seems to emphasize the simplicity of mosques in this region and conforms to the African mosque typology in terms of the absence of a minaret or with pillars sometimes integrated to the mosque as is the case here.
However after the 13th Century there was increased sophistication and mosques started being built of coursed masonry and had more decorations inside. This development suggests that with increased wealth accruing from increased trade, the settlements were receptive and capable of sustaining increased migration and importation of craftsmen from other areas enabling the acquisition of skills in building that enabled the execution of these sophisticated designs in new materials suitable for the local context. Wandibba quotes Kusimba who argues that the emergence of stone buildings in about 1000 to 1500AD suggests the emergence of a more secure economic base in an increasingly complex social and political economy that could sustain several cadres of professional craftsmen including masons (Kusimba as cited in Wandibba, 2001: 131). Therefore in conclusion, even though as pointed out by some scholars Swahili architecture may have been externally influenced as evidenced by the features found in this type of architecture, as per the
words of Sheriff it was wholly dependent on locally available materials and similarly its evolution was locally based (Sheriff, 2010: 274 – 75).

The other crucial symbolic element, and which may be regarded as the anchor of the Swahili town fabric, was the Swahili house. The Swahili residential house performed a unique role uncommon in the Islamic world which was in addition to being the basic building block of the mtaa and hence giving the architectural form to the town. This role was the fact that it performed both social and economic functions and therefore played a crucial symbolic role in creating and cementing of the intra – community bonds. Therefore it aided important social functions of its residents both in public and private, for instance the entrance (daka) allowed for male visitors to be entertained without violating the privacy of the women folk of the house whereas the layout of the house in the form of galleries away from the courtyard clearly demarcated the privacy gradient with the innermost gallery being the most private.

4.1.1 **Justification for selection of Lamu as a Case study**

The choice of Lamu Stone town as a case study was motivated by the following reasons; first it is a historic town that still survives as a historic town which is faced with tremendous development pressures. It is forecasted that by 2015 it will be home to thirty five per cent of the district’s urban population and its population density would have increased to two hundred and fifty five people per square kilometre and this will be further worsened by the proposed development of the second port. Secondly, given that Lamu is the only remaining historic town with a nice collection

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of still surviving 17th and 18th Century stone houses and which has been sheltered from modern development pressures until recently, the emergence of such pressures will have a profound effect on the historic urban fabric. Further, when compared to the other surviving Swahili towns of Mombasa Old Town and Zanzibar Stone Town, Lamu’s architecture is relatively unpolluted hence can allow for research on the indigenous elements of Swahili architecture so as to come with ways of how these can be enhanced in the face of such immense pressures for their destruction.\(^{15}\)

Lamu also has a Conservation Plan that has been running since 1987 which gives adequate time to gauge the performance of the programme and how it has been effective in managing the historic fabric in the face of the mounting developmental pressures. Moreover, Lamu society to a large extent, unlike other Swahili towns that have become more cosmopolitan, may still be considered to be predominantly Swahili and hence it may be assumed to espouse a homogenous identity. Therefore a study on the indigenous elements that give the town its identity may be assumed to reflect the community’s identity aspirations making it a prime candidate for a Swahili town case study. Lastly, the listing of Lamu on the UNESCO World Heritage List was a recognition of the town as an embodiment of a unique cultural heritage and by extension a unique indigenous building technology that led to its realisation. However, the situation on the ground with declining usage and adoption, as witnessed in my working period in Lamu plus further involvement in a number of conservation projects and coupled with the decline of authentic sources of such a technology, meant that such a study in Lamu was necessary to document such techniques not only for possible re-integration in the main stream but also for posterity.

\(^{15}\) Refer to Comparative analysis in Appendix II
Listing of Lamu as a World Heritage Site

From the excerpt of the Report of the 25th Session of the World Heritage Committee

The Committee inscribed Lamu Old Town on the World Heritage List under criteria (ii), (iv), and (vi) refer to Appendix II for a full elaboration of the listing criteria justification and comparative analysis:

- **Criterion (ii)**: The architecture and urban structure of Lamu graphically demonstrate the cultural influences that have come together there over several hundred years from Europe, Arabia, and India, utilizing traditional Swahili techniques to produce a distinct culture.

- **Criterion (iv)**: The growth and decline of the seaports on the East African coast and interaction between the Bantu, Arabs, Persians, Indians, and Europeans represents a significant cultural and economic phase in the history of the region which finds its most outstanding expression in Lamu Old Town

- **Criterion (vi)**: Its paramount trading role and its attraction for scholars and teachers gave Lamu an important religious function in the region. It continues to be a significant centre for education in Islamic and Swahili culture.

**Justification for Inscription - Statement of Significance**

In giving the reasons for inscription, Lamu was described as the oldest and the best-preserved living settlement among the Swahili towns on the East African coast. Further it was stated that its buildings and the applied architecture are the best preserved and carries a long history that represents the development of Swahili technology. It was further described as an old town embodying a unique and rare historical living heritage with more than 700 years of continuous settlement and also
was once the most important trade centre in East Africa before other towns such as Zanzibar took over. In terms of continuing intangible heritage, it was stated that since the 19th century, Lamu has been regarded as an important religious centre in East and Central Africa due to the continued traditions of hosting annual festivals known as ‘Maulidi’. These festivals are endemic to Lamu and draw the Muslim community from all over East and Central Africa as well as the Gulf. Further it was noted in the inscription documents that Lamu is an Islamic and Swahili education centre in East Africa. Researchers and scholars of Islamic religion and Swahili language come to Lamu to study this cultural heritage, which is relatively unchanged. The island town has adopted very little modern technology due to its isolation.

**Location of Lamu**

The Lamu archipelago is home to a large concentration of remnants of Swahili settlements, as evidenced by the many house ruins from as far north as Isahakani, Kiunga and Mkokoni coming all the way down to Ungwana near the Tana river delta. However the most notable ones were the ones on the islands namely Siyu, Shanga and Pate on Pate Island, Manda and Takwa on Manda Island and Shela and Lamu on Lamu Island (see map below Fig. 4.7a & b). Lamu, Pate, Manda, Siyu, Takwa and Shanga, with Shanga on Pate island being the earliest of them all dating to the 9th – 14th Century. Pate Island not only has Shanga and Pate, which still has a collection of stone houses still standing plus a very large area of ruins, Siyu, Mbu and a number of other little settlements such as Faza, Kizingitini, Mbwajumali which came to existence in the late 19th Century.
Fig. 4.7a Map of Kenya showing location of Lamu (Author)

Fig. 4.7b Lamu Archipelago (Adapted from Siravo and Pulver, 1986)

Lamu Island is the most significant on the Lamu archipelago for having the largest still surviving historic town which is still intact. In terms of its geographical setting, it has an
excellent sheltered harbor and even though it is not well endowed with good agricultural soils but mangoes and coconuts can be grown on the island. Perhaps, that is why when faced with the prospect of not being able to produce enough food produce for itself, Lamu looked outside for supplies. Mohiddin further notes that historically, Lamu was a society of consumption living of the products from other areas be it agricultural produce from the mainland plantations, luxury goods from Arabia and India with the surplus redirected to Zanzibar, other city states or to other parts of the Indian Ocean trading system (Mohiddin, 2001: 41 – 47). This openness made Lamu to be essentially a recipient society, a fact that not only made it thrive as a city state within the Indian Ocean trade system especially during the time of the Omani rule when it was the northern most trade nucleus.

The decline of Lamu as the most important northernmost thriving city state was precipitated by a number of factors namely; first abolition of slavery and with it the demise of free labour in the plantations that used to supply Lamu with agricultural produce. The second factor as per Mohiddin was three fold; the decline economically of Zanzibar hence less appetite for Lamu’s surplus plus a change in the pattern of trade in the Indian Ocean brought about by the technological innovations of the industrial revolution which reduced demand for mangrove poles (Mohiddin, 2001). The third major factor was the advent of colonialisation which led to the centralization of economic activities, especially after the shifting of the colonial headquarters to Nairobi after the completion of the Mombasa – Kisumu railway line and with this development there was less focus on the coastal strip, which meant that the former independent city states were the subject of regulations, taxes and economic administration while being at the periphery of the new economic order. For instance, the ban on mangrove harvesting had a devastating effect on trade as per the accounts of my informants who claimed that after the ban, the port which used to be busy with steady stream of dhows and ships was
reduced to a shadow of its former self with only a handful of ships and dhows\(^{16}\). Therefore the relegation of the Swahili states to the periphery of economic arrangements consigned them to a slow natural death, even Mombasa being part of a port city serving a large hinterland and Zanzibar which still continued as a city state to some extent did not fare any better.

Overall this state of affairs was a blessing for Lamu, thanks to this relegation to the periphery from the economic centre, it escaped the attention accorded to many of the other places like Mombasa due to its perceived inaccessibility and remoteness which seemed unattractive to the so called ‘investors’. Due to this scenario, Lamu managed to retain a large collection of its 17\(^{\text{th}}\) – 18\(^{\text{th}}\) Century stone houses unlike many other Swahili towns. However lately, this has been its waterloo, with the upgrading and listing of the town as a world heritage site under the UNESCO World Heritage List; there emerged an unprecedented upsurge of interest in the ownership of property especially in the stone town. Khan notes that property prices have short up by up to 1000% in the recent past (Khan, 2010: 65). Even then this is still relatively cheap in real monetary terms compared to similar beach front properties in other World Heritage sites.

\*Fig. 4.8 Lamu today (Author)*

\(^{16}\) Information obtained via a dialogue with informants in Lamu 2011
Moreover, Lamu with its tranquility and coupled with there being no vehicular traffic on the island has been quite attractive to retired foreigners who after toiling all their lives would wish to have a calm and tranquil environment to spend their retirement. As Mohiddin puts it,

“Lamu offers to the foreigners a piece of pre-industrial past of their “modern” industrialized societies and to live there is to take an imaginative flight into the 15th Century but with practical technological amenities of the 20th Century” (Mohiddin, 2001: 41).

In the course of my interviews with my informants in Lamu, I posed this question of property acquisitions by foreigners to them with an aim of gauging how pervasive the situation was as it had been a subject of debate in the papers and also in public rallies where residents have been exhorted not to sell their cultural heritage. It was indicated to me that close to 90% of the stone town sector of Lamu Stone town was in the hands of foreigners or non-indigenous Lamu people. The problem has been compounded further by the government’s plan of construction of the country’s second major port in Lamu together with mega investments in the form of a resort city and high speed railway line linking Kenya to South Sudan and Ethiopia. The proposed project has run into heavy opposition from a variety of local stakeholders including environmentalists who argue that the region’s rich cultural and natural heritage would seriously be destroyed by such a major project. Moreover, it is argued that for a project of its magnitude, the government has neither involved the local community nor even undertaken environmental and cultural impact assessments studies that would spell out the potential damage to the heritage.

17 Information from interviews with informants in the building industry and the Lamu County Council held over March – April 2011 in Lamu.

This notwithstanding, the race to own every available piece of real estate not only in Lamu World Heritage site but anywhere within the Lamu archipelago has been re-invigorated by this proposed port, and suddenly it is not remote anymore. More, importantly the development of the port has the potential of profoundly affecting the region not only economically but also physically. It is in the physical changes associated with the development that areas like Lamu, with its attendant collection of stone houses, stand to seriously change its historic outlook if it doesn’t receive immediate attention.

4.1.2 Identifying the symbolic elements within Lamu Stone Town

Lamu itself is northern-most surviving Swahili town on the Kenyan coast and is located about three hundred and fifty kilometres north of Mombasa. Lamu Stone town is located on Lamu Island which is the southernmost island on Lamu archipelago. The Island itself is fringed by mangrove forests and separated from the mainland by a small navigable channel. The southern tip of the island is bordered by twenty metre high sand dunes which not only protect the Island but also serve as the principal water catchment area for fresh water for Lamu Stone town. The illustration in Fig. 4.9 below first shows in the inset the location of Lamu relative to Mombasa on the Kenya coast and then shows the layout of Lamu Island in relation to the other islands in the archipelago and also location of the sand dunes on Lamu Island. The dunes being the only source of fresh water for Lamu island, has been the subject of intense struggle between property developers who would want to apportion this part of the prime beach and use it for development versus the National Museum of Kenya (NMK) and the Water Resources Management Agency (WARMA) who would want to conserve it as a water tower.
Fig. 4.9 Location of Lamu Island and the sand Dunes (Source: http://ke.geoview.info and http://www.panoramio.com)

The town itself is located almost two miles further inland from the ocean along a channel on the eastern side of the Island. It fronts a naturally sheltered harbour and was built on a sand dune. The town measures one thousand five hundred metres by five hundred metres and oriented in a roughly North–South axis, with the shorter side being parallel to the slope of the dune and the longer side being perpendicular to it. The town has one major street known as the bazaar street or ‘Usita wa mui’, this runs along the long length of the town and forms a spine that starts at the southernmost cemetery and terminates at the currently reclaimed portion of town known as ‘Domoni’ (Swahili for Mouth) after having passed the northern cemetery as
shown in the illustration in Fig. 4.10 below. Perpendicular to the main street runs a series of thirteen secondary streets or side streets; these also act as the principal drainage and ventilation channels for the town. Given that the town was built on a sand dune, it was important to ensure that surface water runoff would find its way to the sea in the shortest time possible but also draw in winds from the North-East during the dry season.

Fig. 4.10 Layout of Lamu showing one of the Symbolic elements - the Main street (Source: Siravo and Pulver, 1986)

Being a typical Swahili town, the symbolic elements identified in such a town are to be found in Lamu Stone town. Therefore there is the main street which divides the town, at least from the northern part to the town square – ‘Mkunguni’, into the historic town on the west side of the street which covers roughly forty two per cent and composed principally of ‘Mtaa Muini’ and ‘Mkomani’ areas and the new town on the eastern side that was built out of reclaimed land. The section of the town south of the town square which is commonly referred to as ‘Langoni’ is also relatively new compared to the ‘Mkomani and Mtaa Muini’ areas. As noted by Siravo and Pulver, until recently most of these were built mostly of mud and wattle until the fire incidents in 1962 and 1981 which forced many to transform them into more
permanent structures (Siravo and Pulver, 1986: 32). This is because as was the case with most Swahili settlements, this initial core of stone houses in the ‘Mkomani and Mtaa Muini’ sections was ringed by mud and wattle structures that were roofed in thatch especially in the ‘Langoni and Gadeni’ areas. These are the areas that initially grew out of the immigrants from other Swahili settlements and were quite separate from ‘Mkomani and Mtaa Muini’ which were populated by ‘Waungwana’ - the original inhabitants of Lamu Stone town. Generally the largest concentration of 17th -18th Century stone houses is to be found in the ‘Mkomani and Mtaa Muini’ areas. On the other hand the area to the east of the main street is home to a number of shop front and verandah houses.

The other symbolic elements of Lamu include the Town square, which is just in front of the Lamu Fort, which also used to be the terminus of the main street and this was the edge of southern part of the stone town by the sea front. In addition the town square also doubled up as an open air market, a function that it still serves as an extension for auctions, was closely located to the main harbor entry to the town. This is an important element within Lamu’s architecture and planning which heavily affected the community’s way of life. Next to this element one finds another symbolic element, the Friday mosque which is adjacent to the Town square and next to Lamu Fort is called ‘Msikiti wa Pwani’ (Swahilli for Mosque by the beach), this was prior to the emergence of the ‘Langoni’ area.

The last symbolic elements, the traditional Swahili house and its arrangement as mtaa, are located within the residential quarters and which prior to the reclamation of the portion between the main street and the current sea frontage was to the back of the public areas comprising of the Main Street, Town square and harbor entry. Thus the layout of Lamu fits well into the mould of town planning of a Swahili settlement as discussed in the beginning of the chapter. Lamu’s residential areas are organized into a number of mitaas each with its own neighbourhood or mtaa mosque, however in some mitaas the Friday mosque also doubled as
the mtaa mosque. Therefore Fig 4.11 on the following page highlights all the discussed symbolic elements that can be identified in Lamu Stone town. These symbolic elements were the carriers of symbolism and identity meanings and which enable the residents to identify with Lamu as a Swahili town by enabling them go about their social cultural interactions that affirm their identity. Any impairment of these elements would therefore lead to a reduced platform for their social cultural interactions and a forum for the expression of their cultural identity.

Therefore any Conservation Plan that does not address itself towards conserving these elements and their continued functioning would in essence be presiding towards the decline of the requisite platform for the expression of the society’s cultural identity. The resultant conserved fabric would be one that not only does not represent the community’s identity aspirations but also divergent to their daily socio-cultural endeavours.

![Map of Lamu showing Symbolic elements](image)

*Fig. 4.11 Map of Lamu showing Symbolic elements (Adapted from Siravo and Pulver, 1986)*
4.1.3 Community’s perception of Symbolic elements within Lamu Stone town’s Architecture and Planning

<table>
<thead>
<tr>
<th>Element</th>
<th>Scoring/%</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mtaa</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Swahili House and its construction</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Courtyard within the Swahili House</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Daka within the Swahili House</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Side Street</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Main Street/ ‘Usita wa Mui</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Town Square</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Friday Mosque</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>House Decorations</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Community way of life</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 1, Showing the Identity and Symbolic elements in Lamu’s Architecture and Planning (Author)

Table 1 above tabulates responses towards confirmation of the Identity and Symbolic elements in Lamu’s architecture and planning where a survey was carried out among a random sample of twenty six adult residents of Lamu of ages ranging from twenty four to sixty five years. The group was polled on a number of factors affecting the identity of Lamu stone town as a Swahili town. The first question they were asked was to identify an element within Lamu’s architecture and planning which significantly contributed to the perception of Lamu as a Swahili town. The Swahili house and its construction emerged as the single most important element that contributes to identity perception of Lamu stone town as a Swahili town. This was then followed by some two elements within the neighbourhood; the mtaa structure and the streets within as playing an important role in the identity formation of a Swahili town. One interesting aspect of the results was that the three elements that make up
the Swahili house that is the daka, courtyard and interior decorations were listed jointly as the third most important elements that aid in the identification of Lamu as a Swahili town. This was then subsequently followed by the community way of life at number four then the town square and Friday mosque at joint number five and last but not least at number six was the main commercial street as representing elements within the Lamu architecture and planning that impacted the identity perception of Lamu as historic Swahili town. These elements were then aggregated according to similar usage and location as per the understanding derived from the preceding chapters and the results were as follows:-

<table>
<thead>
<tr>
<th>Element</th>
<th>Score/%</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Swahili house, its construction and decorations</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td>The Neighbourhood or mtaa structure and its streets</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Community wide areas including: Friday mosque, Town square and Main street (<em>Usita wa Mui</em>)</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>The community way of life</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

**Table 2, Aggregation of Elements within Lamu’s Architecture and Planning (Author)**

In this aggregation, all the elements related to the Swahili house were added as one element followed by all the neighbourhood elements and finally adding all the town wide elements such as town square, Friday mosque and *Usita wa Mui*. The results of this aggregated ranking according to common usage and location gives us a clearer indication of what the respondents felt to be the most important elements within Lamu and what contributed to identity of Lamu as a Swahili town. The Swahili house emerged as the single most important element contributing to this identity at fifty five per cent followed by the neighbourhood and surrounding streets at thirty per cent. This was subsequently followed by the town community wide areas at eight per cent and finally the community way of life at seven per cent.
The above Figs 4.12 and 4.13 highlight what the community considered to be very significant in giving identity to Lamu as a historic town. The residential neighbourhoods in Lamu as is typical for a Swahili town are located away from these busy community wide elements such as the Town Square, Friday mosque and the Town’s main street. Moreover they are located to the north of the Town square and on the upper parts of the sand dune on which Lamu was built. This was a deliberate attempt to shield these private residential activities away from the much busier activities that usually occur in the bazaar street and at the Town square which occasionally is normally used as a spillover of market related activities. Another characteristic
of the historic neighbourhood is the narrow streets in between towering blank walls as depicted in the picture Fig 4.14 below.

![Fig 4.14 Typical Lamu side street (Author)](image)

This narrow Lamu side street (as depicted above) is one among many which radiate up the sand dune away from the Main street, punctuated once in a while by individual house wikios that lead on from one house to the other across the street, are a characteristic which the community found it significant and gives the town its historic identity. Moreover the plain exteriors, with minimal fenestrations and decor, which gives one an expression of a bland and quiet house devoid of much life reinforces this identity. The streets and the accompanying bland facades play an important function in defining the characteristics of Lamu town, they are essentially public spaces and in conjunction with the dakas are supposed to serve as venues for formal consultations among men. Hence the plain exterior was a deliberate ploy to not only preserve the integrity of the two areas but also emphasize the privacy of the interior
space as wide openings might have been impractical within the narrow streets. The house environment had to be insulated from the outside world and it was here that the individual was equipped and inculcated with the core beliefs and values that enabled one to accurately position within not only the neighbourhood but the community as a whole.

The cultural codes were inculcated through a series of cultural activities, rituals and ceremonies mediated through the house courtyard as the principal staging point of this frame of reference. Therefore, this formative environment traditionally was to be insulated from communicating to the external world and one could only access this through the daka where the individual’s identity was projected to the outside world. Ghaidan emphasizes that the bare exterior of the house gave the street a ‘privacy’ of its own acting as a public lounge and an extension of the ‘madaka’ and the only embellishment of the street façade was the entrance door, whose rich decorations accentuating it as a unique element, ‘was meant to restore the identity of the house in the setting of the standardized façade’ (Ghaidan, 1976: 73 - 75).

In nutshell, the street is the gateway and link between the house on one side and on the other more public areas of the town such as the neighbourhood mosque, Bazaar or Main Street, market and town square thus for Lamu it enables the transition from the more formal environments of Lamu town to the more informal realm of the house. The narrow side streets would lead one into the neighbourhood mosques which traditionally were key gathering points or lounges cum social clubs of the Lamu town and a key characteristic of the fabric of the town. It is worth noting that the formality observed in the streetscape, in terms of street embellishment and setting and which terminates at the traditional Swahili house was to aid this transition from the public areas of the town to the more private realm of the residential dwelling. The consequences of any inappropriate conservation interventions on the street facades would therefore be to destroy this transition.
It must be emphasized that the mtaa or neighbourhood level was an important level for the expression of communal identity in a Swahili town like Lamu. This was a level which allowed an individual to identify himself or herself as a member of a neighbourhood or mtaa by participating and sharing of cultural activities and experiences that were staged within the neighbourhood. The platform of development and staging of this identity started at the home dakas and extended into the side streets connecting houses within the mtaa. This culminated in the neighbourhood mosque which was a nucleus of the mtaa socio-cultural activities from burials, special mtaa-wide prayers, weddings, communal meetings, mediation of disputes and for prayers. This was an important reference and meeting point for members of the mtaa and played a crucial bonding role for the members enabling them to identify themselves as belonging to that mtaa. The neighbourhood platform was separated from the individual level by the fact that the individual houses turned their backs to this area and access was only through the daka. Hence they functioned as public lounges of the mtaa, with scale commensurate to the intimacy required, whereby the male members of the lounge knew one another and could easily identify any outsiders. In this regard it retained a scale commensurate with the intimacy and involvement required. Therefore the vast walls of the traditional Swahili houses with minimal fenestrations as observed in Lamu side streets were so constructed to ensure these activities take place while not interfering with the household functions. Therefore any conservation intervention should aim to facilitate the continuation of these activities in their domains without impairing them in any way so as to be relevant to the cultural identity of the community.

Another symbolic element of Lamu town is the main street or ‘Usita wa mui’ or bazaar street. This is where the town’s main trading activities would take place and normally this street

19 Information gathered through interviews conducted from April – December 2011 in Lamu
usually would play host to a variety of business outlets that cater for the needs of the residents. In terms of spatial configuration, this street is different from the other streets in that it is much wider and more public that any other street in the town (see illustration in Fig 4.15 below)

![Fig. 4.15 Relationship between Main Street and Side Street (Author)](image)

This element together with the town square, market and the Friday mosque(s) were the main socialization points which would ideally bring together all the residents of the town and allow them to exercise an identity commensurate with the aspirations of the town. The community thus daily interacted in these areas as they transacted their daily needs. This in a way enhanced the solidarity among the residents of the town and hence played an important role in shaping the social and political identity of the community in a Swahili town. Thus continued relevance of the conserved Lamu's historic fabric would be dependent on the fabric being facilitative of these daily community activities and as a necessity the conservation measures should aim at conserving the social functional integrity of all the symbolic elements that make up the social cultural platform of the community’s interactions.
4.2.0 The Swahili house as a Symbolic element of Lamu Stone town Architecture and Planning.

Given that the Swahili house, in the foregoing discussion, was identified as a key symbolic element contributing to the identity of Lamu town. This section first seeks to understand the typical Swahili house spatial layout, its building technology and interior decoration and thereafter analyse the physical changes of this element. This will be done in the context of first understanding what are the community concerns relating to this element, then looking at the field data together with the historic data, obtained from the first inventory of historic buildings in Lamu done as part of a study titled ‘Lamu: A Study in Conservation’ which was undertaken in 1976 by Usam Ghaidan, and comparing with the present situation. Fig 4.16 below highlights the key symbolic element in Lamu, a typical Swahili house layout.
The above illustration depicts the layout of a traditional Swahili house. The first point of contact with a Swahili house is the Daka or Porch which is labeled as number one in the above illustration. This is predominantly a male dominated space and would normally be used by the master of the house to entertain male visitors and who ordinarily may not be long term visitors. The next space that communicates to this space is the courtyard or ‘kawanda’. This space would usually be open to the sky and in a typical Swahili household would be the nerve centre of all the activities of the household from food preparations, cleaning activities, children plays and games, storytelling, ceremonies and all activities that the particular household would be engaged in as a family. In addition the courtyard would be the venue for entertainment of any female visitor to the house.
The other place that directly leads from the courtyard is the first gallery or ‘msana wa tini’. This area would usually be slightly raised from the courtyard which was not only for drainage purposes but also this was the beginning of the private areas of the household. The first gallery of the house was used as a sitting and entertainment space during the day and a boys sleeping quarters during the night. The next space that leads on from this is the second gallery or ‘msana wa kati’ which would also be slightly raised from the first gallery. In addition this space would be dimly lit than the first gallery due to the fact that it was further away from the courtyard. The second gallery was similarly used as both entertainment and sleeping quarter but for female members of the household.

The third gallery or ‘msana wa juu’ was the master bedroom of the house where the master of the house and wife would be residing. It was usually the most heavily decorated part of the house with the back wall being decorated with wall niches for display of the family treasures and the jewellery of the lady of the house. In addition the entry to this gallery would also be decorated. Most of the Swahili houses were short of any decorations on the outside in line with Islamic teachings of not flaunting one’s wealth (Khan, 2010; Horton, 1996; Allen, 1979; Ghaidan, 1975). The master bedroom was the only area with an impressive array of decorations in the interior of the house such as shown in Fig. 4.17 below. These types of decorations adorned the inner wall of the master bedroom and would be used to display the woman’s jewellery possessions as per the illustration and accompanying photo. The display of the possession of the lady of the house in the most private of an already private residential household, buttresses the multilayer privacy gradient that exists in a Swahili town such as Lamu. Appropriate conservation measures would therefore be in tune to such considerations so that the resultant conserved fabric reaffirms the residents’ identity aspirations.
Fig. 4.17 - Typical Master bedroom wall niche decorations (Author)

The final part of the house was the storage gallery or ‘ndani’ this was where the household stores its household supplies and also where they would wash bodies of the dead.
It is worth noting that privacy was a key consideration in both the planning and use of a Swahili house and the various elements of the Swahili town. Moreover the need to shield women from the public view influenced the planning of the Swahili town. Swahili women as a tradition were never allowed to venture into the public domain, unless it was absolutely necessary, especially the town market and bazaar street. Due to privacy, the Swahili ensured that both internally inside the house and on the street no two doors faced each other; instead doors were staggered so that they don’t face each other. Ghaidan quotes Garlake describing Gedi 15th-16th Century house plans that…

“…almost always ensure that the doors of outer rooms are never placed directly opposite the doors leading on to inner rooms.” (Garlake in Ghaidan, 1975: 74 – 75).

The illustration below, illustrates the spatial relationships in terms of the privacy level and their usage in a typical Swahili town. From this illustration, one notes that the Swahili house was a predominantly female dominated domain and thus in the normal course of daily activities women would hardly be expected to be seen in the male dominated areas such as the side street, main street, Friday mosque and Town square. Further as Bishawi notes according to Islam building traditions the transformation of private and public space has cultural and gender consequences (Bishawi, 2008). Lamu’s case is not any different, moreover the exterior of the house’s plain finish, devoid of any fenestrations, was aimed at shielding this female domain from the male domain areas. Therefore, any conservation intervention that seeks to conserve Lamu’s historic fabric commensurate with the community’s values should out of necessity seek to preserve this spatial ordering so as to foster the cultural identity expression of the society and hence ensure the continued relevance and future sustainability of the conservation programme.
Fig. 4.18 Spatial relationships, usage and privacy levels in a Swahili town (Author)
4.2.1 Swahili Indigenous Building Construction

![Swahili House section diagram]

Fig. 4.19 A Typical Swahili house cross-section (adapted from Siravo and Pulver, 1986)

In terms of the building system and technology, Fig. 4.19 depicts a typical Swahili house cross section, and highlights the key areas in the Swahili house construction which are further detailed in this chapter as per information gathered in this case study. However the information gathered contradicts observations made by Horton in Shanga, that Swahili houses lacked deep footings (Horton, 1996: 40), probably this could have been true for constructions of the time, information obtained from my informants in Lamu did indicate that a typical Swahili house had a foundation height of a minimum of a man’s height that is about 1.65 to 1.95 metres. The thickness of the foundation wall would be up to two feet wide and which was subsequently built up to the ground level. The wall thickness varied according to the
required height of the house – with taller buildings requiring a thicker foundation walling (see Fig. 4.20 - Detail A below).\textsuperscript{20}

\textbf{Fig. 4.20 Detail A}

As narrated by informants, once the construction started, the process progressed in stages and after each stage the wall would be finished to a smooth level finish and left. Stage one of the construction was from the foundation up to the ground level, stage two from ground level to a man’s height, stage three from a man’s height to ceiling or roof level and final stage the roofing stage. After each stage it was reported that work was not allowed to continue until the

\textsuperscript{20} This information was first collected in a FGD in Lamu in April 2011 and subsequently corroborated by a master mason – Mr Salim Hila – who has over 60 years experience and who has worked on several buildings in Lamu and Mombasa and trained several masons all over Eastern Africa
works were rained on to allow the mortar to gain its full strength.\textsuperscript{21} Horton referred to this technique as repeated heightening of the walls over a period of time and that it may have been borrowed from Near – Eastern mud brick architecture techniques (Horton, 1996). However, from the information gathered in the interviews, this process was not only necessary to ensure appropriate bonding and strength of the walls to enable them better carry the expected roof load but also it was an adaptation that suited the environmental conditions. It is a testimony to the efficiency of this technique that we have a collection of 17\textsuperscript{th} to 18\textsuperscript{th} Century stone houses still standing in Lamu, some still in a good state. The informants further noted that as the house walls progressed, mangrove poles were introduced at every stage to further strengthen the bonding of the walls. Eventually when the walls reached the required height, a layer of interlocking mangrove joists were introduced and run the whole length of the house. This was meant to tie the walls of the house together, more like what a concrete ring-beam does in a modern house, to stop any cracks developing. The wall having reached its intended height of between three and half to four metres for a single storey house, it would be finished off ready to receive the roof slab. It is important to note that necessary window and door openings would have been made at appropriate heights and spanned at the top with mangrove joists before continuation of the wall structure (refer to Fig. 4.21 A – Detail B below).

\textsuperscript{21}See footnote 15

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{fig421a.png}
\caption{Fig. 4.21A – Detail B (Author)}
\end{figure}
The main ingredients for the coral rag construction consisted of lime (which would have been buried for quite some time to gain its maximum strength, coral aggregates and sand later during the ceiling construction the creeper ‘khoe’ would be added to acquire more strength and water proofing qualities (See Fig. 4.21B – below)

![Fig. 4.21B – Ingredients for Coral rag wall and the creeper plant for strengthening and water proofing slabs (Author)](image)

The wall would then receive a series of mangrove joists, spanning across the width of a room, set at intervals of two hundred and fifty to three hundred millimetres and parallel to each other, this frame would then in turn support a dry coral rag whose pieces would normally be almost flat on the room side. The average size of the coral stones in the dry coral rag would be about one hundred and fifty to two hundred millimeters thick. A layer of lime mortar with small coral stones would then be laid over the coral rag to close the gaps with stones of average size of about one hundred to one hundred and fifty millimeters. Two more similar layers would then follow before finally finishing with water proofing cum binder layer of either cow dung of ‘khoe’ plant. This would be pounded and rubbed in until it bonds with the slab.
The resultant roof slab would then be finished with a screed of thickness twenty five to fifty millimeters to channel water to the sides. The final roof slab which now would have a thickness of between three hundred to six hundred millimeters would be structurally sound, partly water-proof and partly supported by the mangrove joists in the short-term. It would then be left until the next rainy season when it would be given its final approval (See Fig 4.22 – Detail C below). However, in the long-term after it has attained its maximum strength, the slab would fully support itself. This was attested to by a narration in the interviews of a case of slab that has remained intact without collapsing even after most of the mangrove joists had rotten away and fallen off. This is further testimony of the rigidity of this type of construction.

There was a slight variation to the ceiling or roof construction of the more ostentatious Swahili houses where a variety of hardwoods were employed as opposed to the usual mangrove joists. This was partly due to the fact that they used the square dressed joists ‘banaa’. This allowed for better decoration on the interior which included painting. These hardwoods were mainly derived from a variety of species namely; *Terminalia brevipes* or *Mwangati*, *Brachylaena hutchinsii* or *Muhuhu* and *Afzelia quanzensis* or *Mmbambakofi* (Allen, 1974a). It is important to note that most of these hardwood species have been depleted and coupled with government ban that was imposed on the harvesting of mangrove and other...
tree species has meant that it is difficult to undertake a proper restoration of the Lamu regions Swahili houses. This is more so given the fact that even some of the houses that use mangrove joists or ‘boriti’; where the room spans were quite big these hardwood species were employed as beams to break the room span to lengths that could be spanned by the ‘boritis’

![Swahili house ceiling with ‘boriti’ and painted ‘banaa’ (Author)](image)

**Fig. 4.23 Swahili house ceiling with ‘boriti’ and painted ‘banaa’ (Author)**

In almost all Swahili settlements, not all structures were built in coral stone in fact as it has been discussed earlier, all of these settlements started off with structures built out of mud and wattle or as some Swahili scholars have referred to as wattle and daub and roofed in thatch. Gradually as they traded more and became prosperous, the wealthy among them replaced their mud and wattle structures with stone houses and with time the remaining mud and wattle structures were confined to the periphery of the settlements. These were the areas where most of the poorer members of the community lived and also where new immigrants, who had been forced to abandon their original settlements, established their residences (Allen, 1979). However, the technique itself has been in use worldwide for about six thousand years, with resurgence lately in the developed world where it is being adopted as a low – impact sustainable building technique.
The construction of the mud and wattle house was quite a simple exercise compared to the Swahili stone house, and in general they were of a simple plan. The walls would compose of a series of mangrove posts or ‘nguzo’ which were inserted into the ground normally to a depth of about two hundred to three hundred millimeters deep and at intervals of three hundred millimeters. These would later be joined by horizontal mangrove members or ‘fito’. These horizontal members would either be tied or woven at intervals of one hundred and fifty to two hundred millimeters starting from the ground level to the top of the wall which would be about ten to eleven feet (three meters to three decimal three meters). The space in between the horizontal members would then be filled with daub or mud only or mixed with cow dung to finish the construction (see photo below).

![Traditional mud on wattle frame construction common in early Swahili settlements (Author)](image)

**Fig. 4.24 Traditional mud on wattle frame construction common in early Swahili settlements (Author)**

The wall could be left bare in mud or sometimes it would receive a further layer of mud to conceal all the joints and then, as is common along the Swahili coast nowadays, be finished with a layer of coral rag or ‘mutomo’ – which was composed of stones of average size fifty to seventy five millimeters bonded in lime mortar. It is worth noting that this finish could also be applied to coral rag construction. This could either be left bare faced or receive a layer of smooth lime plaster (see Fig 4.25A and B below). The roofing to such a structure was mainly a pitched timber frame supported on the walls and possibly a centre post. This frame would
eventually receive thatch of either woven palm leaves or grass that would be tied on to the frame’s support members (Denyer, 1978; Horton, 1996).

Fig. 4.25A – ‘Mutomo’ – during construction and when completed (author)

Fig. 4.25B – Exposed ‘mutomo’ on an existing house and then covered in rough plaster (author)

The next level of survey involved finding out what were the factors that the residents felt impacted on the shaping of Lamu’s historic character and identity. For this question the response was as follows below:-
Table 3, Characterization of factors shaping the historic character and identity of Lamu

In the results for this question, culture emerged as the most important factor that was impacting on the shaping of historic identity of Lamu town. This was followed by religion and spirituality of the people then technology and building systems, spatial organization and use, town planning, social and gender issues and finally politics and power arrangements. However when similar factors combined together like having all factors associated with the built environment together and then culture factors together we get the results below:-

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Religion and Spirituality</td>
<td>15.5</td>
<td>3</td>
</tr>
<tr>
<td>Spatial organization and use</td>
<td>14.8</td>
<td>4</td>
</tr>
<tr>
<td>Social and Gender issues</td>
<td>12.7</td>
<td>5</td>
</tr>
<tr>
<td>Technology and building systems</td>
<td>15.6</td>
<td>2</td>
</tr>
<tr>
<td>Politics and power arrangements</td>
<td>10.6</td>
<td>6</td>
</tr>
<tr>
<td>Town planning</td>
<td>14.8</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4, An illustration of the factors impacting on the historic identity formation in Lamu

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural factors</td>
<td>44.2</td>
<td>2</td>
</tr>
<tr>
<td>Culture, Religion and Spirituality plus Social and Gender issues</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Built environment factors | 45.2 | 1    |
| Spatial organization and use, Technology and building systems plus Town planning | |

| Administrative factors | 10.6 | 3    |
| Politics and power arrangements | |

The foregoing results indicate that the respondents felt that factors associated with the built environment impacted heavily on the historic identity perception of Lamu, and together with the cultural factors they contributed to almost ninety percent of the overall perception of
Lamu as a Swahili town. Subsequently, the respondents were brought together including other residents in two focused discussion groups, one for male residents and the other for female residents. The object of discussion was to determine or estimate the degree of change in the factors identified in the above question and also to elaborate on the changes observed plus the possible causes and consequences of the changes. The results were as per the table below:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Observed changes</th>
<th>Causes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial organization</td>
<td>Increased alterations to accommodate new needs, closed galleries in the house, blockage of important elements in the house, compromise on privacy, addition of economic activities</td>
<td>Lack of economic opportunities, economic considerations, economic decline leading to less incomes to maintain houses, alternative sources of income</td>
<td>95</td>
</tr>
<tr>
<td>Technology and building systems</td>
<td>Adoption of speedier form of construction using new modern materials, use of poor materials, disregard of traditional materials</td>
<td>Economic considerations due to less incomes, unavailability of traditional inputs – due to mangrove and tree cutting ban, loss of faith in traditional materials, changes in attitudes due to new lifestyles</td>
<td>95</td>
</tr>
<tr>
<td>Religion and spirituality</td>
<td>Very strong religious aspect with over 30 mosques – no major changes observed</td>
<td></td>
<td>58</td>
</tr>
<tr>
<td>Town planning</td>
<td>Kiosks and increasing hawking activities, compromises on privacy</td>
<td>Economic considerations and lack of alternative economic opportunities, high unemployment, high dependency ratios</td>
<td>62.5</td>
</tr>
<tr>
<td>Social systems</td>
<td>Decline in communal discipline mechanisms, changes in lifestyles, adoption of new fashion trends</td>
<td>Lack of belief in traditional customs and culture, breakdown of cultural systems, breakdown of family support systems, western culture</td>
<td>87.5</td>
</tr>
<tr>
<td>Politics and Power arrangements</td>
<td>Changed to multiple power centres</td>
<td>Shift from a traditional city state to one under a central role with multiple role holders</td>
<td>70</td>
</tr>
</tbody>
</table>

Table 5, A highlight of the changes in factors impacting on the historic identity of Lamu town (Author)

According to the results the first factor that has contributed heavily to the change in the historic character, and where the degree of change was ninety five per cent, was
spatial organization of the Swahili house. It was observed that some of the changes that have to a large extent contributed heavily to the state of affairs include; increased alterations to the house to accommodate new needs, blockage and closing off of important elements of the house such as galleries and daka\textsuperscript{22} such as illustrated in Fig 4.26 below.

![Fig. 4.26. Blocked Dakas (Author)](image)

These changes as illustrated above were felt to be not only compromising privacy as a result of installation of new larger window openings but also led to inadequate ventilation and lighting due to blockage of courtyards and subdivision of galleries. All these changes, it was observed were attributable to a number of causes such as the need to increase income sources due to poor economic conditions, low incomes due to the fact that the area is deficient in economic opportunities. Some even suggested that the general economic decline observed in the seventies and coupled with the mangrove and tree cutting bans had necessitated them to look for alternatives and some even opted to sell the houses because they could not maintain them. They generally agreed that all these changes had collectively destroyed the

\textsuperscript{22} These factors impacting on the Swahili house will be looked at in detail in the next section where they will be contrasted with the situation that existed so as to see the magnitude of change
ambiencé and serenity of the neighbourhood by introducing public activities to areas that used to be private. This especially true for the blockage of dákas, introduction of oversized windows and the covering of courtyards forcing some activity to spill out on the outside.

The second factor, in terms of degree of change and which had the same score as the first at ninety five per cent in terms of contributing to changes was technology and building systems. This was reported to have contributed much to the changes due to the adoption of modern materials which were said to aid in faster implementation or construction of a house. Other changes observed were adoption and use of inferior materials and poor workmanship. The main cause of all this was the fact that these materials were deemed to be much cheaper than traditional materials especially after the imposition of the mangrove and tree cutting ban which rendered the traditional inputs scare hence expensive.

The next factor that was identified to have contributed to the least changes hence contributed less to the change to the historic character of Lamu was religion and spirituality. This was rated at fifty eight per cent; many of the responses were unanimous on the fact that Lamu being a traditional Muslim society had a strong religious base with over thirty mosques in the town. This was indicated not to have changed much, what had changed it was observed was the traditional usage of the mosque plus the increase of people practicing other religious beliefs. The town planning aspect was deemed to have not contributed much to the changes, but much higher than the previous factor at sixty two and a half per cent This was attributed to the there being several commercial activities that have sprung up in areas that were traditionally not meant to host these functions. These include the sprouting of kiosks
in not only the Main Street and sea front but also in the side streets within the
neighbourhoods – these were exclusively residential areas. Coupled to this it was
stated that, in addition commercial open-air cooking activities have mushroomed in
the neighbourhoods further aggravating the situation. The same causes were adduced
for this state of affairs namely, lack of employment opportunities and high
dependency ratios necessitating this state of affairs.

As regards social systems, this factor was rated to be the third largest factor to have
contributed to the change in the historic character at eighty seven and a half per cent.
This was attributable to the fact that there was an overall drastic decline in the
traditional communal discipline mechanisms and as a result the traditional way of
life, which made the town to be seen and perceived as a historic Swahili town, had
changed to a large extent. Consequently, it was observed that there was a progressive
collapse of the traditional cultural systems, as seen in the demise of many cultural
activities which were used to reinforce these systems, due to the change in lifestyles
and adoption of western cultures. Hence as a result of this there was immense
pressure on the family unit which some linked it to the loss of belief in traditional
customs and cultures.

The final factor that was examined that contributes to the historic character of Lamu
town was politics and power arrangements which were rated at seventy per cent
change. It was the general feeling of the discussants that, even though this factor had
not changed much, it was felt that the changeover of political systems had impacted
on the historic character of Lamu due to the nature of changes in the discipline and
sanction mechanisms. For instance it was observed that, where as in the traditional
city state arrangements discipline and sanction mechanisms were centralized at the
mtaa level as regards transgressions in the activities in the mtaa. In the current set up authority on the built environment is vested in a number of bodies such as the National Museums of Kenya due to the historic nature of Lamu, Lamu County Council as the final authority on development and the provincial administration for any transgressions on the streets; functions which were all handled at the mtaa elders council.

Thereafter the discussants were asked to note some of the observed changes in functions in some of the elements in Lamu town. This was meant to gauge how the changes in the spatial use could not only have impacted on the historic character of Lamu town as earlier observed but also how it could have affected the identity expression of the community. It was observed that, among the Swahili house elements the daka was traditionally used as a welcoming area for short term guests and business visitors. It was also a short term resting place and a space for Arabic lessons especially for the houses owned by religious scholars. However, currently it was being used as a sleeping area for the homeless, and due to the security concerns that this posed, some owners have resorted to blocking some of these dakas whereas in some particular cases they have been converted into commercial spaces or shops. Therefore, in conclusion this space in the Swahili house is no longer used as a social meeting space leading to not only loss of privacy but also a loss of social cohesion.

For the courtyard, the discussion observed that this area was usually the principal source of light and ventilation into the house in addition to cooling the house during the hotter months. It ensured privacy for the occupants who could carry on their domestic activities away from the prying eyes of the public. It was the main area for playing of children, storytelling and women’s work area. The discussion observed
that currently in some cases this area had been covered and partitioned to provide additional rooms. This was due to the need to raise extra income or due to space constraints. The loss of this important space in a Swahili house definitely leads to a loss of privacy of the occupants and also results in poor lighting and ventilation necessitating the installation of bigger windows at a lower level further eroding the privacy.

The next element was the street, where most agreed traditionally it used to be a space for movement and the space size was usually adequate for movement, shade and minimal interaction. It was also meant for communication, security and ventilation through appropriately placed windows. The change in this area currently is reflected in it being used more of a business area in the form of outdoor cooking and kiosks than it used to be traditionally. This has spawned a potential health hazard, causes congestion and a potential fire risk (see photo below).

![Fig. 4.27 A Makuti thatched kiosk projecting into the street (Author)](image_url)

The mtta traditionally used to be exclusively a residential area, a bonding and cohesion area of the neighbourhood for people who are related to one another. It also aided in easy identification and was characterized by sharing among the mtta
members. These functions it was noted, were fostered by the following attributes; uniformity of residences, ease of communication among the people who also shared the same belief systems. The changes that have been observed in these areas include the introduction of commercial activities as seen above, sub division of the houses and extension of some which has drastically altered the scale of the neighbourhood. In some instances communication between houses has been blocked. The overall effect of this has been the breakdown of family ties leading to a loss of community cohesion.

Apart from the mtaa, the other element that has seen some changes is the mtaa mosque which traditionally was the nerve centre of communication, a praying venue and meeting point. It was also a wedding venue for male members of the mtaa, death and burial prayer venue and a sleeping area for the homeless. Additionally it was cited as a unifying point for the mtaa members through prayers, meeting point for the elders and finally a venue for special prayers during circumcision, rains or mtaa sacrifices. These functions were fostered by the fact that the mtaa mosque was centrally located which facilitated easy communication and had adequate space. There was general agreement that much of these functions are not being carried out in mtaa mosques again such as sleeping of the homeless due to security considerations, the elders scarcely meet in the mosque and as such it had lost its function as a prime meeting and communication point of the mtaa members.

The main street or Usita wa mui, traditionally was associated with commercial activities, shopping, movement, meeting point for all the people of the town on a daily basis for men. It was the main thorough fare of the town and a relaxation area as evidenced by the number of games people participate in while patronizing this
area. These were made possible by the fact that the street had adequate space and it was centrally located.

![Fig. 4.28 Changes that have taken place in the Main Street or Usita wa Mui (Author)]

This has considerably changed, even though some of the games are still played here, the addition of kiosks and other commercial activities outside the shops has considerably encroached on the street. Moreover the patronage of the street has drastically changed with a fifty – fifty representation of the two sexes. This has not only led to the area being congested but also hazardous due to the incompatible change of use (see above photos).

The town square was traditionally used as an auction area, market, venue for town meetings, relaxation area, meeting point for all the mtaas for major meetings and venue for hosting cultural activities of the whole town. These were facilitated by the fact that the area had adequate space to allow for meetings and display of products. The current changes observed include the apparent usurpation of the traditional roles of the neighbourhood or mtaa mosque especially meeting of the mtaa people, as people find it easy to meet at the town square because of the changes that have occurred in the neighbourhoods. Otherwise other than having some ongoing
commercial activities, it has not significantly changed from its traditional functions it used to host (see photo below).

Fig. 4.29 Town Square showing some of the daily activities (Author)

The last element that was considered was the Friday mosque which was traditionally a venue for town wide prayers every Friday. It could perform this function because it had adequate space to accommodate all those who would participate in prayers. The changes that have been observed in this element are due to the fact that the Friday mosques themselves have become many in Lamu town thereby weakening the bonding effect on the community that they used to have. In conclusion, the sum effect of the above changes has been the loss of the traditional outlook of the Swahili house, loss of community cohesion as a result of the breakdown of family support systems and an overall lack of belief in the traditional cultural belief systems. The foregoing discussion in relation to the community concerns regarding factors impairing the historic identity of Lamu as a Swahili town demonstrate that the current conservation efforts might not be catering adequately for the cultural identity considerations of the community. Therefore there is need for the Plan to be evaluated, aligned with the value considerations of the community and thereafter protect that which the community consider symbolic in the cultural identity aspirations.
4.2.2 Sample historical data

The survey assessed a sample of forty-five houses that were randomly selected and which were distributed evenly over Mkomani, Mtaa muini and Usita wa mui areas. The selection was done with the purpose of observing first how the houses could have changed and impacted on some of the side streets in Mkomani and Mtaa Muini areas on one hand and on the other how the changes could have impacted on the main street. Secondly the survey aimed at observing the changes that these houses have undergone over time from before the start of the Conservation Plan, at the inception of the Plan and at the time when the survey was being done so as to confirm the community’s concerns cited in the survey. In terms of sizes, the houses ranged in size from five hundred and ten square feet to two thousand seven hundred square feet, with majority of the smaller plot sizes ranging between five hundred and ten to one thousand two hundred square feet mainly found along the bazaar street, as shown in the table and chart below:

<table>
<thead>
<tr>
<th>Plot Size/Square</th>
<th>Number of Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>501 – 1000</td>
<td>15</td>
</tr>
<tr>
<td>1001 – 1500</td>
<td>13</td>
</tr>
<tr>
<td>1501 – 2000</td>
<td>9</td>
</tr>
<tr>
<td>2001 – 2500</td>
<td>7</td>
</tr>
<tr>
<td>2501 – 3000</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6, Table showing plot size distribution (Author)
The sample had a mean of one thousand three hundred and eighty eight square feet, a median of one thousand two hundred and twenty four square feet and a standard deviation of five hundred and fifty one square feet. In terms of house orientation, given that Khan had noted that houses in Lamu were oriented Northwards (Khan, 2010: 71). This survey sought to see how this could have changed over time and came up with the following results; orientation towards North was sixty six per cent, Eastern orientation nineteen per cent, orientation towards West eleven per cent and Southerly orientation four per cent. For the internal spatial arrangements, forty five per cent had four galleries and a similar percentage had three galleries, two per cent had one gallery, four per cent had two galleries another two per cent had five galleries and another two per cent had six galleries as shown in chart below:
For the built up levels, thirty three houses representing a seventy three per cent of the sample had two floors each where as the remainder representing a twenty seven per cent of the sample had one floor. Then the survey looked at the indigenous elements like daka, wikios and other decorative elements such curved doors, wall niches, paneled end walls, trifoliate arches and dados. The results are as in the chart below:-
The survey finally looked at the service provision in the houses and noted as per the following table:

<table>
<thead>
<tr>
<th>Amenities</th>
<th>No. of Houses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>With water and electricity</td>
<td>32</td>
<td>71</td>
</tr>
<tr>
<td>With water but no electricity</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Without water but with electricity</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Without both water and electricity</td>
<td>7</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Table 7, Showing availability of services in the sampled houses (Author)

Among the surveyed houses ten had western type of toilets and sixty six eastern type of toilets.

4.2.3 Current situation

Some aspects have not changed currently, especially issues to do with orientation and plot sizes. Even the division into galleries did not change much over the thirty five year period even though there was a marginal difference but by and large the proportions remained forty five per cent for both three and four galleries, four per cent had two galleries, two per cent for one gallery, five galleries and six galleries respectively. This could be attributed to the fact that given that the structural system was already in place, and given the massive nature of the structure involved, it was practically impossible to either interfere with the orientation, the plot size or the number of galleries already in place unless the house did not fully cover the plot.
It should be pointed out that for all the houses surveyed, the plot size was the same as the house coverage on the ground with space allowed for on the inside in the form of a courtyard. However when we come to the built up levels, current situation begins to have a different picture as per the chart below:

![Chart](image)

**Fig. 4.33 Chart highlighting the changes in built-up area within sample (Author)**

Whereas during the initial inventory in 1975, seventy per cent of the sample houses were only built up to the first floor, the situation currently is that close to twenty houses or about fifty six of the sample have reached not only the first floor but up to the second floor and even an equal number have a penthouse on the third floor. Some of the very catchy examples include the following (see photos below)
This effectively means that the skyline for the sample area had shifted, over the twenty six years since the inventory was done, by upto two levels since majority of the houses had put up roof top penthouses. Next the survey looked at the indigenous elements like daka, wikios and other decorative elements such curved doors, wall niches, paneled end walls, trifoliate arches and dados which had been retained over the period under consideration. The results of this are as per the chart below:-

![Element present chart](chart.png)

This effectively means that the skyline for the sample area had shifted, over the twenty six years since the inventory was done, by up to two levels since majority of the houses had put up roof top penthouses. Next the survey looked at the indigenous elements like daka, wikios and other decorative elements such curved doors, wall niches, paneled end walls, trifoliate arches and dados which had been retained over the period under consideration. The results of this are as per the chart below:

**Fig. 4.35 Chart showing number of traditional features in sample area (Author)**

The survey also looked at the issue of service provision and amenities within the sample area as per the tables below;
### Table 8, Table showing a comparison of service provision between 1975 and 2011 (Author)

<table>
<thead>
<tr>
<th>Services</th>
<th>No. of Houses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1975</td>
<td>2011</td>
</tr>
<tr>
<td>With water and electricity</td>
<td>32</td>
<td>39</td>
</tr>
<tr>
<td>With water but no electricity</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Without water but with electricity</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Without both water and electricity</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

What the two tables show us, is that as there was an increase of provision of water and electricity supply to houses in the sample area there was also a corresponding increase in western toilets and conversion of some eastern toilets as evidenced by the decline of the same in 2011. Finally, an investigation of the materials used in these new developments and extensions was also carried out and yielded the following results (see the chart below)

### Table 9, Table showing a comparison of the amenity provision between 1975 and 2011 (Author)

<table>
<thead>
<tr>
<th>Amenities</th>
<th>No. of Toilets</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1975</td>
<td>2011</td>
</tr>
<tr>
<td>Eastern Toilets</td>
<td>66</td>
<td>40</td>
</tr>
<tr>
<td>Western Toilets</td>
<td>10</td>
<td>46</td>
</tr>
</tbody>
</table>
Fig. 4.36 Chart showing occurrence of incompatible materials in survey area (Author)

The above demonstrates the prevalence of use of foreign materials which are not prescribed for use under conservation principles. As the following photograph further illustrate, the problem seems to be wide spread.

Fig. 4.37 Casement glass windows, louvered windows and iron roof (Author)

4.3.0 Lamu World Heritage Site’s Conservation Plan

The key reasons for the development of Lamu’s Conservation Plan as adduced by Siravo and Pulver were, first to check the haphazard alterations of traditional houses with new imported materials or build new ones, as a result of changing standards of
living, and which were ill suited to the local conditions. Secondly, need to preserve Lamu’s important cultural assets especially its historical buildings and streets, its traditional skills and industries and its cultural identity. Thirdly, need to conserve Lamu’s existing building stock due to shortage of land for future expansion, lack of adequate resources to build affordable and decent buildings and increased population pressure. Fourthly, need to keep and continually use old techniques and traditional materials due to the high cost of buying and transporting modern materials. Lastly, Lamu’s historic building stock was well adapted to the tropical climate of the area and together with its town plan it provided a successful working model of a traditional urban community (Siravo and Pulver, 1986: 8). The purpose of the plan was therefore to:

1. ‘Determine the uses of land and buildings that will not undermine the special character of the old town
2. Indicate buildings, features, artifacts and other elements which will be subject to protective measures in order to preserve the character of the old town
3. Regulate all private and building activity which has an impact on the special character of the old town
4. Provide the foundation for preparation of future detailed town planning schemes within the designated Conservation Area’. (Siravo and Pulver, 1986: 155)

Due to the above reasons the Conservation Plan (see appendix I) was developed that included detailed Conservation and land use policies, a number of special projects meant to improve public buildings and spaces, conservation guidelines for building owners and builders and finally local legislation necessary to implement the conservation measures. Subsequently, a survey of the town was carried out first to classify the buildings which was as per the table below.
<table>
<thead>
<tr>
<th>Building type</th>
<th>No. of Houses</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Stone House</td>
<td>281</td>
<td>43</td>
</tr>
<tr>
<td>Stone verandah buildings</td>
<td>95</td>
<td>19</td>
</tr>
<tr>
<td>House and Shop buildings</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>Makuti buildings</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Mosques</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Contemporary Non – Conforming</td>
<td>134</td>
<td>21</td>
</tr>
<tr>
<td>Traditional Non – Conforming</td>
<td>93</td>
<td>14</td>
</tr>
<tr>
<td>TOTAL</td>
<td>650</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 10, Table showing building classification during start of Conservation Plan (Siravo and Pulver, 1986)

The second aspect of the survey was to identify historically significant buildings and elements within the streets, with the aim of identifying buildings, elements and vistas which contribute to the historic significance of the town. The third aspect of the survey was to analyse the building condition of the houses in Lamu with a view to understand the structural condition of buildings in Lamu, this went hand in hand with an evaluation of the changes and alterations of the town. Thereafter, the survey analysed the town's open spaces and other areas that could be acquired for the purpose of being turned into public open spaces.

Following the survey results, the Conservation Plan of Lamu was prepared whose key elements were namely, a land use policy that designated the town into zones. Zone one was the area around Mkomani and Mtaa muini areas which was zoned for
residential and private cultivated land. Zone two which was composed of the area between the bazaar street and the sea front was zoned for administrative, mixed commercial and residential uses.

The other key element of the Plan was a development plan that had the following components. One the designation of some streetscapes as significant based on their historical features, which required that any development that would interfere with the height and exterior finish to be expressly approved by the conservation and planning authorities. The other aspect was the restoration of ruins where permissible plus the prohibition of permits for any development that alters or endangers important historic elements like daka, wikio and carved doors. The third component related to the protection of important vistas to the harbour, fifteen of them were identified, and the protection of trees due to their rarity value within the Lamu townscape. The other key component of the development plan of the conservation area was the proposal for public area improvements for the Town square, Market square, jetty and customs complex plus the Lamu fort. These were areas which were at the main entry gateway to the town from the harbour and their improvement was necessary to upgrade the town’s view. Other areas also proposed for attention included the drainage system improvements (see map below), sea wall repairs and street furniture rehabilitation. The final component in this Plan was infrastructure improvements which included augmentation of the water system proposal, improvement of the open drain system, recommendations on the pit latrine system in use – the critical one being prohibition of installation of flush toilets without the construction of a septic tank and last being electricity supply recommendations. It is worth noting that even though the Conservation Plan’s principle aim was to check the continued modification of traditional Swahili houses and also stop the increased adoption and use of new
modern materials in house construction. The Plan did not have specific provisions for protection of the traditional Swahili house nor did it attempt to lay specific steps towards elimination of modern materials by having a regime for the adoption of traditional construction methods and materials.

Fig. 4.38 The open drain system in Lamu (Siravo, F and Pulver, A. 1986)

From the foregoing, it can be deduced that the Plan’s focus was the conservation and sustenance of Lamu’s historic fabric, the emphasis on protection of streetscapes, open spaces and the physical attributes of the town was symptomatic of this. The conservation guidelines were not any different. Much attention was given towards an orderly restoration of the built fabric in terms of repairs to walls, roof slabs and floors. Emphasis was on not only functionality and use of traditional techniques and materials but also the preservation of the exterior outlook and in most cases need to
match to existing surfaces. This approach was extended to the repair of window and door fixtures, where use of modern materials such as steel or aluminium frames, obscure or tinted glass, steel, chrome plate and aluminium hardware, steel glazing, and glass louvered windows were to be avoided. In keeping with the need to preserve the historic character of Lamu, the use of the following modern materials were to be discouraged; concrete columns in verandahs or balconies, iron sheets as side cladding for balconies and verandahs and concrete block balustrades. The Conservation Plan did not address itself to the bans of key indigenous technology materials such as the ban on mangrove cutting which was not only a key ingredient in the manufacture of lime but also was heavily used in the floor and ceiling construction in Swahili houses. This was a major structural weakness in the Plan which contradicts its aim of phasing out modern materials in house restorations. Further it is evident that the Plan did not specifically seek to protect the key symbolic elements of Lamu’s historic fabric as a means of preserving and enhancing that historic look, but instead opted to protect singular units within the historic unit such as the daka and curved doors with varying degrees of success.

4.4.0 The Status of the Conservation Plan’s performance

The success of the Conservation Plan has been somehow mixed. It has largely succeeded in improving the public areas and even some public buildings have been restored especially the Lamu Fort, the Town and Market squares. Moreover there has been a high level of infrastructural improvement especially the drainage around the town square, the sea wall was rehabilitated and street furniture has been installed in number of areas including street lighting. Furthermore, National Museums of Kenya has sponsored a number of donor funded restorations of private houses which were restored as per the plan’s guidelines and examples include the ten houses restored
under SIDA funding in the 80’s and the sixteen houses restored under the European Union funded Community Conservation Fund in the year 2000. In all these instances, improvements were also done to the exterior pavements and drainage channels. This did not escape mention from my informants in Lamu, who said thus National Museums of Kenya efforts have succeeded in conserving important buildings within Lamu and have served to enhance its historic outlook. They however noted that further, there was limited success in integrating indigenous building techniques in the process as evidenced by the numerous buildings being restored or coming up using modern materials which they thought were not allowed under the conservation guidelines.\textsuperscript{23} Even though the lan’s successes achieved in improving the public areas and the few places where specific projects were implemented is laudable, however it is in the larger Lamu town environment where the individual developers and house owners’ ignorance, omission or refusal to abide with the laid regulations collectively affects the historic character of Lamu where it’s achievements are called into question. It is not in doubt that changes have occurred in Lamu and it is acknowledged that some of these were done contrary to the specifications contained in the conservation guidelines. These changes include the flouting of the three storey rule (ground, first and second floors) which was meant to preserve the character of the historic skyline of Lamu. The table below shows the changes in the massing of the town by combining data from the initial survey in 1975, the pre-plan survey data in 1984 done during the preparation of the conservation plan and the current situation as obtained during the research study survey.

\textsuperscript{23} Lamu informants interviews held in March – April 2011 in Lamu.
<table>
<thead>
<tr>
<th>Houses with</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1975</td>
</tr>
<tr>
<td>Ground Floor</td>
<td>63</td>
</tr>
<tr>
<td>First Floor</td>
<td>37</td>
</tr>
<tr>
<td>Second Floor</td>
<td>0</td>
</tr>
<tr>
<td>Third Floor</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 11, Table showing changes in Lamu stone town building height (Siravo and Pulver, 1986; Ghaidan, 1975; Author –Field Survey)

From the table it is clear that the massing of the town is increasing beyond the limits set by the Plan guidelines which set the historic skyline limit to three levels so as to be within the human scale. Even if one was to dismiss the findings made from the sample of forty seven houses, general appearance of the town as observed shows a general trend backing the results and even the community noted this in their remarks in the interviews, Lamu’s skyline has changed considerably. In the photo below of Lamu’s skyline shows a number of houses which have pent houses or resting platforms on the fourth floor.

Fig. 4.39 Lamu’s skyline (Author)
4.5.0 The Development Approval Process and Approvals Incompatible to Lamu’s Historic Character.

This research study observed that it is in the area of usage of materials deemed to be unsuitable to Lamu’s historic character together with the developments that end up endangering the historic streetscapes where the implementation of the Plan appears to be failing.

Approvals that have been sanctioned under the Plan include use of steel burglar proofing and a curved door on blocked daka as shown in Fig. 4.40 below.

Fig. 4.40 A curved doors installed on a blocked daka and burglar proofing on the bazaar street (Author)

Even though the Plan’s intention was to preserve the elements that contribute towards not only to preserving the historic character and streetscapes but also preserve the cultural identity, its performance in preserving the same on the streets is debatable as evidenced by the number of alterations and finishing which has completely changed the character and use of the streets.
After observing what has happened on the Lamu townscape, the research study examined some of the approvals implemented under the Conservation Plan to try and find the answers to what was happening to the urban fabric. According to the Conservation guidelines, the approval process was envisaged to be multi-stage with time given for an informal consultation with the Lamu World Heritage Site Conservation Office (LWHSCO) before lodging a formal application. Then after the office receives and scrutinizes the application, they were supposed to make a recommendation for approval to the Lamu Town Planning Commission (LTPC). The LTPC was to deliberate on the application and if found in order give a permit for development, if not they were to reject with reasons. There was an appeal process where one could seek a review at the Lamu Supervisory Planning Board (LSPB) that was to meet twice in a year to review all rejected applications whereby all the aggrieved parties were to defend their applications in light of the comments from the LTPC. After being satisfied with the application they could either recommend for approval, in which case they would approve and send to the LTPC for a permit or reject and direct the developer to make a fresh application incorporating the elements required. The process was as represented by the chart below
There was no specific role in the approval process for the local authority which is the Lamu County Council except through the Local Town Planning Commission. Therefore it was envisaged that there will be three levels at which the requirements of the Conservation Plan will be vetted whereby any omissions were to be noted and flagged down for correction before the next stage of the process. Stage one was when there were the informal consultations and the developer would be advised of all the requirements for before finalizing his or her plan for the works. The second level was when the application was submitted to the LWHSCO, where all the requirements would be assumed to have been met, however in the event that this was not the case the applicant would be given a chance to amend before it is recommended for approval. The third level was when the application landed at the LTPC, where after due scrutiny to ensure that it had met all requirements it would be approved and issued with a development permit. In the event that it did not meet all the
requirements, the developer’s application would be rejected with reasons as to why. The third level was when the developer defended his or her application before the LSPB.

4.5.1 Approvals Infringing on Privacy

It was observed in the research study survey that there were a number of development approvals granted which allowed a number of houses to have a series of large windows opening to the street and also which were placed at a low height. Consequently, this arrangement allowed house residents to view the goings on in the street and vice versa. A sample of this scenario is best illustrated below by Fig.4.42 of some of the approvals done in the conservation area.

![Fig. 4.42 Examples of House Approvals Compromising Privacy (Author)](image)

These kinds of approvals as depicted in the foregoing illustrations compromised the socio-functional integrity of the street and not only impaired the privacy of the house environment but also interfered with the transition from the ordered formal and public areas of the town to the informal and private realm of the house. The ideal conservation measure would have been to set limits on the size and placement of the window openings so as to ensure the continued socio-functioning of the street space.
4.5.2 Approvals that interfere with the Traditional Courtyard Layout

It was also observed that there were several development approvals that were sanctioned by the Conservation Office that interfered with the traditional courtyard as contained in the Lamu houses. This development in essence denied the residents an internal living area that shielded them from the street but also impaired the effective ventilation of the house. Moreover denied the house adequate windows to ventilate the various rooms, as the traditional courtyard served as a ventilation system for the interior rooms by channeling chilled evening breeze into the rooms while letting out hot air from inside. The blocked courtyards hampered this and are best illustrated in the sample of approvals below in Fig 4.43.

Fig.4.43 Approval showing conversion and covering of courtyard (Author)

The courtyard is a symbolic space within the Swahili house which is also critical in maintaining privacy by providing ventilation and daylight. The impairment of this critical space within the traditional Swahili house also marks the deterioration of the privacy and ventilation arrangements of the same. The survey highlighted the community concerns as regards the continued blockage of this important space and
what that portends for the dwindling of space for the organization of private family functions which are crucial for the socio – well being of the individual in Lamu society.

4.5.3 Approvals Impairing the Functioning of Culturally Significant Elements

The survey also found out that there are a number of approvals that were sanctioned that either destroyed, blocked or impaired the functioning of cultural significant elements such as dakas, side streets or even the main street. The blocked dakas interfered with the performance of the traditional Swahili house by denying space for activities that were usually expressed on the outside such as welcoming of short term guests and visitors and thereby forcing these to move to the inside of the house.

Consequently, this impaired further the privacy safeguards of the overall house and hence impeded the socio-cultural development of that particular household. Even though these kinds of alterations were not to be allowed in Lamu under the Conservation Plan, they have nevertheless been implemented. The resultant built fabric is therefore at variance to the community’s cultural identity expression due to the shrinkage or destruction of important socio-cultural platforms necessary for the projection of the cultural identity of the society. Some approvals like Fig. 4.44 below which hinder the effective use of the street, also contribute to this state by impairing the socio-functioning of these important Lamu Town’s symbolic element. The unchecked proliferation of commercial activities on these symbolic elements have denied the community the effective use of the same as they participate in socio – cultural bonding activities that aid in the consolidation and expression of their cultural identity.
4.6.0 Constraints Impeding the Conservation of Lamu’s Key Symbolic Elements

One factor that was observed in the study and that has significantly hampered the Conservation Plan’s ability to conserve Lamu’s key symbolic element was lack of use of traditional materials and techniques. This has been attributed to the high cost of these materials compared to modern materials and techniques. The assumption that traditional inputs were cheaper was a true reflection of the state of affairs then during the Conservation Plan formulation as the cost of transportation of materials was quite high due to the insecurity on the Malindi – Lamu road. Consequently, the whole Plan was made with an understanding that traditional materials should be employed in house restorations and construction as it would lead to lower costs of realization of such projects. However, the reality currently has proven otherwise as first the insecurity has been controlled and road transportation has been significantly improved resulting in the cheaper sourcing of modern materials. This coupled with the fact that such materials are brought in bulk has meant that the unit cost has become even cheaper.
Conversely for the traditional materials such as lime and mangrove and other timbers, there are a number of factors that have conspired to make them more expensive. The first being the fact that mangrove and other hard woods have being the subject of harvesting bans and can only be harvested upon securing a permit from the forestry department. There are no clear cut rules for securing these permits, meaning that the well connected dealers are the ones who end up getting them and hence seek to maximize their returns. This in effect has not only made these inputs scarce but also increased the prices significantly. For the case of lime, the supply the situation has not only been aggravated by the fact that there are already bans for the mangrove or other forest timber which it requires in large quantities to be produced but also the fact that there are licenses required before the actual production. When eventually it is produced and as Allen noted, the quality is usually compromised by the fact that it is cooled or slaked with sea water so as to be able to get a quick return on the investment (Allen, 1996). Moreover given that most of these materials are brought to Lamu in small quantities by boats the unit cost ends up being much higher as there are no economies of scale. The total effect of this is that the eventual unit cost of replacement or building a new house using traditional materials ends up much higher than when the same is executed in modern materials. The foregoing is a consequence of the lack of a strategy being put in place, through the Conservation Plan, to ensure that traditional building materials are available at an affordable price which would specifically address the factors that hinder their production. Therefore the inability of the Conservation Plan to address itself to the harvesting ban on mangroves and restrictions on lime burning, despite the fact that it was the Plan’s stated aim of ensuring continued use of traditional materials as opposed to modern materials in house constructions and restorations, is a major structural weakness of the current Plan.
The other factor is that, and this together with the above was severally referred to in the interviews\textsuperscript{24}, it takes a longer time to not only do a restoration or build a new building employing traditional materials than an equivalent one done in modern materials. The reason being traditional materials, especially lime takes longer to acquire its maximum strength as opposed to cement which takes a very short time to gain a big percentage of its maximum strength. Therefore a slab constructed in traditional materials would take longer as they allowed each layer to harden and gain strength before proceeding with the next layer as opposed to constructing the same slab in concrete which requires a day to be cast. This consequently means that the developers or owners end up spending more on labour to undertake the restoration or do new construction of a building using traditional means thereby increasing their overall costs and minimizing returns on their investment. The biggest drawback to this is the fact that no alternatives were put in place or explored as the assumption was that these materials were cheap. Hence as a consequence of this, no attempts were made at understanding the different implementation characteristics of the materials and devise a way of surmounting the envisaged obstacles. The ultimate result has been that the conservation of key symbolic elements within Lamu’s historic fabric has suffered as the cost consideration plays a decisive role in influencing utilization decisions of the available scarce resources owned by the community members. This may not necessarily have been the case had the current Plan incorporated a strategy of continuously researching on and updating of the traditional building methods and techniques with a view to making them much faster, cheaper and be able to produce a better aesthetic product in line with the community’s cultural identity aspirations.

\textsuperscript{24} Interviews with informants in Lamu in March to April 2011
The other major factor hampering the conservation of the key symbolic elements is that, even though these elements may have been acknowledged within the Plan as contributing to Lamu’s historic fabric, however it contains no specific conservation measures aimed at their protection. The loss of privacy and hence effective functioning of the Swahili house would have been avoided by the explicit protection of the haphazard alterations of such elements as the courtyard and daka in the Plan. Moreover, for effective protection of the Swahili house there was need for fortification of this element by linking the change of use process and approval of other uses within the residential quarters with the approval of any alteration or extensions. In this way not only would the primary traditional functions have been protected but also the layout and traditional functions of the neighbourhood or mtaa would also have been protected. With the protection having been explicitly included, the key symbolic elements would then have been protected against alterations that endanger their traditional functions as contributors to Lamu’s historic fabric. Therefore, issues like the mushrooming of kiosks in the Usita wa Mui, and the mitaa streets or the use of large window openings that comprise privacy or the blockage of dakas and covering of courtyards would have been controllable. However, the lack of explicit protection of these key symbolic elements is not the only problem hampering their conservation, the mode of approval and enforcement has contributed significantly to their destruction. The current approval process seems to have less control over developments pertaining to the conservation or alteration of these key elements. It may therefore seem that major alterations of these elements which are key to the historic character and identity of Lamu as a Swahili town are taking place sometimes without the involvement of the conservation office.
The final major factor impeding the conservation of Lamu’s key symbolic elements that contribute towards the historic character of Lamu is the overall change of lifestyles of the community. As noted by Joffroy,

“…traditional conservation practice capacity has been reduced by changes in the social environment, new trends in lifestyles, new needs and priorities such as education within the population” (Joffroy, 2005: 4).

This is particularly true for Lamu, where the application of traditional materials and techniques in the restoration of key symbolic elements has met consideration resistance due to the community’s apparent lack of faith in traditional beliefs and customs. This has consequently led some to view the traditional materials as not reflective of their status and lifestyles and as such view such materials and techniques as backward and not representative of their progressive status.

The foregoing issues amplify the need for a suitable Conservation Plan to be in place, which explicitly anchors the protection of the symbolic elements of Lamu’s historic fabric as a key pillar of the Plan so as to ensure their continued functioning in the social – cultural framework of the town. Further in such a Plan critical buy-in has to be ensured by not only the bodies that would be implementing the plan that is LWHSCO and LCC, which is critical as it is the one mandated to gazette and implement by-laws, but also the community who is the consumer and user whose cultural identity the conserved fabric ought to express.
4.7.0 Chapter Conclusion

The foregoing demonstrates that Lamu is a typical Swahili town which grew to a height of prosperity in the 17\textsuperscript{th} and 18\textsuperscript{th} Century just like other Swahili settlements along the East African coast. Even though it declined, towards the start of end of the 19\textsuperscript{th} century, it managed to retain a good collection of stone houses which are still well preserved unlike other Swahili towns. This uniqueness led to its being listed on the UNESCO World heritage list on the strength of three criteria the most critical being its graphically demonstration of the cultural influences that have come together there over several hundred years from Europe, Arabia and India which were synthesised by the traditional Swahili techniques to produce a distinct culture.

However, it seems that the current state of affairs may threaten to destroy this rich cultural heritage collection with a variety of pressures bearing on this historic fabric, chief among them being population pressure where it is estimated that by 2015 thirty five per cent of the urban population will be residing in the town. The pressures appear to be further compounded by the fact that it is the foremost urban centre with a big potential for employment opportunities, a situation which may worsen with the construction of the second port in the Lamu archipelago. However, it seems that this may be the fuel that propels further the property buying frenzy that has gripped the town since the listing of the town on the UNESCO World Heritage site and which threatens to disposes the locals of all their stone houses.

The Conservation Plan of Lamu World Heritage Site was set up precisely due to the above reasons and which has been in existence since 1987; its initiation was to among other reasons check the haphazard alterations to traditional houses and use of modern materials that were ill suited for the local environment. Also given that it was
assumed that traditional materials were less costly than their modern equivalent, the Conservation Plan was to not only conserve the historic building structures in the face of scarcity of land and lack of adequate resources but also use it as an avenue to promote indigenous building industries and skills so as to enhance the cultural identity expressed by these assets.

It was with this in mind that the designers of the Conservation Plan opted to anchor the same on two pillars; one a land use plan that zoned the town in two, zone one an exclusive residential and private garden cultivation area concentrated around Mkomani and Mtamuni areas and zone two for administrative, mixed commercial cum residential area on the strip of plots bound by the main street and the sea front. The other pillar was a conservation development Plan that had six key components namely; a designation of historic streetscapes and their protection, selective rebuilding of ruins to enhance streetscapes, protection of vistas from the main street to the harbour, denial of permits for developments endangering historic features such as daka, wikio and carved doors.

The other component of the Plan related to Lamu infrastructure improvements including drainage systems, sea wall rehabilitation, public sitting areas and street lighting. The last component was the improvement of public areas including the town square and market square plus other important public buildings. It may be deduced that the overall emphasis of the Plan was protection of the exterior aesthetic qualities of the historic fabric and its enhancement through use of traditional materials and techniques. The Plan seems to have left out the protection of the symbolic elements of Lamu, elements which form the socio – cultural platform from which the
community expresses its cultural identity and also that give the town its historic identity.

The existence of these elements was confirmed by the community position, which rates the following key symbolic elements of town’s historic fabric, Swahili house, side streets, town square, Friday mosque and the main street, in terms of the order of priority in their contribution towards the identity of Lamu as a Swahili town and hence representing their conservation priorities. Further it appears the community position also emphasized on the need for the conservation process to focus on the factors that contributed significantly on the shaping of the historic identity of the town which were mainly first; spatial use changes occurring within the town’s stone houses, technology and building systems used in implementing these alterations and extensions and overall town planning regime plus cultural factors which included the community traditional culture and belief systems, religion and spirituality and finally social and gender issues. In their view this contributed over ninety per cent to the historic character of Lamu. It is important to highlight the fact that the community feared the continued alteration of the symbolic elements within the town not only interfered with the privacy within the various households but collectively affected them as a community as it denied them a platform to exercise and express their cultural identity.

Further analysis reveals that the community’s view point, was based on the fact that some of the spatial changes taking place appeared to be impacting negatively on the traditional usage of these elements. Some of the cited changes which have been demonstrated in the foregoing and were said to be impairing not only the usage of the elements but also on the historic identity of Lamu include; increased alterations and
blockage of key features and parts of a traditional house such as the daka and courtyard which were said to compromise on the privacy, leads to poor ventilation and lighting and more importantly loss of a cultural identity formative arena. In view of the above effects, it was shown that protection of the traditional Swahili house was necessary so as to ensure key elements such as the daka, courtyard and size plus position of fenestration are not interfered with so that it continues its socio – cultural function.

Other changes that have been described in this chapter in support of this view point include the introduction of commercial activities, kiosks and open air cooking activities within the streets and residential neighbourhood in general. These changes it was argued served to convert an area hitherto reserved for community bonding and cohesion to being a commercial space thereby denying the community a point of family unification and precipitating a breakdown of family bonds. These changes were also linked to similar changes and conversion of functions in other elements of the town such as the neighbourhood mosque, town square, Friday mosque and the main street. The overall effect of these changes in spatial use, as per the community’s perspective, led to the loss of the traditional outlook of the traditional stone house, loss of community cohesion and overall lack of belief in cultural belief systems.

Judging the Conservation Plan in terms of the status of the Lamu’s historic fabric, there appears to be some mixed results so far with a lot of success credited towards improvement of public spaces such as the town and market square, improvement of the seawall and the sea front public sitting areas plus the drainage works improvement. Other than this, the donor funded projects seem to have had a concentrated impact and demonstration of the benefits of the conservation process in
terms of its effect to Lamu’s historic fabric. The community appears to be in agreement with the programme being successful in these areas and particularly halting the deterioration of the town’s building stock and provide impetus in house restorations.\(^25\)

However, it may seem that there was limited success in controlling the town’s quest to go higher, with the height of the stone town’s houses having risen from fifty seven per cent at first floor and six per cent on second floor at the start of the conservation programme to the current situation where fifty three per cent of the houses are at first floor, eighteen percent on second floor and ten per cent at third floor; this level being one storey more than the prescribed maximum level in the Conservation Plan. This massing change seems to have been accompanied by a shift from the use of traditional amenities to modern ones. The adoption of new modern amenities was not the only trend that appears to have emerged from the results, as also over the same period there seems to have been a decline of about twenty to fourty per cent of retained traditional historic features such as carved doors, daka and wikio. More worryingly however and in contrast to the intentions of the Plan, there seems to be an upsurge in the usage of non-traditional materials in 2011 such as corrugated iron sheets, concrete canopies, louvered windows and iron roof window hoods ranging from a low of fifteen per cent to a high of fourty per cent for some materials. The results seem to show a trend where there is a gradual decline of usage of traditional materials and a corresponding increase in the employment of modern materials and techniques accompanied by an increased installation of modern amenities. Cost may be cited as a key contributing factor to the above scenario; since the apparent low

\(^{25}\) Interviews with the community March – April 2011 in Lamu
cost, ease of construction and coupled with the attractiveness of new modern materials may have convinced most developers to adopt them in favour of traditional materials and techniques which seem to be costly and take a much longer time. It was noted that the absence in the Plan of a strategy that addresses the availability and pricing of the traditional building inputs together with an ongoing strategy of research and updating of the traditional building techniques is a weakness that has contributed to the upsurge in the adoption and use of modern materials and techniques.

The foregoing results demonstrate the mismatch in priorities between the apparent focus of the Conservation Plan which prioritized on the preservation of the town’s historic fabric’s aesthetic qualities and the community whose focus is on the retention of key symbolic elements of the town which are the centre of the community’s way of life and spirit of the town. Another possible way of explaining the state of affairs is, given that the Plan contains no specific measures for the protection of the town’s key symbolic elements from alterations and changes that may impair them from performing their traditional functions, there is no tool within the approval system to stop developers from undertaking the kind of actions that are so far being witnessed. Further, it may be argued that the apparent changes in life style of the Lamu people, where they consider the modern western oriented lifestyle to be more attuned to their way of life, may have given justification to discard traditional materials and techniques which to them seem to represent traditional customs, beliefs and culture to which they no longer owe allegiance to. Another contributing factor could be that the approval process in missing these changes may be operating in ways not envisaged due to absence of stakeholder buy-in of the Plan which is critical for the success of the programme. This scenario could have been
addressed had the development of the Plan been through a broad stakeholder participation and ownership where the potential benefits were enumerated and fully understood by all stakeholders.
CHAPTER 5

ANALYSIS OF RESEARCH FINDINGS

This chapter, through the analysis of the results and findings of the case study, will seek to show if there exists a link between the conserved Lamu Stone Town architecture and the Lamu society’s cultural identity. This would be through an analysis of the findings of the key identity and symbolic elements in Lamu’s architecture and planning and their relationship to the conserved built fabric. This would be with the aim of finding out the principal pillars as identified in the study that underpin the conservation of the Lamu’s historic fabric and how these relate to the identified symbolic elements and by extension of the Swahili community’s cultural identity. Thereafter the retention status of these key elements within the conserved Lamu town’s historic fabric will be discussed as a way of gauging the capacity of the current Conservation Plan to reflect the community’s aspirations in its conserved architecture. This would serve to put in perspective the factors that hinder the integration of indigenous building technologies and which not only hold the key to the conservation and retention of the important identity and symbolic elements of Lamu’s historic fabric but also the best methods that can capture the essence of these elements. The discussion would also weigh the findings against the assumptions and theory arrived in the literature review. A discussion of the current operational support environment of the Lamu World Heritage Site Conservation Plan would then follow. This discussion will attempt to understand the essential support factors that would aid in the alternative conservation model framework and which would have the best chance of conserving and enhancing the identity of Lamu stone town as a historic Swahili town and thereby reflect the community’s cultural identity. The chapter then ends with a conclusion of the issues raised in the chapter.
The Lamu Conservation Plan’s original intentions were primarily to conserve the traditional stone houses through application of traditional materials, techniques and skills which constituted the most important assets in Lamu’s historic character. This was with the aim of guarding against destruction occasioned by mounting population pressure, shortage of land and scarce resources among others. However, it appears from the onset identification and setting of the key symbolic elements within the town’s historic character as an anchor for the Conservation Plan was not made but instead the Plan identified for protection key physical features that enhanced the visual physical beauty of Lamu town. It is worth noting that these physical elements such as dakas, curved doors and streetscapes on their own had no symbolic meanings within the historic Lamu built fabric other than for ornamental purposes.

Therefore the emphasis was on the visual exterior beauty which was not to be reflective of the society’s identity of the time as opposed to anchoring on the symbolic elements whose conservation would have ensured the conservation of the historic identity of Lamu. Moreover as opposed to solely relying on the historic values of the town, the Plan seemed to have ignored the use values the community attach to Lamu’s built fabric such consideration would have yielded a conservation strategy that was in harmony to the community’s daily aspirations. This vindicates the assumption of the research in the Plan not seeking to attach a heritage meaning and function to the conserved fabric, as opposed to merely concentrating in on aesthetics and vistas.

Moreover given that the traditional materials, techniques and skills originated this architecture and hence would ensure its conservation and so as to guarantee the success of the Conservation Plan, it was probably more important to understand the
contextual factors that underlie their production, adoption and usage to allow for the proper formulation of a framework through which they could be integrated in the conservation process. Therefore the lack of a strategy, within the Plan, to address the supply and pricing of traditional building inputs in addition to the continuous research, update and integration into the mainstream conservation of traditional building techniques primed the Plan for limited success in its stated aims of countering the continued adoption and use of modern materials and techniques in conservation. The inclusion of such a strategy in the Plan would have ensured that the historic identity of the town is sustained by the application of materials and techniques that are compatible to its core fabric.

Another key area of emphasis ought to have been aimed at understanding the historical development and approval support processes which would have facilitated the development of an approval framework that stood the best chance of success in delivering on the conservation of Lamu town’s historic character and also to be able to contain the potential political risks that might emerge. This would have ensured that there is not only a link between the indigenous building practices and the conserved identity but also a Lamu conserved architectural fabric that is reflective of the community’s cultural identity.

5.1.0 Analysis of the Identity and Symbolic features of Lamu Stone Town

From the results of the last chapter, one of the elements that emerged as a key symbolic feature of Lamu stone town is the traditional Swahili stone house. Its importance has been highlighted not only in terms of the role it plays in the community's way of life but also its significant contribution towards the town’s historic character. Going back historically and as indicated in Chapter 2 the
traditional Swahili stone house occupied an important position in the context of the socio-political arrangements; in fact it was a symbol of guarantee and acceptance of one as a member of the elite class or original owners of the town the ‘waungwana’. Allen attests to the fact that it was a symbol of the permanence, solidity, continuation of generations and a key consideration for political power (Allen, 1979: 5). Taken collectively, it was the collection of these houses and their potential security connotation that drew trade to the town and made it one of the most important city states in this part of the Lamu archipelago in the 17th to early 19th Century and enabled it to be listed on UNESCO World Heritage list under criteria (iv) (see appendix II).

Further, and as highlighted in Chapter 4, it was the unique collection of these traditional stone houses in Lamu, and what currently the town is known for worldwide, that gave the impetus to initiate the Conservation Plan and later on its inscription on the UNESCO World Heritage List. The traditional stone house importance does not end at its solidity of construction and aura of permanence only, but also the vital formative role it used to perform as a nucleus of the Lamu town’s way of life. It was further highlighted in Chapter 2 that this used to provide the basic building block of not only the town’s planning but also the community’s cultural identity as it is within the confines of the house that the ethos, beliefs and customs were inculcated in the individual. It used to perform a crucial role of nurturing the community spirit, and it is this spirit which has been shown in the preceding Chapter to be lacking in Lamu today and which ought to be reawakened in any Conservation Plan of the town that seeks to preserve its historic identity. These functions collectively together with the support mechanisms, as highlighted in Chapter 4,
anchored in the other town symbolic elements is what informs the use values that the community associates with the Lamu townscape.

Further the case study in Chapter 4 has indicated that there have been immense changes to this element over the intervening years in terms of not only the physical aspects but also its traditional role as an incubator for an individual’s cultural identity. The results show that it is out of this consideration that the community in the interviews ascribed it to be accounting for over fifty per cent of the historic character of Lamu town and also the identity as well. It was further shown in Chapter 4 that this element has undergone a number of changes that has not only impaired its traditional functions but also compromised its key attributes such as privacy which is of primary concern to Lamu society. It has also emerged in the preceding Chapter that the current Conservation Plan sanctioned the changes on this element with the attendant impairment of its functions. Fig 5.1 below highlights some of the core the functions of the traditional Swahili house and its relationship to the outside which have been impaired by some of the approvals that have been granted under the current Plan.
Consequently as a result of the observed changes, the conserved built fabric will not only be at variance with what the community considers to be significant but would also be unrepresentative of its cultural identity which it ought to represent.

The other key elements, and which are considered together because of their complimentary roles, are the side streets, neighbourhood or mtaa and the neighbourhood or mtaa mosque. It has been shown in Chapter 2 that these elements historically, and especially the mtaa, defined the basic political representation block and was composed of a group of people who were closely related to one another. Due to this consideration, the mtaa had to develop a system of dispute resolution mechanism that would not only keep harmony within the neighbourhood but also relay down important edicts coming from the town council. Moreover, it was also important for the unit to have a central point for communication, dispute resolution,
welfare matters, general meeting and other community bonding matters; these functions were accomplished at the neighbourhood mosque. This study in Chapter 4 has reaffirmed the fact that, these elements acted as the principal area for the solidification of the cultural identity of the community and performed crucial functions that sustained and strengthened community bonds within the neighbourhood. Moreover the interrelationships in space of these elements and accompanying usage evolved to suit the local context. This affirms the initial study assumption that; even though they may have been borrowed from external influences, their overall design developed to accommodate specific symbolic, ritualistic and aesthetic functions of a particular Swahili society such as Lamu’s need to fulfil both African and Islamic ceremonial functions and spiritual beliefs.

Further the initial part of the case study in Chapter 4 has validated the fact put forward in Chapter 2 that these elements together complimented the functions of the Swahili house and took them higher in forging the cultural identity of the people. In a sense, all these elements enabled the traditional Swahili house to execute its physical functions by ensuring adequate privacy, ventilation and security while also complimenting its core function of individual identity formation by offering a forum for the cultivation and bonding of the community or neighbourhood identity. Physically, it was the uniqueness of the structural amalgamation of these units within a mtaa that gave Lamu its unique identity within the Swahili towns. This made it have an identity that made it worthy of being listed on UNESCO World Heritage List in 2001.

The preceding chapter has further demonstrated that it was in view of the above considerations, that the community appears to be alarmed at seeing the disruptive changes occurring within these areas which would serve to completely transform the
physical attributes of these elements and thereby change the physical links that the community cultural identity formation relies on. More importantly, judging from the results in Chapter 4 one sees that the changes seem to hamper the said cultural identity consolidation while at the same time injure the expression of this identity in the town’s architecture. The importance lies in the fact that it is a crucial stage in the building of the community’s cultural identity which in turn gives form to Lamu’s historic identity. The illustration below highlights how the various changes have impacted other use values such as privacy of the houses and also the side streets’ ability to function as an extension of the lobby (as described in Chapter 2) and thus impair the neighbourhood social activities that used to occur in the streets.

![Illustration of Approvals that impair House and street privacy](Author)

The foregoing reaffirms what has been demonstrated in the preceding chapter that these elements ought to have formed the anchor of the Conservation Plan due to the fact that they were central in the identity construct of the community in Lamu. It was not only confirmed in the literature study but also the actual case study and
interviews carried out that these symbolic elements were the basis on which the socio–cultural interactions of the community of Lamu were based on. Further it has emerged that any interference or impairment on any of them would interfere with the community identity formation, consolidation and eventual expression. The foregoing affirms the research study’s initial assumption that the current Conservation Plan, seems to have neglected the need to take into account the local cultural heritage’s symbolic and cultural values in the conservation of Lamu.

Moreover, the foregoing chapter has not only highlighted the declining privacy levels in these elements due to numerous alterations that has made them ineffective in discharging their traditional roles but also for the case of the streets the numerous commercial activities has meant that they can no longer serve as private lounges. Furthermore these commercial activities have severely restricted the effective street space thereby hampering the possible cultural activities that used to occur in these areas, this scenario is illustrated in Fig. 5.3 below. Similarly other elements which were highlighted in Chapter 2 and have emerged in the case study as important in Lamu’s architecture and planning the town square, Friday mosque; these historically were points of mobilization for the whole town population and as per the community’s view point do not affect much the physical aspects of Lamu’s historic fabric, given that they have not undergone changes that would severely impair their core traditional functions.
Fig. 5.3 – Restricted Main and Side street space (Author)

In the area of the community way of life other issues were observed regarding the nature of use of some of the elements that has in turn impacted on the overall feeling of solidarity of Lamu people especially in relation to the Friday mosque; however this is an issue that cannot be managed through conservation of the physical aspects of the town. The case study in Chapter 4 has identified the main street not only as a key artery of the town and which performed a crucial function as a commercial and meeting cum relaxation area; activities which are still being performed but it’s the nature of spatial requirements of these functions which appear to be of concern to the community and consequently has become an obstacle to fortifying their cultural identity. Therefore to the community this artery is still key in the value association in terms of what is significant to them hence its continued change does not augur well to their continued use of this element in their daily life.

In totality these elements aid in the expression of two key things in Lamu; one the town’s historic identity as represented in the physical attributes of these elements and
two the cultural spirit or essence of way of life of the community, that rides on the
use values that they ascribe on each of these elements, which is key to the
community’s cultural identity. Their conservation therefore guarantees the
conservation of the town’s historic character as a Swahili town and one that is
representative of the community’s cultural identity. The results in Chapter 4 answers
the research question posed at the beginning of the study that a conservation
approach that has not been contextually adapted cannot contribute to a sustainable
conservation of Swahili architecture and towns reflective of the identity and
symbolism of the people. This is demonstrated by the fact that, even though there has
been some gains in terms of the restoration of important monuments within Lamu’s
historic fabric and also improvements in the town’s streets and public spaces, the
inability of the Conservation Plan to protect the key symbolic elements and by
extension the community’s way of life has robbed the conserved fabric the spirit that
embodies the cultural identity of the community.

5.2.0 Integration Status of Indigenous Building Techniques in Lamu Stone Town’s
Conservation

The research results demonstrate further that the retention and conservation of key
symbolic elements in the Lamu Stone town’s conservation appears to suffer from the
adoption and utilization of modern materials; not only has this trend seem to have
undermined the historical character of the town by changing the overall appearance
of the town’s skyline but also the materials are not compatible to the historic
environment. This has been aggravated by the fact that modern materials and
techniques have made it easier to destroy these historic features as demonstrated in
the illustration in Fig 5.4. In this illustration the adoption of modern technology and
materials has not only changed the town’s appearance in terms of exterior finishes
but also given scope to utilisation of bigger openings which as earlier mentioned in this chapter has impaired the privacy levels. Therefore the bigger spans afforded by concrete lintels above the windows together with the fact that there are no specific restrictions on the sizing and placement of windows within the Plan, has made it easier for the creation and installation of larger window openings.

![Fig. 5.4 – Some of the modern reinforced concrete constructions (Lamu Conservation Office)](image)

The only consolation has been that developers are asked to use traditional wooden shutter type of windows, notwithstanding the fact that such large sizing and low placement as shown in the illustration above greatly interferes with the functional integrity of both the house and street. Further the case study results has demonstrated that there is inadequate adaptation of the conservation charters to the local context in their application in the Conservation Plan by clearly showing a link between the adoption and use of modern technology and materials with the decline in the application of indigenous building technologies. Further as was seen in the theoretical framework in Chapter 2, the indigenous building technologies are the most suitable in projecting the community’s cultural identity in the conserved architecture. As per the findings in the previous chapter, the adoption and use of modern materials and techniques was attributable to three key factors; the cost factor implication in terms of sourcing to actual installation in the house, secondly the
desirability of the materials in terms of reflecting the current status and lifestyle of the developer, thirdly the time it takes to complete a construction while using those materials and techniques. On the other hand, current realities as confirmed in the research results appear to have contradicted the initial assumption premised by the Plan that traditional materials were cheaper than their modern equivalent due to the cost factor of transportation and shipment to Lamu. Therefore in making the case for optimal adaptation of the Plan to the local context, the results of the case study confirms the research hypothesis that the current conservation approach cannot succeed in conserving Lamu’s Swahili architecture that is reflective of the community’s identity as it seeks to restore this identity from the outside without due regard to this internal generation processes which is the indigenous building technology. It further affirms the initial assumptions put forward in the research study that the Plan’s apparent neglect of the local values and symbolism is as a result of its inability to exploit these indigenous building processes.

Further the research results in the foregoing chapter point out the fact that the major factor which has impeded the integration of indigenous building techniques in the conservation of Lamu is the appeal of low cost of modern materials. The appeal of low cost seems to have outweighed centuries of experience in traditional materials and techniques, as evidenced by the longevity of the surviving building stock, in favour of modern materials which clearly may not be environmentally suitable and of doubtful durability but more importantly not capable of reflecting the Swahili cultural identity in the conserved historic fabric. This coupled with fact that there is neither a strategy within the Plan that addresses the pricing and availability issues nor clear cut regulations on usage of materials means that there has been a gradual decline in the usage of traditional materials for repairs and restoration of traditional
houses with a corresponding increase in the usage of modern materials for such type of work. This has resulted in a change in these symbolic elements in terms of character, appearance and performance resulting in an architecture that is not reflective of the society’s cultural identity.

The shift in materials may not be attributable to the effect of material cost consideration alone; the time limitations that some of the traditional techniques impose on the restoration or construction process might also have worked in favour of the adoption of modern methods and materials. The reasoning behind this might be the argument raised by many in the research study that it took much less time to execute a restoration or new construction with modern methods than the corresponding traditional techniques, probably attributable to the fact that cement the principal modern input in construction takes a short time to set and acquire its strength than lime. Hence implying that, a construction using cement would proceed at a faster pace than the one in lime, and as a consequence incur the lime user more costs and suffer delayed returns than the former. Moreover due to the perceived extra strength, it allowed the owners to have supposedly better larger openings on the outside so as to compensate for the lack of interior ventilation via the traditional courtyards which were mostly blocked as had earlier been shown in Chapter 4 in some samples of the approvals in Lamu. The foregoing provides a further justification of the research assumption that the Plan’s apparent top down approach missed the key tools of deciphering the society’s cultural identity, in retaining and protecting key symbolic elements, which would have enabled it to be better adapted to the local context.
According to the case study findings therefore, individualised units with larger openings executed through modern methods meant not only more income but also an aesthetically good looking finish within a short time and at less cost compared to one constructed in traditional techniques. This means that overall it costs less to achieve an aesthetically good looking product with modern materials than with traditional techniques. This aesthetic consideration coupled with the community’s change of lifestyles was indicated to have played a huge part in creating an impediment towards integration of indigenous building techniques in the conservation of Lamu. Lamu being a progressive society with its people aspire to modernize and reflect this modernity in their environment, therefore the biggest casualty of this reflection of modernity in the environment seems to have been the indigenous building materials and techniques which appear to be viewed as not reflective of their modern status.

Consequently as it was seen in Chapter 4 the adoption of modern materials appears to have been an attempt to appropriately reflect their status as opposed to the traditional materials and methods which seemed not to be reflective of this status of advancement. Ultimately therefore, it can be argued that modern technology, urbanization and western cultures has led to the decline of faith in traditional beliefs and customs and hence led to the lack of incorporation of traditional systems in modern management systems. This state of affairs seemed to have prompted the UNESCO reactive monitoring mission of 2010 to recommend that

“there is a greater common understanding of the need for a set of effective planning and management tools and enforcement of By-laws that will protect the values of the property and nevertheless allow for the increase in quality of life through infrastructure upgrades and controlled development” (UNESCO, 2010: 5)
Joffroy adds that the problem has been compounded by lack of respect in traditional beliefs coupled by the difficulty in gathering traditional building materials and the increase in their costs (Joffroy, 2005: 4). Therefore changes in lifestyles appear to play a big role in not only reducing the capacity and scope of application of traditional techniques but also lead to less belief and confidence in the efficacy of the same. For Lamu’s case this in turn appears to threaten the conservation of key symbolic elements as they are exposed to new modern techniques and materials which may not be compatible with the original fabric and endangers their sustainability in the long run. As a consequence of the above, the long term sustainability of the conservation of the historic identity of Lamu town and in turn the community’s cultural identity may be threatened. However this in a way validates the research assumption in favour of an approach that would seek to create a continuity of the cultural traditions in the context of the identity and needs of the community. Hence it amplifies the lack of adequate contextual adaptation of the Conservation Plan and thus its failure to incorporate a strategy that would not only document, adapt and update the indigenous building techniques but also the deployment of a framework that would ensure buy-in by all the stakeholders involved in the conservation process.

Moreover, it was pointed out during the research that developers have not been made aware of the full range of options available for traditional techniques’ application within the conservation guidelines, which in a way suggests a lack of an appropriate framework to guide on the available options within the Plan. However, a closer study of the Plan guidelines as demonstrated in the last chapter reveals that some of the procedures seem to fall short on the privacy standards expected of a

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26 Interviews carried out in Lamu between March – April 2011
Swahili house, which points to a lack of involvement of traditional masons and other traditional skills resource people in their development, whereas others may not be practical cost wise given the rising costs of traditional material inputs. This is indicative of a process that was top–down in its conception, formulation and implementation. The Plan’s implementation bears the hall marks of a process that was not adequately understood and owned by the community as their views on the values they consider significant seem not have informed the proposed measures and their suitability. The lack of community involvement exposes the inflexibility of the Conservation Plan and by extension its statement of significance, which confirms the research assumption on the need to ensure that the significance statement of the community’s cultural heritage ought to be reflective of cultural dynamism that generates that heritage.

The results as shown in the foregoing chapter together with the study of the Conservation Plan demonstrate a process that lacks the cultural sensibilities of the people and hence may not lead to a conserved architecture that is able to express the same community’s cultural identity. This may be a classic example of what was referred by Smith and quoted in Ndoro et al that current heritage management is practiced in a hegemonic way that seems to elevate the specialist over the non-specialist in this case the community traditional techniques’ custodians who are more knowledgeable in the indigenous techniques (Ndoro et al, 2009: 70). Adequate consultations may have helped to iron out some of the inconsistencies within the proposed measures in terms of the privacy and cost implications among other concerns. However, of immediate concern to this research is the fact that the current Conservation Plan as currently being implemented seems to be continuing this marginalization of the indigenous building techniques and skills in the conservation
process to the detriment of the conservation and retention of the key symbolic elements of Lamu’s historic fabric. Consequently, this might have profound significance to the long term sustainability of the town’s historic identity as a Swahili town.

The final factor that may have hampered the integration of indigenous building techniques in the conservation of Lamu stone town is the fact that with time there has been a drastic decline in the qualified masons conversant in these technologies; therefore part of the cases of poor workmanship might probably be explained by some of the developers resorting to unqualified persons due to the constrained pool of expertise leading to undesirable results. This fact was highlighted in the course of the case study that there is an acute shortage of qualified traditional masons who seem to be very few and very expensive forcing people to use unqualified ones with undesirable results27.

The overall shortage of the pool of expertise may be attributable to the fact that as the employment opportunities dwindle with more and more people turning to modern techniques and materials there seems to be a corresponding shrinkage in the opportunities for possible transmission of these skills to the younger generation. This is because on the job training constitutes a crucial avenue for the passing down of these skills and which cannot be taught in conventional schools. The gravity of this situation was made the more evident during the research visit in Lamu where it was reported that out of the eight senior most masons used during the European Union funded Community Conservation programme, where a total of sixteen traditional

27 Interviews carried out in Lamu between March – April 2011
stone houses were restored in Lamu between 1999 to 2000, three have since died and one because of limited opportunities has had to switch careers in order to support himself28.

It is indisputable that the skills are in the hands of the older generation, and given the complexity of the traditional stone house plus the fact that it takes a long time to understand their structural nature, a long on the job training is necessary to ensure successful passing on of these skills to the younger generation. Traditionally this training and transmission was and, as Khan narrated (Khan, 2010: 189) a lifelong process of learning and was intimately linked to the knowledge of the Islamic religion and Koran29. Therefore with the declining opportunities for training and transmission of these skills to the younger generation, Lamu apparently continues to suffer a decimation of the pool of potential resource people capable of managing the restoration of its key symbolic elements. This turn of events seems to spell dire consequences for the integration of these techniques and skills in the conservation of Lamu and may further threaten the retention of the symbolic features of Lamu’s historic fabric and thereby further impairing the authentic expression of the cultural identity that the conserved town ought to represent. This in itself highlights a process that was not adequately adapted to the realities of the context and hence did not foresee and institute a strategy within the Plan that would plan for the gradual renewal, through targeted placements and training under established master masons, of the expertise in the indigenous building techniques that would have contributed to its sustainability in the long term.

28 Interviews carried out in Lamu between March – April 2011

5.3.0 Areas of Integration of Indigenous Building Techniques

Arising from the case study results and the foregoing discussion, the integration of indigenous techniques in the conservation process of Lamu Stone town may be seen to hinge on two major aspects. Firstly, the identification of an area of integration where the techniques and skills have the possibility of registering maximum impact on the cultural identity expressed by the conserved town’s historic fabric. Secondly, modernize the indigenous skills so as to make them easy to apply, cost effective and produce an aesthetically pleasing product comparable to the modern materials and methods. Therefore, the most important initial task would be the identification of possible areas within the town’s built fabric with the heaviest impact of not only retention of the symbolic features of Lamu’s architecture and planning but also the biggest impact on the projection of the town’s identity.

The ultimate aim would be to look for areas that represent the spirit and pulse of the town and as per what was discussed in Chapter two and preceding chapter discussions, the Traditional Swahili stone house represents the heart and spirit of Lamu town. To concentrate on the conservation of this element would be to conserve the Swahili town spirit and hence the society’s cultural identity. This is in conformity with Petzet who argues that the primary question in any conservation exercise should be whether one is conserving or preserving the spiritual message of that monument that has been entrusted to them (Petzet, 2009: 67). It is with this in mind and coupled with the fact that the town has an apparent insatiable appetite for vertical growth, as evidenced by the massive increase of fifty five per cent of floor additions over the original Lamu skyline within the twenty five year period of the conservation programme, that this research opted for the overall house planning both for new extensions, empty plots and collapsed ruins so as to preserve the historic town’s
spirit. This area seems to offer a good possibility for integration of these indigenous technologies and skills while at the same time serve to reintroduce the traditional attributes of this important symbolic element such as privacy. This would permit this element to continue to perform its core traditional activities and also offer the possibility of returning the neighbourhood to its former functional standards while at the same time not only re-awakening the traditional spirit of the place but also project the community’s cultural identity in its architecture.

The necessity of this step is due to the fact that the current Conservation Plan, even though it contains guidelines on the massing, building lines and other considerations, it seems to have fallen short on the actual tools that would help in the preservation of the spirit of this important symbolic element. Furthermore the Plan seems to have paid inadequate consideration of the actions that might impair the spirit of this symbolic element through alterations or additions that endanger its capacity to perform its traditional role. Moreover, the various parts of the traditional stone house from the wall partitions, ceilings, balconies, placement of window openings and overall finishing offer other possible avenues for the integration of indigenous technologies. Hence the inadequacies of the current conservation approach, in failing to protect this key symbolic element, points to the need for contextual adaptation of not only the approach itself but also the support framework (indigenous building techniques application strategic framework) that would succeed in emergence of a conserved fabric that is in tune with the community cultural identity aspirations.

The impact of integration of the techniques into such parts may enhance the impact given the fact that these parts enable the house to function traditionally and as such contribute greatly to the overall performance of this symbolic element within Lamu’s historic fabric. Therefore house parts like wall partitions and which as per the
proposed alternatives in the conservation plan seem to be unsuitable due to cost and privacy consideration, together with window fixtures offer possible areas where traditional techniques can easily be integrated with maximum consideration for the need for privacy. Moreover, the integration of these techniques into such elements will serve to uphold the values commensurate with the community’s cultural identity. The Conservation Plan has laid out some guidelines for the conservation of these parts; an evaluation of most of the proposed methods seems to reveal that the major problem in nearly all of them was that the cost considerations may not have been adequately researched on.

It is important to note that for the integration of indigenous technologies and materials into the conservation process to be successful they ought to satisfy three criteria as identified by the community concerns in the case study in Chapter 4. These are first, to be aesthetically desirable and comparable to anything achievable by modern materials. Secondly, they must be available at costs which are much cheaper than the modern equivalent and finally they must be much easier and faster to employ on site if not comparable to similar constructions in modern methods. One possibility of solving this problem might be to develop the techniques in ways that they can be able to match up with the modern ones cost wise while at the same time make the techniques as desirable and faster to implement just as the modern ones. The photo below shows some traditional techniques in earth which have been made for aesthetic purposes and at the same time very functional resulting in wall finishing which is comparable to any that can be achieved in cement - sand plaster.
From the above photo illustration, it seems clear that traditional techniques can be made as aesthetically desirable as expectations permit and be able to express the most modern identity one would want to express. Similar work like the above has been done with cement and lime in Lamu to good effect (see Fig 5.6 below), the problem has always been that the good finishes are only possible at great costs and that could be afforded by the affluent only. Therefore it seems the major problem might be the review of the cost elements to ensure that such results are achievable at budgets that are realistic and are similar to work done with modern materials and techniques. In this way, indigenous techniques may become a viable alternative to the modern methods and one that is environmental friendly. The example highlighted below is what is being attempted in Lamu by those wealthy enough to afford finishes in cement and lime.
Fig. 5.6 Similar plaster finishes achieved in Cement – Lime in Lamu (Author)

What is apparent, and also highlights the lack of contextual adaptation of the whole conservation approach, is that no attempt seems to have been made, both in the conservation guidelines and the Plan implementation and support mechanisms, to research on alternative materials such as earth and indigenous technique variation that would enable the production of finishes that are aesthetically desirable but at significant cheaper costs than what is currently achievable.

The foregoing in a way highlights the obstacle that stands in the way towards a successful adaptation of the programme for the conservation of Lamu’s historic town; adequate contextual adaptation that takes into account not only the use values of the community but also the cultural and symbolic values. This contextual adaptation, which seems to be lacking going by the results in Chapter 4, calls for a strategy geared towards research and experimentation on the various possibilities of the traditional building techniques. Further such a strategy should have a sustained sensitization campaign of the community and developers in particular so as to be made aware of the potential range of possibilities and benefits obtainable from the indigenous techniques and materials together with specific guidelines of their application so as to bring out the best of the traditional techniques’ spirit.
Joffroy notes that this is the major challenge in the incorporation of these techniques in modern conservation programmes where the issue is not only establishing confidence among the community of the effectiveness of the techniques but also methods of integration of the indigenous and modern while respecting traditional rules and habits plus the extent of integration so as not to lose their essence (Joffroy, 2005: 4). After having the cost and desirability issues covered, the next focus ought to be the issue of pace of the construction process so as not to be a factor in hampering the integration of these techniques; for this there appears to be several examples of application methods where traditional inputs have been delivered and applied in the same way as modern materials such as concrete. However, it may be important that this area be researched on beforehand as part of an all inclusive strategy so as to determine the mode of application suitable for the Lamu situation and one that might not disenfranchise the traditional knowledge custodians, below is an illustration of a stabilized earth test wall panel, that is structurally sound just like a stone wall and was produced using a conventional concrete mixer and was poured in situ.

Fig. 5.7A The stabilized earth wall with its mode of production – Ville Fontaine France (Author)
Fig. 5.7B Traditional means of sourcing inputs and application (Author)

Fig. 5.7A above highlights the possible modernization of the techniques that may easily be implemented with the existing Lamu traditional inputs. What might need to be considered for the Lamu situation is means of sourcing the sand without having to use the traditional means of ferrying it in by means of boats (as shown above in Fig 5.7 B) which might make the techniques quite costly, possibilities of sourcing the sand within the island would definitely lower the cost due to the easy availability without the need for expensive transport. Similar considerations for the other inputs such as lime and coral stones might need to be researched on and their cost implications worked out to enable the development of an option which is functional and cost effective.

Currently all the parties to the conservation process from the developers, traditional masons, and conservation professionals seem not to know how these traditional techniques can be modernized in order to ensure wider adoption and use of the techniques. Other than the fact that the Conservation Plan does not have a strategy for the continuous research, adoption and update of the indigenous building techniques, similarly the two major strategic organs in Lamu seem not to have measures in place that can lead the way in modernizing these techniques and also
policing mechanisms for their enforcement in the course of managing the conservation of Lamu. These organs are the conservation office (LWHSCO) which is the body charged with ensuring that the technical aspects of the conservation programme are implemented and in this case ought to play a crucial role to ensure that the integration process runs smoothly. The other body is the County Council of Lamu (LCC) which is currently the final authority in all matters related to development approval; this body ought to play an important role in ensuring that the traditional techniques are taken on board.

5.4.0 Analysis of the Operational Support Environment for the Lamu World Heritage Site Conservation and Integration of Indigenous Building Techniques

Arising from the foregoing discussion based on the observed results in Chapter 4, the current conservation programme seems to lack an operational support environment that seeks to best conserve the Lamu World Heritage Site in ways that also retain the key symbolic elements and thus best express the cultural identity of the community. Such an operational environment would be one that deliberately seeks to give better leverage the integration of indigenous techniques and materials over modern methods and materials. Perhaps an environment that affirmatively drives the integration of these traditional methods while at the same time ensures participation and compliance through a system of stakeholder involvement, developer incentives and rewards for adoption. This kind of environment is what would be achieved had the current conservation approach been contextually adapted to the Lamu context and it is what is lacking in the current Conservation Plan for Lamu World Heritage Site.

From the foregoing discussion in the preceding section, this lack of contextual adaptation is demonstrated by the apparent lack of adequate documentation on the
available indigenous technologies and skills plus their viability in terms of modernizing them and application in Lamu. It also manifests itself in the form of a lack of a capacity building strategy that would take care of not only training but also avail the full range of possibilities of the techniques to the stakeholders. The role of LWHSCO seems to have stopped at engaging with all prospective conservation applicants to offer planning advice including ascertaining whether the intended conservation would destroy any significant aesthetic features. Thereafter its role reverts to just monitoring the ongoing restoration. Therefore there seems to be no attempt at ensuring that traditional techniques are applied or more importantly the process does not give preference between a development that proposes to apply traditional techniques and the one that would use modern materials. This is despite the fact that at the onset, the aim of the Plan was to check adoption of modern materials and techniques in favour of the traditional.

The contextual adaptation would have emphasized the need for a regulatory framework that would drive the integration of the traditional techniques in the conservation of the Lamu World Heritage Site supported and managed by LCC as per the Local Government Act. Therefore this process would have led to a protective regime that could be enacted as a by-law together with a schedule of modernized traditional materials and techniques including the incentive structure in favour of integration of the indigenous techniques highlighting the qualification for the preferential status, the waivers expected for compliance and sanctions in the event of default after approval. Such a consistent message of firm application of the procedures while at the same time highlighting the benefits of integration is what is lacking in the current conservation framework guiding the conservation of the Lamu
World Heritage Site and which magnifies the disconnect between the Plan and the realities of the context.

5.5.0 Chapter Conclusion

Lamu World Heritage Site may be considered to be having a number key of symbolic elements within its historic architectural fabric, with the most notable being the traditional Swahili stone house. This element and as it is communally organized in mitaas, with its unique traditional functions, seems to a large extent to have given the town the three dimensional perception of the town as it is today. The mitaas, streets, neighbourhood mosques, town square, Friday mosque and town’s main street; notwithstanding the fact that they were also important as key symbolic elements of the townscape and hence ought to be critically considered in any conservation aimed at enhancing the representativeness of the cultural identity expressed by the conserved historic fabric. Not forgetting the fact that they also played a complimentary role and offered a supporting cast to the traditional Swahili stone house which occupied an important position within the town’s socio-political arrangements.

This key element that was historically the symbol and passport to political power and guarantee to the elite status of the town – ungwana, formed the basis for the development of trade contacts which in turn was the catalyst for the development of the town and its unique architectural fabric; a fabric that seems to have formed the key consideration for it being declared as part of the heritage of the world by UNESCO in 2001 (see Appendix II). It may not be the fabric alone which is unique, but beneath this fabric are masked functions which serve to nurture the town spirit or individual and community cultural identities, an identity that eventually finds
expression in the built heritage. However it appears that there are threats faced in the
target expression of this spirit in the town’s fabric which take the form of increasing
alterations, extensions and additions to this key element, unregulated changes in use,
blockage of key parts of this symbolic element; these consequently seem to have
hampered the effective performance of this element and thereby endanger the
nurturing of the town pulse and spirit.

This threat seems also to have impacted on the other supporting elements within the
town fabric; not only destroying the platform that allowed the Swahili stone house to
adequately perform its role but also further stunting and truncating the consolidation
and growth of the community cultural identity. This is what appears to have been the
basis of the community’s concern at the rapid changes witnessed within these
elements and which to them appears a credible threat to their cultural identity survival, therefore the physical changes seem to destroy the non – physical links
necessary for the cultural identity mediation and expression.

The conservation of these symbolic elements may be seen to be the only way of
contributing to not the least in maintaining the town’s way of life, which was a key
consideration for the UNESCO World Heritage listing, but at the same time perhaps
guaranteeing the community’s cultural spirit as personified in the way of life which
is necessary to ensure the town’s vibrancy and liveliness. Further arguments for the
retention and conservation of this symbolic element come from ICOMOS as quoted
by Petzet, who during the call for papers for their ICOMOS General Assembly in
2008 stated....

“the spirit of place is transmitted by living people in their every day experience
and therefore depends entirely on them for its survival” (Petzet, 2009: 66).
Therefore this appears to lend credence to the need for protection of this element from these perceived threats and also to be conserved so as to continue transmission of this spirit of place by undertaking its core cultural identity formative processes. The foregoing affirms the above by showing how the current Plan in not taking into account of the community symbolic and cultural values it has resulted in a conserved fabric that is at variance with the community’s cultural aspirations. This is due to the fact that the plan did not seek to create a cultural continuum between the past and present by ensuring the retention and conservation of the key symbolic elements through techniques anchored in the traditions and which have been at the centre of the synthesis of the community’s cultural identity; an identity that has been seen to be worthy of world recognition as the best exemplification of the synthesis of a variety of external influences.

However it appears the current Conservation Plan though successful in improving the overall town’s aesthetics through targeted upgrading and restorations has not been unsuccessful in reflecting the Swahili community’s cultural identity in Lamu’s conserved architectural fabric due to its not having been adapted to the contextual symbolic and use values and which has allowed the adoption and use of modern materials in the conservation of the town’s architectural fabric. The handicap presented by this seems to manifest itself in two ways; the adopted materials undermine the historic character of the town and may not be conducive to the town’s environment. Secondly adoption and use of the materials reduces the chances for the adoption and application of traditional materials and techniques which seem to be much superior in their ability to better conserve the town’s symbolic elements and hence the cultural identity espoused by them. The above scenario answers the research question of this study that a conservation approach that has not been adapted
to the realities of the local context cannot succeed in having a conserved fabric that is reflective of the local community’s cultural identity aspirations.

The success of traditional materials in supplanting their modern equivalents in their adoption and use in the conservation of symbolic elements within Lamu’s historic fabric appears to ride on three major factors which are key in the contextual adaptation of the conservation programme together with the protection of the key symbolic elements; first the ability to be easily available and cheaper than the modern. Secondly ability to be applied in the construction environment at an equal or much faster pace than the modern materials if they could be made to gain strength at a comparable rate so as to save on construction time hence lower costs and result in a quicker return for the investment. Lastly the desirability of the indigenous techniques would have to be improved to match up or better the modern ones which seem to be more attractive and provide for good finishes and even when the traditional ones appear to match it is at a higher cost which only the rich can afford.

The adaptation of the Conservation Plan to Lamu’s context not only has to contend with the above considerations but also the community change of lifestyles which seem to have played an important part in motivating the community’s adoption of modern materials. This has in turn frustrated the eventual adoption and integration of indigenous building technologies in the conservation of Lamu’s key symbolic elements and hence ensures a better expression of the community’s cultural identity. The prime mover in this seems to be the fact that due to the change of lifestyles, modern materials were adopted as they appear to be more representative of the society change in status as opposed to the indigenous ones which are thought to reflect an inferior class. This appears to have been further amplified by the fact that there seems to be a decline in traditional beliefs and customs due to a lack of respect
for the same coupled by an increased incidence of adoption of western fashion trends that were accelerated by urbanization and globalization forces. This supported by Hodjat who argues that the normal cultural exchange becomes apparent imposition of modern products stems from

“the massive and rapid provision of cultural products to highly demanding societies who have no opportunity to decide whether or not the products are appropriate to the reality of their needs” (Hodjat, 2009: 121)

The local adaptation of any future conservation approach also has to contend with declining sources of the indigenous techniques due to limited opportunities for the master traditional masons. This has been precipitated by the corresponding increase in the adoption and use of new methods and hence less training opportunities for upcoming traditional masons which in itself are a manifestation of the weakness of the current conservation plan. This is due to fact that on job training is the principal avenue of transmission of traditional skills from the older generation to the younger generation and due to the complexity of the traditional stone house requiring lengthy periods of internship to master it. To make matters worse, it appears the master masons faced with the prospects of limited opportunities to ply their trade and at same time having to fend for their families may have been forced some to opt to change their careers further decimating a pool which already is being shrunk through natural attrition.

The long term sustainability of the current efforts in the conservation of Lamu’s historic fabric therefore may seem to be on shaky path when viewed against the back drop of the foregoing factors, a situation that may not bode well for the future expression of the cultural identity of the community in the conserved Lamu historic
character. Possible solutions to this state of affairs as indicated in the foregoing discussions include contextually adapting the International Conservation Charters by incorporating local symbolic and use values and thereby develop active measures to integrate the indigenous building techniques in the conservation of the key symbolic elements within the town’s architectural fabric. This would result in a fabric that better reflects the community’s identity in its architecture. The foregoing in addition to a strategy that holistically re-looks at the training and passing of these skills to the younger generation together with the availability of traditional inputs would ensure the continuity and sustainability of the conservation process. Given that some quarters have argued that International Charters, on which the Conservation Plan of Lamu is based on,

“have internationalized European values, concepts of heritage and principles of conservation” (Smith, 2006: 11).

Integration may offer a better way of domesticating the Eurocentric based Conservation Plan, which appears to have been implemented in a top-down manner without adequate consultations and inputs, by ensuring that it reflects local community values and cultural identity. This is in agreement with Ndoro and Chirikure’s arguments that…. 

“there is need to domesticate such western based heritage management systems by incorporating local values and indigenous practices and knowledge systems” (Ndoro and Chirikure, 2009: 71).

In accepting the argument for the integration of indigenous building techniques and by extension the contextualisation of any conservation intervention in Lamu, one is faced with a challenge of one identifying areas of integration that seem to have the best potential for multiplier effects in terms of resulting into a wider conservation of
the town’s key symbolic elements. Secondly relates to addressing the issue of acceptability of the actual techniques while at the same time make them cost effective and faster in application. Regarding the area of integration, the traditional Swahili house probably may represent the element with the potential for a wider diffusion of these techniques and taken together with the other elements would allow the conserved fabric to reflect the community’s way of life and thus bring out the Lamu’s unique attributes. This may be necessary so as to bring out the authenticity in the town’s conserved historic fabric. Regarding the issue of authenticity, Zancheti et al note

“the capacity of a city to express authenticity is intimately linked to the processes of creation and reproduction of past practices which have come down to the present, whether incorporating or not new ways of doing....” (Zancheti et al, 2009a: 167).

It is apparent from the above argument that the adaptation and contextualisation of the International Conservation Charters as represented in a Conservation Plan for Lamu and the subsequent integration of indigenous techniques in conservation would enable the town to express its authenticity, which may be a major factor for a site to maintain its World Heritage status and also would allow this element to reclaim its position in the community cultural identity formation pyramid and hence enable the re-awakening of the town spirit. For Lamu’s case through the UNESCO World Heritage Listing which recognised as the best example of the synthesis of a variety of external influences namely Arab, Indian and even European, through the indigenous techniques to produce a unique heritage and culture; its authenticity lies in the re-invigoration of these techniques so as to continue sustaining this heritage and the Outstanding Universal Value (OUV) for which it was inscribed. Further it seems to
be an avenue to highlight and re-affirm the community values in the conserved Lamu’s architecture, and which are in danger of being obscured by the rampant alterations and extensions, leave alone the fact that this may also be a refreshing change that seeks to deepen the Plan away from the apparent superficial focus of surface aesthetics. Therefore a strategy of modernization and subsequent integration of the indigenous technologies provided they meet the threshold of desirability, cost effectiveness and acceptable speed of application appears to be the most feasible route to achieve an authentic expression of Lamu community’s cultural identity in the town’s architecture.

The ultimate challenge however may lie in finding an acceptable level of modernization that not only respects the traditional techniques rules while at the same time infuse a level of modernity that meets the three criteria discussed in the preceding sections. In this predicament Lamu appears to have a lot of examples to learn from; worldwide the trend towards green and sustainable technologies has become fashionable and there are cases where earth has been used to good effect to produce houses that are functional and fashionable such as in Mexico and France. The International Centre for Earthen Construction (CRATerre) in Grenoble France, based on worldwide experience given that it is the UNESCO Chair on earthen construction, has developed techniques in earth construction that are not only aesthetically good and faster to implement but also result in cost savings of between fifty five to seventy percent to the modern equivalent. Therefore, the onus appears to be with LWHSCO which ought to research, assess and document a list of potential options for the integration of indigenous techniques as a means of adapting the current Conservation Plan to the peculiarities of the Lamu context. Further the process of adaptation would need to involve the local masons.
and traditional resource people who would be beneficial in offering meaningful ways of improving these techniques so as to make them faster in application, cost effective and as fashionable and desirable as the modern alternatives. The need for local people involvement in the improvement in these techniques stems from the fact that, the traditional skills holders are more equipped in understanding the origin of these techniques and can offer meaningful inputs in their improvement given that all these techniques were able to evolve over time through a process of constant improvement and learning. Hodjat advocates for…

“conservation of historic properties by people well versed in the monument ....locals who belong to the context, well acquainted in natural traditions regarding conservation and understand the human message it conveys” (Hodjat, 2009: 121).

Hodjat in his argument seems to be in agreement and apparently advocating for the involvement of the local indigenous technical knowledge holders, in the improvement and integration of the techniques in conservation, who would offer a chance to tap from their knowledge of the cultural context of the techniques’ origin so as to improve them in the present for the betterment of the authentic expression of the community’s cultural identity.

The adaptation of the Conservation Plan and subsequent integration efforts of the indigenous building techniques may not be successful without a proper support environment that would bring together the key stakeholders of the Lamu’s conservation programme; namely the public entities such as LWHSCO and LCC on one hand and the traditional masons, house owners and any other interested parties on the other. The development of an appropriate range of options plus the necessary sensitization campaigns on the potential benefits of the modified techniques together
with its support framework will therefore be very critical and which seems to be lacking in the current conservation set up.
CHAPTER 6

SUMMARY OF RESEARCH FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter reviews the research study findings and thereafter the issues arising out of the literature. The chapter then looks at the conclusions drawn by the study before making recommendations arising out of the conclusions. The chapter then ends with guidelines relating to protection of the function integrity, regulation of the overall massing of the buildings and the town in general. It further looks at guidelines on integration of the indigenous building technology before ending with a model of the Conservation Plan’s institutional framework that would be able to guide the conservation of the Lamu World Heritage Site in a sustainable manner.

6.1.0 Case Study Findings

The Swahili cultural identity with its characteristics and values may probably be said to find a perfect expression in Lamu; a typical Swahili town which prospered in the 17th and 18th Century and which retains a good collection of stone houses that are still well preserved and hence justified its inclusion on the UNESCO World heritage list. However, this cultural identity as expressed in the richness of the town’s historic fabric seems to be under immense pressures from a variety of factors such as: the population pressure where thirty five per cent of the urban population has been projected will be residing in the town by 2015. Being the largest urban centre within the district with more employment opportunities the situation may be further worsened with the construction of the second port in the Lamu archipelago. The combination of the UNESCO World heritage listing and the proposed new port seems
to have the potential of turning the area into a major focus for property acquisitions which may further threaten to disposes the locals of their cultural heritage.

The research has shown that Lamu Conservation Plan, which was initiated 1987 to check the ever increasing house alterations to traditional houses and adoption of environmentally ill suited modern materials, has had mixed success. It was also seen that the Plan was aimed at conserving the historic built fabric while at the same time promote indigenous building skills and industries so as to enhance the cultural identity expressed by this fabric.

This seems to have influenced the design of the Plan such that it sought to solve the problem on two fronts; one a land use plan that zoned the town in two – an exclusive residential area concentrated around Mkomani and Mtaa muini areas and a zone of administrative, mixed commercial cum residential activities. This was the foundation for the implementation on the second front which was a conservation development Plan that sought to protect and preserve historic streetscapes including refusal of permits for developments endangering or destroying historic features, selective rehabilitation of ruins to enhance the streetscapes and protection of prime views to the harbour. Action on the second front also included infrastructure improvements and the improvement of public areas including the town square and market square plus other important public buildings. Key focus of the Plan was to arrest the problems identified and thereafter embark on the protection of the aesthetic qualities of the historic fabric and its enhancement through use of traditional materials and techniques.
From the study it was revealed that the community appear not to ascribe and vest the cultural significance and symbolism of the historic fabric on the exterior aesthetic qualities as emphasised by the Plan but on the traditional functions that are the carriers of the symbolic and cultural values. These values were identified in the study in Chapter 4 as being enabled by the following key symbolic elements of the town’s historic fabric; traditional Swahili house, side streets, town square, Friday mosque and the main street in order of priority in contributing towards the identity of Lamu as a Swahili town and hence representing their conservation priorities. Further the community felt that the conservation process ought to focus on the factors that adversely affect these elements in shaping the historic identity of Lamu town. The foregoing chapters of this study, that is Chapter 4 and 5, have isolated the key factors as being spatial and use changes occurring within the town’s stone houses together with technology and building systems used in implementing these alterations and extensions which need to be addressed within the context of the overall town planning regime so as to ensure a conserved fabric that is reflective of the community’s values. Other factors identified include cultural factors which encompass the community traditional culture and belief systems, religion and spirituality and finally social and gender issues.

Further analysis of the two key factors revealed the basis of the community’s concerns to be the fact that the spatial changes taking place within the stone houses were negatively impacting on not only the usage of the elements but also on the integrity of the community’s cultural and symbolic values within the built fabric of Lamu. These included increased alterations and blockage of key features such as the daka and courtyard thereby compromising on the privacy, ventilation and lighting standards leave alone the loss of a cultural identity formative arena. Other changes
that appeared of concern to the community include the mushrooming of commercial activities within the residential neighbourhoods despite the fact this area was zoned exclusively as residential. They attributed the loss of community bonding and cohesion to these changes as they denied the community areas for family and community unification and precipitating a breakdown of family ties and community bonds. All these changes in the other elements within the town fabric were blamed for the loss of the traditional outlook of the traditional stone house and overall lack of belief in cultural belief systems.

The Conservation Plan performance review on the other hand reveals a success especially as regards the improvement of public spaces such as the town and market square and other infrastructural works improvement. Moreover, the donor funded restoration projects were viewed as a model that demonstrate the benefits of the conservation process in terms of its effect to Lamu’s historic fabric especially halting the deterioration of the town’s building stock and provide impetus in house restorations.\(^{30}\)

However, the success in controlling the town’s ever increasing adoption of new modern building techniques and amenities with a corresponding decrease of retained traditional historic features such as carved doors, daka and wikio seems to be limited; this was in contrast to the stated intention of the Conservation Plan of utilization of traditional materials. The overall picture of the results seems to indicate a high propensity for vertical growth more than the recommended, decline of usage of

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\(^{30}\) Interviews with the community March – April 2011 in Lamu
traditional materials and an increase in the employment of modern materials and techniques coupled with an increased installation of modern amenities.

The lack of contextual adaptation of the Conservation Plan, in the inadequate protection of the key symbolic elements of the town which form the nucleus of the community’s pulse and essence of the town, may be attributable to these results. Therefore this lack of specific measures for the protection of the town’s key symbolic elements from alterations and changes contributed towards a conserved fabric that is not representative of the society’s cultural identity. Further coupled with poor enforcement and the apparent low cost of modern materials has led to the increased deterioration of Lamu’s historic fabric. This is because the low cost, ease of construction and coupled with the attractiveness of new modern materials convinced many house owners to adopt them instead of the traditional materials and techniques. The above was aggravated by the growing wave of globalization This in essence appears to give justification to the fact that modern materials are much cheaper to produce and hence become the material of choice for most people.

Lastly, given that exposure to foreign cultural goods frequently brings about changes in local cultures, values, and traditions due to increased adoption therefore with the Lamu people being increasingly being exposed to more modern things a change in lifestyles was to happen sooner than later. Therefore the western oriented lifestyle was considered to be more attuned to their way of life and gave the justification to discard traditional materials and techniques which represented traditional customs, beliefs and culture to which they no longer owed allegiance to. However all this is symptomatic of a process that did not adequately contextualise the Conservation Plan to the local context so as to take into account local symbolic and cultural values; this
process would have enabled the Plan to create a cultural continuum between the community past and the present by not only creating meanings in the conserved spaces and fabric but also be in sync with the cultural dynamics of the processes that synthesised the various influences to create Lamu’s unique built heritage. The contextualisation would have highlighted the need for a strategy of not only integrating the traditional building techniques into conservation, given that they were at the heart of the synthesis and creation of this architectural heritage, but also address issues of availability and cost of traditional inputs which have been subject of bans plus modernisation of the techniques so as to address the issue of speed, aesthetic appeal and ease of application. Therefore the study findings answers the research question by reaffirming that a conservation approach that has not been adequately contextually adapted cannot contribute to a sustainable conservation of Swahili architecture and towns which is reflective of the symbolism and identity of the people. Further the case study findings have also proved our initial research hypothesis which states that; given that Swahili architecture espouses an identity which has been internally generated through the indigenous building techniques and systems as a means of dialoguing with the external world, the current conservation approach cannot succeed in conserving Lamu’s Swahili architecture that is reflective of the community’s identity as it seeks to restore this identity from the outside without due regard to this internal generation processes to be true.

Moreover the foregoing further proves that Lamu World Heritage Site Conservation Plan does not conform to the African Conservation Approach model put forward in the theoretical framework as it has created a disconnect between the past and present by not acknowledging the community’s symbolic and cultural values and also
adopting techniques that are not in harmony to traditions in the context of current realities and needs.

6.2.0 Issues arising out of the Theoretical Framework

From the foregoing literature review in Chap 2 and which has been confirmed by the research findings as summarized above, this research study has shown that the conservation of monuments reflects a desire to preserve and sustain the society’s cultural identity in the built architectural fabric. Cultural identity on the other hand has been defined as a shared culture whereby a people with a common history and ancestry share common historical experiences and cultural codes. It can be impacted also by language, ethnicity, gender and locality. For the Swahili people it may be taken as a totality of the cultural influences derived from the socio-cultural interactions and experiences from a diverse and expansive region resulting in its expression in their environment. For the Swahili in Lamu, this identity is represented by the key symbolic elements identified in the case study namely; the traditional Swahili house, side streets, town square (Mkunguni square), Friday mosque and the Main street (Usita wa Mui) together with the associated intangible values.

Further it was shown that the initial conservation efforts of past monuments were initiated due to the rapid changes in the environment at the time which contributed to a loss of symbols that reflected the society’s sense of cultural grounding. Conservation was aimed at retention of these identity symbols to anchor the cultural growth of the society in the context of changes that threatened the ordered expression and change of the society’s identity. The origin and growth of the conservation concepts in Europe and in particular England, France and Germany bears this out; as various interests in the conservation of past monuments were driven by the fear of apparent loss of those monuments symbolic of their identity due to rapid industrialization. Therefore, in all these attempts they sought to conserve the past monuments
as a protection and projection of the past societal achievements so as to serve as a source of inspiration that the society can align itself towards in their future endeavors. Loss of this identity base amounted to society losing the foundation on which to build future cultural identity expressions. Subsequently conservation methods and charters that were developed from these concepts sought to remove subjective interpretations of the cultural identity elements in the approaches for the conservation of this identity.

The approaches concentrated on the best way to conserve the universal aspects of the society’s identity in its architecture. They were meant to be objective so as to remove individual bias in the judgment of what ought to be significant in the conservation of the identity aspects in the architecture. However in practice, the objectivity coupled with the impersonal application often excluded the community in the assessment of values of the heritage hence rendering them impractical by coming up with inappropriate conservation priorities especially in situations where the monument formed part of the daily life of that community. This might have worked in contexts where the monuments were not closely attached to the community’s way of life like in Europe where the initial conservation concepts originated but may not be as successful in the African setting.

The study has shown that this was a consequence of the fact that these charters incorporated much of the European values, thinking, ethos and principles of conservation at the time which has led some critics to assert that the charters have internationalised European values, concepts of heritage and principles on conservation. This is due to the fact that the value assessment and their corresponding statement of significance was heavily influenced by the expert involved and who in most cases was not familiar with the local symbolic and cultural values. Further the fact that they concerned themselves to the exterior aspects of
monuments and particularly the historic value as opposed to their intangible, symbolic and cultural values may have conspired to make them unsuitable to monuments in the African context. This is true for the Swahili architecture and towns where there are key elements that are the main carriers of intangible values, including both symbolic and cultural, that play a crucial role in the support of the Swahili cultural identity construct and whose conservation was necessary in maintaining the community’s identity in its architecture. Further as it is necessary in African context to have cultural and symbolic continuity for the identity construct process, these key elements with their attendant intangible values and through synthesis and facilitation by indigenous building processes were the bridge between the past and present. This has been vindicated by the findings in Chapter 4 where the community in Lamu did identify a number of key symbolic elements together with associated intangible heritage values that they considered to be critical in the articulation of their cultural identity.

It was also seen that the approaches provided the conservation expert with much leeway to influence the conservation interventions based on personal judgments. This meant that they heavily relied on the expert’s interpretation of the significance and symbolism of the monument to the exclusion of the community concerned. The consequence of this was that conserved monuments were at variance to the community’s identity aspirations hence robbed the historic neighbourhoods of their traditional vibrancy brought about by the traditional activities that served to renew these areas. Simultaneously, this also denied society of its traditional mode of renewal and replacement of the cultural built fabric due to the adoption of foreign techniques without the benefit of local contextual adaptation. Indigenous conservation practices on the other hand were often community wide activities and the techniques themselves were transmitted from generation to generation through symbolism, traditions, taboos and rituals as a way of cementing them in the society. The foregoing case study results
in Chapter 4 has shown that this is indeed the case with the Lamu World Heritage Site Conservation Plan whereby the conserved Lamu historic fabric represents something contrary to what the community considers to be culturally symbolic and significant in expressing there identity.

It was further highlighted in the literature review that the indigenous building techniques were the most suitable in conserving the community’s monuments which initially produce them. In addition they were identified as the best suited in the expression and conservation of the community’s identity espoused in its architecture. Further confirmation lies in the reasons for listing of Lamu on the UNESCO World Heritage List in Chapter 4, as being a best example of the synthesis of a variety of cultural influences through the indigenous building techniques to create a unique cultural heritage and culture. Hence the indigenous building techniques are the best equipped in conserving and expressing the continually evolving community’s identity as they are both anchored in the same cultural codes. This is because such techniques are unique to a particular culture and form a repertoire of that culture’s cultural heritage management tools. For Lamu’s case, it was ably demonstrated in the study results that the indigenous building techniques were the only techniques which were best suited in conserving the identified key symbolic elements of the town’s historic fabric and thereby better express the community’s values in their architecture.

The review also demonstrated the fact that legal environment in most African countries was ill-suited to promote and guarantee the conservation of monuments in those countries. This was due to the fact that, being Euro-centric in origin, the legal environment provided little or no protection for monuments of indigenous origin. This in effect served to deny the community’s identity a base for its reflection in the architecture. The legal environment shortcomings coupled with the conservation expert’s biases in conservation interventions created a ground for community marginalisation in the conservation of monuments which...
played a key part in their daily lives. It further highlighted that domestication of the conservation charters and the recognition of the critical role played by indigenous building techniques in the conservation exercise became a major consideration by critics interested in redressing the conservation charter pitfalls which have been discussed. For the African situation domestication as per the review would entail first the adoption of the community’s symbolic and cultural values in the significance statement followed by a strategy for the integration of indigenous techniques in conservation and which would not only contextualise the western based local Conservation Plans but also ensure the authentic transmission of the spirit or essence of the monuments embodied in their symbolism, significance and meanings. This would also serve as recognition of the indigenous building knowledge held by indigenous knowledge holders in the conservation of African cultural heritage. The results of the case study have clearly highlighted the apparent lack of this aspect in not only the current Plan in Lamu, this was also noted by the UNESCO reactive monitoring report of 2010 on Lamu, but also in its implementation, consequently the conserved Lamu’s historic fabric seems to be unrepresentative of the local community’s values and aspirations in their architecture.

Through these indigenous knowledge holders, as demonstrated in the review the Swahili were able to encapsulate their identity and values in their towns’ layout, architecture and use by employment of local building technology and materials which have evolved over time. This cultural identity further found expression in the way people used the various elements within the town in the course of their daily interactions. Therefore for any conservation approach to be successful in conserving the Swahili architecture that expresses the Swahili identity, it must first seek to preserve the Swahili community’s way of life and use of its architecture. The foregoing demonstrates that Swahili architecture and the identity it espouses are
intimately linked and can only be conserved and sustained through techniques anchored in the local building techniques which understand its conservation and sustenance. Such a conservation approach would be able to capture the community’s aspirations and their identity in their architecture and ensure the sustainability of such endeavours. Any other alternative approach that does not consider the above, as has been demonstrated by the current Lamu World Heritage Site Conservation Plan, would not only result in a conserved fabric that is devoid of the community’s identity but also serve to make the whole exercise unsustainable in the long term as demonstrated in this research study’s findings.

6.3.0 Research Conclusions

This research study has established that International Charters are not able to fully engage with the intangible aspects within some certain type of heritage such as the Swahili cultural heritage in particular where the tangible is a carrier of the intangible and therefore cannot be separated. Therefore it is through the understanding of the intangible heritage including the cultural and symbolic values that one can be able to establish the necessary foundation for the conservation of the heritage and which will yield results that are in harmony with community’s cultural identity. Under such a scenario the African Conservation Approach would be the best approach; in this approach while remaining alive to the community being repository of knowledge of its cultural heritage, is able to take into account of the community’s values while at the same time employ techniques that are in harmony to traditions in the context of current realities which is necessary as the monuments are part and parcel of the daily life of the communities concerned.
Secondly the International Charters’ overly scientific approach serves to
disadvantage the African heritage whose interpretation and meanings rely more on
the people’s understanding hence its meanings and significance will vary according
to the location and people unlike the international charters. This is because for
African heritage the people are the custodians of the cultural meanings inherent in a
monument and any cultural significance assessment and interpretation that seeks to
employ an objective approach that excludes them looses the significance and
relevance to society. Thus this study has ably demonstrated that a conservation
process that has not been contextually adapted and hence has not had the opportunity
to benefit from the local community’s perceptions and values, in this particular case
the Swahili community’s perspective on Lamu, on what is cultural symbolic and
significant to their cultural identity cannot lead to a sustainable conservation of their
built cultural heritage that is reflective of their cultural identity. This further
illustrates the need for the adoption of the approach above which would be able to
take into account the live processes that are necessary in the community’s identity
projection.

Lastly the current Lamu Conservation Plan’s apparent emphasis on museological
approaches seems to disadvantage the built cultural heritage whose relevance lies in
its use and continuous renewal. Traditionally, conservation in Africa is a process
which involves continuous use, renewal customs and traditions; therefore its
authenticity lies in the fact that it can be put to the same uses over time to provide
the same meanings and not a reliance on the preservation of material fabric. Further
the International Charters not only appear to rely on scientific and museological
methods in their intervention but also the fact that they seem to heavily rely on an
expert’s judgement of the significance of a monument. This means that they
advantage a single individual’s value judgments, who may not be involved in the day
to day management of the monument and thus not aware of the local relevance and meanings. This reliance on an individual is normally at the expense of the local community’s understandings and meanings which hold much potential in the long term management of that monument. It has been shown in the theoretical framework that western based heritage management systems are hegemonic in their application and advantage the western expert over the local knowledge holders. Therefore the African Conservation approach with its ability to accommodate community’s understandings and meanings would be more suitable for the Lamu situation and will enable the deployment of identity projection processes that are in harmony with origin of Lamu’s heritage. This fact was highlighted in the theoretical framework where it was shown that conservation of monuments needs to be undertaken by local people who have an understanding of the cultural meanings of the heritage and are aware of the various technical approaches which can best preserve and sustain that meaning.

This justifies the reason why this research study has also highlighted the fact that African traditional conservation practices were a continuous process of renewal and adaptation to evolving realities which could be environmental, social or technical as per the local understanding of the same. This process of evolution and change, as demonstrated in the theoretical framework, is in harmony with the traditions and is also part of the authenticity of the particular cultural heritage as it mimics the dynamics of culture change and of the identity it espouses. In short this research study has concluded that international guideline policies on conservation appear to be ill equipped to manage the conservation of the Swahili towns’ cultural heritage, and in particular the Lamu cultural heritage, without first their contextual adaptation to suit the local conditions and the involvement of the local stakeholders who are a repository of the values and meanings of this heritage. This may be necessary so as to
benefit from the wealth of knowledge acquired over time in managing the evolution of these monuments.

The above conclusion emanates from the fact that African heritage, especially urban cultural heritage, may be assumed to be the culmination of various complex processes involving the community negotiating their cultural identity amidst a number of influences from a variety of quarters. Therefore the resultant heritage is a manifestation of the collective experiences of the community and represents a conscious effort in reflecting their positioning as a group within which they seek to interpret the environment or world. Hence any conservation intervention must be in tune to all these factors and influences to have any realistic chance of success in conserving the cultural heritage to a point which reflects that society’s identity. More importantly, the negotiation tools and techniques of constructing this identity seem to have been acquired and perfected by the community through their efforts in managing the various interactions, so it is to these tools that this research concludes must be the basis for the conservation and sustenance of Swahili towns’ urban cultural heritage and Lamu’s architectural heritage in particular.

Moreover the Swahili heritage just as it was developed at the confluence of a variety of influences appears now at the centre of new types of influences and threats. These threats include unfavourable legislation governing its management, unfavourable development policies and initiatives that seem to threaten its existence coupled with population pressures. Other factors include the ever shrinking resources for its management and renewal, emergence of cheaper unsuitable techniques for its management, emergence of competing uses for existing resources for its renewal and lastly but more importantly changing lifestyles. This research concludes that all the listed influences were not adequately addressed in the Conservation Plan as
demonstrated by the lack of a strategy to address all these issues especially mangrove harvesting bans, controls on lime burning, shortcomings in legislation and also the effects of globalisation on the choice of techniques and materials for conservation. This is because the presence of such a strategy would have addressed the proliferation of modern materials that are not only not rooted in the local culture but also lack institutional memory within the same culture but nevertheless are accepted as fashionable.

The biggest danger in this trend is the delinking with the earlier way of life and thinking that embeds many aspects of the environment and cultural experiences hence alienating from past memories and lack of a culturally informed pursuit of the future. Arising from findings of the case study, the above is the conclusion that this research has arrived at in relation to Lamu historic heritage where the community owning this heritage have adopted different lifestyles which do not prioritize the improvement of such heritage due to not only changed values and priorities but also because of lack of the necessary belief systems that would necessitate its preservation. Therefore, this research has shown that the current conservation approach has not succeeded in conserving Lamu’s Swahili architecture reflective of the community’s identity this is due to the fact that it lacks the necessary traditional tools that enabled the community to better negotiate its positioning amidst emergent influences such as the ones highlighted above. Therefore the survival of Lamu’s historic urban heritage seems to lie in the taking into account of these traditional internal processes that historically succeeded in projecting the Swahili community’s identity amidst various influences, in the context of the competing influences and pressures so as to redefine and project the current identity.
This is necessary so as to enable the taking into account of intangible meanings associated with the symbolic elements within the architecture which were found critical in projecting the community identity. Because of this inadequate contextual adaptation which would have enabled the integration of these processes and techniques, the research has made some findings that the current Conservation Plan in Lamu has not succeeded in having a conserved architectural fabric that is reflective of the Swahili cultural identity. Thus in essence the research has proved the research hypothesis that any conservation approach that does not incorporate the local indigenous building techniques in the conservation of local monuments cannot succeed in having a conserved fabric that is reflective of that society’s cultural identity and also will not be sustainable in the long term.

Therefore the inadequate contextual adaptation of the current Lamu’s Conservation Plan seems to have disadvantaged it by denying it the following: First it lacks explicit provisions for the protection of the identified key symbolic elements which are the carriers of the cultural and symbolic values of the community in Lamu. Secondly it also lacked a strategy for the research, development, modernisation and integration of traditional skills into conserving the historic fabric. Thirdly the Plan also did not have a strategy to address the availability, pricing and suitability of traditional materials especially given the prevailing policies affecting these materials. Fourthly the plan’s conception, formulation and implementation appears not to have had adequate stakeholder involvement, which would have enabled it to be cognisant of the community’s symbolic and cultural value concerns. Therefore from the foregoing the Conservation Plan lacked the ingredients that would have succeeded in representing the community’s cultural identity in its architecture. This state of affairs
may not be sustainable in the long term and may pose a considerable threat to the sustainable realization of the conservation Plan’s objectives.

6.4.0 Research Recommendations

Arising out of the foregoing conclusions, the performance of the Conservation Plan for the Lamu World Heritage Conservation Site could be improved by implementation of the following key steps:- The most important steps in the contextualisation of the conservation process for Lamu Stone town ought first to be, the protection of the symbolic elements within the town that represent the cultural identity of the community in its architecture after a through and broad stakeholder involvement and consensus process. The protection of these elements in the Conservation Plan, especially the traditional Swahili house which is the anchor of Lamu’s historic fabric and whose protection would also foster the protection of the other key elements, would serve to safeguard them from unregulated changes that would impair their functions as identified in Chapter 4.

Therefore the key recommendation of this study, and which has been arrived at from the findings of this research study is that there is need for a review of the Lamu World Heritage Site Conservation Plan to adequately contextualize it as per the local realities. This review is important so as to rectify some of the problems highlighted in the Case study in Chapter 4 and the subsequent analysis of the same in Chapter 5. The key areas of review of the plan would include the provision of the protection of the traditional Swahili house plus all the key symbolic elements of Lamu’s historic built fabric against impairment of their core functions and use. In addition the protection of the privacy of the occupants of the dwellings, in line with the traditional way of life, through appropriate requirements for window size and placement plus commercial activities on the street would be another area of focus of the
review. Other areas of review include the regulation of the overall building heights, form and massing and finally the need for integration of indigenous building techniques in the conservation process.

6.4.1 Impairment of the Functions of the Traditional Swahili House through blockage of the courtyard and daka plus other key areas.

This research study recommends the traditional Swahili house layout and form, which forms the basis of Lamu’s historic fabric, be protected specifically in the Conservation Plan against any changes that may impair its core traditional functions. Therefore any proposal to block the courtyard (through subdivision of the house) or the daka should not be approved for development. Further, only subdivisions which are sympathetic to the layout and working of the traditional house be allowed as shown in Fig. 6.1 below should be permitted.

![Before sub-division](image1.png) ![After sub-division](image2.png)

Fig. 6.1 Subdivision of a traditional Swahili house in a manner that respects its traditional functions (Author)
The protection of the traditional Swahili house including all its elements such as the courtyard and daka would not only guarantee the continuation of the community’s way of life but also ensure the continued hosting of the intangible heritage that supports the community’s symbolic and cultural values within the historic fabric. Furthermore its protection would automatically ensure the protection of the other key symbolic elements identified such as the side streets and mtaa mosque. The town’s full acceptance of the need to protect the town’s symbolic elements through the review process would give the moral authority to enable an elaboration of a framework of protection of these features. The framework would also serve to reintroduce the traditional attributes of these important symbolic elements and at the same time function as an integration platform for the indigenous technologies and skills which will be discussed in recommendation 6.4.5 below. Such a step would aid in ensuring the elements continue to perform their core traditional functions and also aid in re-awakening the traditional spirit of the town.

6.4.2 Loss of Privacy through Placement of low level Large Windows

This research study other than recommending the explicit protection of the traditional Swahili house as a unit against any changes that would impair its functions further recommends that any development application to be provided with windows openings at a minimum height of 1.5metres above ground as shown in the Fig. 6.2A below. Further the windows to be of such as size so that the height is twice the width of the window and all such windows on any particular window facing the street not to exceed twenty percent of the wall surface.
As a continuation of the enhancement of the privacy of the traditional Swahili house, it is recommended that no commercial activities be stationed on either on the street or opening directly onto the street. These commercial activities may be approved in the residential areas but to be accommodated within the house and not to block key elements of the houses such as the dakas but may open into the same as shown in Fig. 6.2B below.
6.4.3 Regulation of the Overall Building Height, Form and Massing

In order to maintain Lamu’s historic built fabric in a manner that respects the proportions of the key symbolic elements identified in the Case study, there is need to regulate the overall height and massing of Lamu’s World Heritage site buildings to a certain level. This is because as it was observed in the Case study in Chapter 4 and indicated in Fig. 6.3A below, the built fabric has been steadily growing upwards with no apparent firm control. Even though the Conservation plan limits this to only two levels and a summer house in some areas, this has been heavily flouted.

Fig. 6.3A Lamu’s historic built fabric vertical growth as captured in the different survey periods (Author)
This research study therefore recommends that the Conservation Plan review puts a cap on the vertical growth to a height of Ground plus 3 and which should be strictly enforced. This is informed by the fact that the majority of the houses in Lamu World Heritage Site have reached this level (as shown in Fig. 6.3B below) and furthermore it will not only ensure adequate natural day lighting to the houses but also not jeopardize the structural integrity of the existing structures.

**Fig. 6.3B Existing Lamu Skyline (Author)**

### 6.4.4 Research And Integration Of The Indigenous Building Techniques

The other recommendation that this research study makes is a strategy that would develop first a framework of research and documentation of the available indigenous building technologies and skills, analysis of possible modernization options and eventual training and their eventual integration in the conservation process. Secondly, the strategy would also need to address the issue of traditional materials and potential substitutes’ availability and pricing as a way of ensure a sustainable supply of these materials at a competitive cost. This is due the fact that these indigenous building processes were responsible for the realization and retention of the identified symbolic elements within Lamu’s historic fabric. Their integration into
the conservation process would then serve to ensure the continued performance of the traditional roles of the identified key symbolic within Lamu’s historic fabric.

The research and documentation exercise would eventually culminate in a framework of integration and protection that would guide the adoption and application of these techniques in the conservation process. It is important to note that the framework of protection and integration of the indigenous technologies and materials in to the conservation process alone would not be successful as the techniques themselves ought to satisfy three important criteria; aesthetic desirability, cost effectiveness and ease of application and the recommended research would be geared towards satisfying these three criteria. Therefore to solve this problem part of the recommended research’s objectives would be to research, review and documentation of these techniques so as to understand their strengths and weaknesses as a basis of updating them to make them more cost effective, desirable and easier to work with just like the modern methods and materials. Given also that this research would be done in conjunction with all the stakeholders in the conservation process they would be aware of the full range of possibilities and would be able to offer insights on the best way of retaining the traditional spirit of the techniques. Further, it will be important for the research to look at all possible application methods where traditional inputs have been modernized worldwide, study the mode of delivery and application so as to understand the best way of improving them that will be suitable for the Lamu situation and one that will not disenfranchise the traditional knowledge custodians. The second part of integration and modernization strategy may need also to concern itself with the sources of the materials and their potential alternatives, this would be necessary to allow for the search for a solution on the cost aspects of the traditional materials. In this endeavour consideration would need to be given to potential sources which do not involve heavy transport costs and or are not subject to
hefty local levies and taxes. However, involvement of the community at all levels of the process would be critical so as to ensure their understanding and hence be a guarantee that they adopt these techniques.

6.4.5 African Conservation Plan Model Institutional framework

The implementation and enforcement of the conservation programme of Lamu World Heritage Site rests on the conservation office (LWHSCO) which is vested with the technical implementation aspects of the Conservation Plan and hence would be critical to the success of the integration of indigenous techniques into the Plan. The other body is the county council of Lamu (LCC) which has a key role of not only anchoring the new conservation measures outlined in the recommended review and integration framework of the indigenous building techniques and also ensure that new relevant regulatory bye-laws are in place to guide the whole process. As a consequence of the results in the preceding chapters of this study, the research study further recommends the review and formulation of an enhanced operational framework between the Lamu World Heritage Site Conservation Office (LWHSCO) and Lamu County Council (LCC). These study recommendations are graphically illustrated in Fig 6.4 below highlighting how the new conservation measures contained in the recommendations above will operate in practice.
Fig. 6.4 Proposed Conservation model (Author)
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APPENDIX I

LAMU WORLD HERITAGE SITE CONSERVATION PLAN
the old town and gazetted as a monument under the Antiquities and Monuments Act no. 2 of 1983.

"Court yard" is an open space, surrounded by walls, that provides light and ventilation to the surrounding enclosed spaces.

"Daka" or "Modaka" (pl.) is a partially enclosed entry porch, flanked by stone benches, sometimes with carved plaster ceiling friezes.

"Guest House" is an accommodation for visitors which does not exceed a total of ten beds.

"Hotel/Lodging" is an accommodation for visitors which contains a maximum of twenty-five beds.

"Light Well" is a small space open to the sky and up to two storeys deep, with a minimum dimension for each side of two metres, to provide light and ventilation to interior spaces.

"Listed Building" is any structure or group of structures protected under the terms of the Conservation Plan.

"Local Planning Commission" is the authority responsible for implementing the planning policy and the Building Regulations of the Conservation Plan.

"Outer Protection Area" is the protective zone surrounding the designated Conservation Area whose boundaries are delineated on the maps attached to the Conservation Plan.

"Wikia" or "Vikia" (pl.) is a building extension or suspended room bridging the street which creates a covered passage.

"Soil Duct" is a totally enclosed vertical duct constructed over a soil pit to connect an upper storey latrine to the pit.

"Soil Pit" is a pit excavated for the purpose of disposing of faecal matter.

"Supervisory Planning Board" is the authority responsible for directing the town's overall growth and hearing appeals of decisions made by the Local Planning Commission.

8. Zoning Regulations

8.1 Introduction

8.101 Land use policies apply to both the designated Outer Protection area and the designated Conservation Area. Permitted uses of land and buildings are classified in Zone 1 and Zone 2.

8.2 Zone 1

8.201 Permitted uses of plots and buildings in Zone 1 are residential; private recreational or cultivated garden; religious; educational; commercial establishments occupying a maximum of 100 m² of floor area; and guest houses containing a maximum of ten beds.

8.202 Change of use from unimproved land or private green to any of the permitted uses listed in paragraph 8.201 will be permitted subject to the new development regulations stated in section 9.4.

8.203 Change of use from any of the permitted uses listed in paragraph 8.201 to other uses not specified for Zone 1 will not be permitted.

8.3 Zone 2

8.301 Permitted uses for plots and buildings in Zone 2 include all uses permitted in Zone 1 plus commercial establishments occupying a maximum of 450 m² of floor area and hotel/bedrooms.

8.302 Change of use from unimproved land or private green to any of the permitted uses listed in paragraph 8.301 will be permitted subject to the development regulations stated in section 9.4.

8.303 Change of use from one to another of the uses listed in paragraph 8.301 will be permitted on condition that the design and location of the new premises are approved by the Local Planning Commission.

8.304 Applications for the establishment of a hotel/lodging which is licensed by the County Council and the local Trade Office must be approved by the Local Planning Commission and is further subject to the condition that the size of the new premises be limited to a maximum of twenty-five beds. Applications for the establishment of a hotel which is also licensed by the Ministry of Tourism and Wildlife must also be approved by the Local Planning Commission.

8.305 Change of use from any of the permitted uses listed in paragraph 8.301 to other uses not specified for Zone 2 will not be permitted.

8.4 Buildings reserved for public and religious use

8.401 Buildings so designated include religious buildings, administrative offices, places of public assembly, the post office and hospital, cultural or recreational buildings, educational buildings, and any other premises housing public facilities or services.
8.402 Change of use may be permitted on condition that the proposed use is approved by the Local Planning Commission.

8.5 Areas reserved for public use
8.501 Areas so designated include the Market Square, the Town Square, and other Government land which has been set aside for public use as indicated on the attached Land Use Map.

8.502 Development in the Market Square and Town Square shall be prohibited with the exception of improvements to the infrastructure and existing facilities. Such improvements are to be carried out according to detailed plans subject to approval by the Local Planning Commission.

8.503 Priorities for development and improvements in the remaining areas are to be determined by the local authorities after considering what amenities and public services are needed in the town. No development will be permitted until detailed plans have been approved by the Local Planning Commission.

8.6 Areas reserved for harbour related activities
8.601 Buildings and areas so designated are reserved for warehouses, open air storage, mending of nets and sails, and other uses related to harbour activities.

8.602 Change of use will not normally be permitted except under extraordinary circumstances as determined by the Local Planning Commission. In such cases development is subject to the regulations for new development stated in Section 9.4.

8.7 Areas and buildings which conflict with prescribed land use
8.701 Premises so designated indicate buildings, plots, or areas whose present function is unsuitable or detrimental to the surrounding environment.

8.702 Alternative locations for the town rubbish dump, the open air vegetable market, the power station, and the abattoir must be found within a maximum period of five years. In all other cases, as indicated on the attached Land Use Map, further development of premises with conflicting land use will be prohibited by the Local Planning Commission.

8.8 Illegally blocked streets to be reclaimed by the public sector
8.801 Areas and streets so designated on the attached Land Use Map indicate public passages which have been illegally blocked.

8.802 All illegally blocked streets shall be restored to public use, if necessary by opening a ground floor passageway.

9. Conservation and Environmental Regulations
9.1 Introduction
9.101 Conservation and Environmental Policies apply to the designated Conservation Area unless otherwise specified.

9.102 Within the designated Conservation Area, the Local Planning Commission will seek to preserve all buildings, street frontages, open spaces, streetscape elements, and environmental features which contribute to the character of the old town.

9.103 Within the designated Conservation Area, demolition of coral stone buildings or parts of coral stone buildings or of any other historical, architectural, or environmental features will not be permitted.

9.104 Within the designated Conservation Area, protected buildings and streetscape elements include all listed buildings designated as grade I and grade II buildings and significant facades, ruins, madaka, vikio, carved doors, trees, and vistas as indicated on the attached Development Plan for the Conservation Area.

9.105 Within the designated Conservation Area, alteration of buildings or any other protected streetscape elements specified in paragraph 9.104 is subject to the regulations stated in section 9.2.

9.106 Within the designated Conservation Area, repair and alteration of all other buildings not specified in paragraph 9.104 are subject to the regulations stated in section 9.3.

9.107 Within the designated Conservation Area, development of unimproved land is subject to the regulations stated in section 9.4.

9.108 Within the designated Conservation Area, the location, size, materials, and style of signs and exterior advertisements is subject to the regulations stated in section 9.9.

9.109 Within the designated Outer Protection Area, the height of buildings is restricted to a maximum of three full storeys unless otherwise specified.

9.2 Repairs, alterations, and additions to listed buildings and protected streetscape elements
9.201 Building applications for repairs, alterations, and additions to listed buildings and protected streetscape elements specified in
paragraph 9.104 must be submitted to the Local Planning Commission for approval.

9.202 Owners and builders must carry out all repairs, alterations, and additions using traditional building materials in a structurally sound manner.

9.203 Requests for permission to alter listed buildings will be considered on a case by case basis by the Local Planning Commission. In most cases, alterations will be limited to necessary improvements of living and working spaces and should be executed with special regard to the historical and architectural features of the buildings. Radical alterations which change the exteriors of buildings to such an extent as to render them incompatible with their neighbours in scale, massing, colour, or detail will not be permitted.

9.204 The Local Planning Commission will provide technical advice to people undertaking approved repairs, alterations, and additions.

9.3 Repairs, alterations, and additions to other buildings within the designated Conservation Area

9.301 Building applications for repairs, alterations, and additions to non-listed buildings within the designated Conservation Area must be referred to the Local Planning Commission for approval.

9.302 The owner is responsible for seeing that all repair work is carried out in a structurally sound way. All work involving external and visible parts of buildings must conform in scale, colour, and details to the character of the old town.

9.303 All alterations and additions to non-listed buildings are subject to approval by the Local Planning Commission. The height of any building or part of or addition to that building must not exceed three storeys.

9.304 The Local Planning Commission must be satisfied that all alterations and additions conform in colour, scale, massing, and design to the character of the old town.

9.305 In the case of non-listed buildings with protected streetscape elements specified in paragraph 9.104, repairs or alterations which would obstruct, damage, or remove any of these protected features will not be permitted.

9.4 New development within the designated Conservation Area

9.401 Within the designated Conservation Area, development of unimproved land indicated on the attached Development Plan as “Unimproved land subject to new development regulations” requires the approval of the Local Planning Commission. The Local Planning Commission will request owners and builders to observe the following regulations.

Planning

9.402 Plot size: no plot less than 80 m² in area may be developed.

9.403 Siting and distance between buildings: new buildings shall be sited so that walls facing onto streets match adjacent building lines. The Local Planning Commission may specify additional requirements for the siting of new buildings in response to the particular characteristics of a given “infill” site. If there are no adjacent buildings to establish a frontage line, the front walls of new buildings must leave a minimum of one metre clear distance across the street to the opposite building.

9.404 Height: new buildings shall have a total height to the roof surface of no more than two storeys. If at least two of the adjacent buildings are three storeys high, a height of three storeys will be permitted for the new building.

9.405 Scale and massing: new buildings shall be compatible in scale and massing with the character of the old town. In particular, the configuration of doors, windows, and openings shall be similar in size and proportions to those found in the traditional buildings.

Structure and Finishes

9.406 Building materials: standards and finishes of building materials must conform to the existing buildings in the old town.

9.407 Details and fittings: details and fittings for new buildings should be compatible in appearance and proportion with the traditional character of the old town. Exact duplication is not required, but non-traditional fittings such as concrete awnings, metal canopies, glass-louved windows, pre-cast concrete or cement blocks inserted in openings and used as balustrades, and any other fittings not compatible with the character of the old town will not be permitted.

9.408 Colours: colours used on the outside of new buildings must blend with the range of tones and colours found in the old town. Use of garish colours, oil-based paints, dark tones, and glossy finishes should be avoided. Traditional lime wash tones should be used, and a cream or “off-white” colour is preferable to pure white.
Health and sanitation

9.409 Light and ventilation: the design of new buildings must incorporate a courtyard or lightwell with a minimum dimension of 2 metres on each side to provide light and air.

9.410 Drainage: plans for the new building must show that satisfactory provision has been made for drainage. The roof must be provided with sufficient waterspouts and downpipes to prevent rainwater from infiltrating any part of the building and to carry rainwater to the street drains. No rainwater shall be discharged over or into a street above a level of 50 cm. Household waste water must be discharged into the open drains. The Local Planning Commission may require the owner or builder to do additional work to ensure satisfactory discharge of waste water into the open drains, including the reconstruction, if necessary, of the drain outside the new building.

9.411 Sanitation: construction plans for a new building must show that satisfactory provision has been made for a soil pit latrine. No flush toilet or other household waste water pipe shall discharge water into a soil pipe. Flush toilets will be permitted only if connected to an impervious septic pit or tank. Soil pits must be ventilated to the open air and apertures must be made of permanent, smooth construction and provided with close fitting lids. The interior of the soil duct must be finished with a smooth surface.

9.5 Areas and buildings within the Outer Protection Area subject to Conservation Area building regulations

9.501 The areas and buildings so designated on the Development Plan for the Conservation Area, located along the seafront within the boundary of the Outer Protection Area, will be subject to the same regulations that apply within the designated Conservation Area.

9.6 Public improvement areas subject to detailed development proposals

9.601 The improvement areas subject to future detailed development proposals include the areas specified in sections 8.5 of these regulations.

9.7 Seafront area recommended for drainage improvements, seawall repairs, and refurbishment of street furniture

9.701 The limits of the seafront area recommended for drainage improvements, seawall repairs, and refurbishment of street furniture are indicated on the Development Plan for the Conservation Area.

9.702 Improvements and repairs are to be carried out according to detailed plans subject to approval by the Local Planning Commission.

9.8 Areas and streets recommended for paving and drainage improvements

9.801 Within the designated Conservation Area, public streets and open spaces will be paved with waterproof cement unless otherwise specified by the Local Planning Commission. Drains should be shaped to facilitate cleaning and sloped to provide adequate fall.

9.802 Priority in paving and drainage improvement work will be given to the streets and open spaces indicated in the Development Plan for the Conservation Area.

9.9 Areas where development is not permitted

9.901 Areas unsuitable for development include the areas and buildings specified in section 8.6 of these regulations.

9.10 Outdoor advertisement and special sign ordinance

9.10.1 Within the designated Conservation Area, the erection of signs and other forms of advertisement is subject to the approval of the Local Planning Commission.

9.10.2 The Local Planning Commission will discourage the use of large projecting or flat signboards, signs made of plastic or metal, and internally illuminated signs as well as any other form of advertisement considered inappropriate in colour or scale to the character of the old town.

9.10.3 The Local Planning Commission will encourage the use of traditional carved and hand painted signs.

9.11 Telephone and electricity cables and public lighting

9.11.1 The Local Planning Commission will seek to minimize the erection of poles for carrying electricity lines within the boundary of the Conservation Area. Electricity and telephone cables must be attached to the walls of buildings in a manner which is safe and does not detract from the appearance of the buildings. The route selected must be approved by the Local Planning Commission.

9.11.2 The Local Planning Commission will explore the possibility of re-routing existing overhead cables underground and provide the necessary coordination between the implementing agencies. It will also explore the possibility of installing public street lights in selected areas of the old town, reserving the right to approve appropriate locations and types of street lighting and design of lamp posts.
APPENDIX II

LISTING OF LAMU ON UNESCO WORLD HERITAGE LIST

SITE NAME: Lamu Old Town

DATE OF INSCRIPTION: 16th December 2001

STATE PARTY: KENYA

CRITERIA: C (ii)(iv)(vi)

DECISION OF THE WORLD HERITAGE COMMITTEE:

Excerpt from the Report of the 25th Session of the World Heritage Committee The Committee inscribed Lamu Old Town on the World Heritage List under criteria (ii), (iv), and (vi):

• **Criterion (ii):** The architecture and urban structure of Lamu graphically demonstrate the cultural influences that have come together there over several hundred years from Europe, Arabia, and India, utilizing traditional Swahili techniques to produce a distinct culture.

• **Criterion (iv):** The growth and decline of the seaports on the East African coast and interaction between the Bantu, Arabs, Persians, Indians, and Europeans represents a significant cultural and economic phase in the history of the region which finds its most outstanding expression in Lamu Old Town

• **Criterion (vi):** Its paramount trading role and its attraction for scholars and teachers gave Lamu an important religious function in the region. It continues to be a significant centre for education in Islamic and Swahili culture.
BRIEF DESCRIPTIONS

Lamu Old Town is the oldest and best-preserved Swahili settlement in East Africa, retaining its traditional functions. Built in coral stone and mangrove timber, the town is characterized by the simplicity of structural forms enriched by such features as inner courtyards, verandas, and elaborately carved wooden doors. Lamu has hosted major Muslim religious festivals since the 19th century, and has become a significant centre for the study of Islamic and Swahili cultures.

Justification for Inscription

a) Statement of significance

Lamu is the oldest and the best-preserved living settlement among the Swahili towns on the East African coast. Its buildings and the applied architecture are the best preserved and carries a long history that represents the development of Swahili technology. The old town is thus a unique and rare historical living heritage with more than 700 years of continuous settlement. It was once the most important trade centre in East Africa before other towns such as Zanzibar took over. Since the 19th century, Lamu has been regarded as an important religious centre in East and Central Africa due to the tarika activities introduced by Habib Swaleh, a Sharif descendant of Prophet Mohamed (P.B.U.H). There are many descendants of the Prophet in Lamu. Their presence has kept up that tradition, which continue to the present day Lamu in form of annual festivals known as 'Maulidi'. These festivals are endemic to Lamu and draw the Muslim community from all over East and Central Africa as well as the Gulf. Lamu is an Islamic and Swahili education centre in East Africa. Researchers and scholars of Islamic religion and Swahili language come to Lamu to study this cultural heritage, which is relatively unchanged. The island town has adopted very little modern technology due to its isolation.
b) Comparative analysis.

Lamu is one of the foremost pre-industrial urban settlements in Africa and falls in the class of ‘antique living cities’ in the world. Its historical growth compares well with other African old towns such as (Marrakech and Fez) of Morocco, Lalibela of Ethiopia and Kano of Nigeria whose origins were because of trade and their development was the effort of indigenous people. More than three hundred independent city-states flourished along the East African coast at the height of Swahili civilization from the thirteenth through the fifteenth centuries. Most of these East African towns have either fallen into ruins or have been transformed into modern towns.

The surviving towns and ruined sites are heirs to a distinctive urban tradition that is over a thousand years old. This tradition generated a town building activity, which has left over a hundred and twenty towns on the Kenyan coast. A few of these in Kenya, Mombasa, Malindi, Witu, Faza and Lamu continue to exist, but the majority have disappeared, some hardly leaving any traces such as Hindi and Famau. Others are recognized by substantial archaeological remains of old towns in Shanga, Ungwana and Pate going back to 9th century. Swahili towns of Kilwa and Gede date to 13th and 14th Century respectively. Towns that are Lamu’s contemporaries are such as Mogadishu (in Somali), Zanzibar (in Tanzania), and Mombasa (in Kenya). These three date back to 12th Century. There are many other towns dotted along the East African coast that fall within the 13th-15th Century time period. Most of these towns now retain their old settlements but in ruins. The over riding function of the mentioned towns was trade. Some settlements like Mombasa and Lamu were harbour entreports, others like Pate were workshop towns while Gede was probably a resort town and Takaungu as well as Hindi were plantation centres. All of them retain evidence of an evolved urban culture
formed by the African environment, influenced by input from trade contracts and immigration from across the Indian Ocean. In the East African coast, Lamu is among the region’s most ancient Swahili settlements, some of which dates to as far back as the 8th Century AD. Manda town ruins for instance, a short distance away from Lamu has been dated by archaeologists to be a 9th Century town. Lamu however is one of the very few living Swahili towns’ still retaining its unique and original architectural character and is probably the third oldest continuously inhabited town in the country after Pate and Mombasa. The Swahili culture thrived along the coast of East Africa and there are some similarities in the dialects spoken, the architecture, religion and many other aspects of culture in the coastal towns of this region. However, regardless of the common Swahili culture, geographical and historical circumstances have helped in the development of isolated cultural particularities in each of the coastal towns.

**Zanzibar**

An example we can use to draw the differences is by comparing Lamu old town to the stone town of Zanzibar, which is also a Swahili town off mainland Tanzania. The stone town has been nominated to the World Heritage List. There are several differences between Lamu and the Zanzibari architectural styles. Most of the Zanzibar’s houses are made of mud, lime and stones but the Lamu inhabitants preferred using coral stones, lime and sand. To this effect, Lamu houses are more durable. The Zanzibari designers tended to highly depend on floor tiles and/or mortar screed. In the Lamu case, floor tiles are absent and screed lime mortar is used instead. The two towns have responded differently to the problem of water leakage considering that the houses of the towns were originally designed to be flat topped. To solve this problem, the Zanzibaritis (residents of Zanzibar) have used corrugated iron sheets but the Lamu people have resorted to the traditional coastal adaptive way of thatching with palm fronds. As concerns the internal spatial arrangement, the settings of the Swahili courtyard in
Lamu and Zanzibar are different. In the case of Zanzibar, the courtyard is placed at the back but the Lamu courtyards appear at the front of the building. In Lamu a major feature of many buildings has been *Wikio* (room over a street: a kind of fly over). There are 19 of these in Lamu. This unique feature enhanced the introvert nature of the local residents in that they could afford to move from one house to the other without necessarily coming down to the streets.

This feature is not highly pronounced in the Zanzibar town and is only found in one building next to the Zanzibar fort. The Zanzibari building design is extrovert in nature while the Lamu design is introvert. In regard to Zanzibaris buildings a lot of external aesthetics are placed to the outside as seen in the arched openings, which are wide. In Lamu, windows opening to the street are very small and there are no balconies as is the case with Zanzibar. The setting in Lamu was such that a person could survey the street without being seen from the outside. Lamu architecture has continued to rely heavily on the traditional industry. For instance, traditional lime production is still used. Kilns that use firewood are used to burn coral into lime, which is used for buildings. Lamu’s architectural and cultural uniquness is of great antiquity given that it represents one of the best presentation of Swahili architecture and its conservative and very inward looking society. Thus preserving most of its original characteristics. The present state of preservation is still intact compared to many other similar properties elsewhere. This is so due to the fact that Lamu’s strategic location on an Island plus its narrow streets and alleys has hindered motorized traffic from reaching the town. Hence it has thus remained undisturbed. The townscape of Lamu is such that it will remain unchanged for it has in its design not considered modern amenities like tarmac roads for motorised traffic. Unlike Lamu, Zanzibar’s town planning has considerably allowed infiltration of tarmac roads.
The topography of Zanzibar town allows it to expand but Lamu’s relief is restrictive in that the area beyond its buffer zone lies flat and experiences floods during heavy rains and thus is not suitable for erection of buildings. The area has in history continued to be used as an agricultural reserve.

**Mogadishu**

Both Lamu and Mogadishu, a city in southern Somalia flourished during the same era (12th century). However compared to Lamu’s built heritage, it has not been able to retain its authenticity. Mogadishu has been subjected to rapid modernization unlike Lamu. At present, most buildings that still stand date back to the 19th century. There is no evidence of “buildings that antedate the 18th century with the exception of the mosque in Hamer Weyne,” (Chittick, N. 1982 Pg 48). In the present Lamu, there are many well-preserved buildings some constructed more than five hundred years ago.

**Mombasa**

This is an old town in the Kenyan coast. Unlike Lamu, it was highly influenced by the completion of the Kenya-Uganda railway in 1901 and the development of the harbour. This subjected it to international influences unknown to Lamu and Mombasa turned into a cosmopolitan town. Unlike Lamu, the Mombasa old town streets are wide and have accommodated motorized traffic. Mombasa old town buildings have their own characteristic balconies overlooking the streets wooden brackets that support these.

Lamu therefore is seen to present a distinct character in its architecture, streetscape planning, and its conservative culture. It is the only town among the ones mentioned that has managed to preserve its authenticity.

c) **Authenticity**

Integrity The old stone town of Lamu has survived into the twenty first century due to several fortunate circumstances: the remoteness of the area, and the absence of roads
and vehicles on the island have prevented many irreversible changes associated with modernization. At the same time Lamu’s position as regional center and its active seaport have ensured the continued economic well-being of the town. The inhabitants of Lamu old town managed to safeguard the town’s identity while it was growing by preserving its Swahili culture and its buildings, some dating from the fifteen-century. At present the building fabric is relatively well maintained and the socio-cultural practices are still in place due to its location in an island. Lamu has been spared the disruption of its society, which is the norm of the impact of western influences when in contact with the African culture. “It adheres to its old way of life, and the town itself is as it was a century ago…” (Usam Ghaidan, 1975). The inhabitants of Lamu have managed to maintain the age-old tradition of the sense of belonging and social unity.

For instance, relay of information is still done by a town crier who broadcasts along the narrow streets any news that is of interest to the Lamu residents. This character of friendly verbal communication with people hitherto unknown to an individual and the ready acceptance thereof is almost absent in most of the towns in the world. It is normal for an inhabitant of Lamu to stop and chat long with people he meets on the streets when on his way to work. Many comparable towns have been overshadowed by modern agglomerations of an alien character or the infiltration by impacts from other cultures in modern towns. In other towns interactions with other inhabitants are highly impersonal and superficial and selection of social relations is determined by social classes, which more often than not emanate from economic hierarchy. Repair work on conservation of Lamu old town has always been done using materials and methods traditional to Lamu culture. There is no indication so far that this position will change in the near future given the remoteness of the area and the poor communication network by road.
APPENDIX III

KEY INFORMANT QUESTIONNAIRE

UNIVERSITY OF NAIROBI
DEPARTMENT OF ARCHITECTURE

<table>
<thead>
<tr>
<th>Purpose of study:</th>
<th>To investigate the identity elements in Lamu Stone town architecture and how these influence the perception of individual identity as Swahili people</th>
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<tr>
<td>Declaration:</td>
<td>Data/information collected will be used only for purposes of this study.</td>
</tr>
</tbody>
</table>

KEY INFORMATION INTERVIEW SCHEDULE

Name (Optional): ____________________________  Profession: ____________________________

Organization: ____________________________  Designation: ____________________________

Gender: ____________________________  Age: ____________________________

1. What are/were the traditional defining elements of Lamu Stone town as a Historical/Swahili Town?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Defining Elements/characteristics</th>
<th>Manifestation and Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial organization &amp; use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technological &amp; building systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ritual &amp; Spiritual systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social systems</td>
<td></td>
<td></td>
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<tr>
<td>Political &amp; Power relations</td>
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</tr>
</tbody>
</table>

2. How were the above elements manifested in Lamu Stone town?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Element</th>
<th>Cultural manifestation Mode of establishment in Lamu Stone town</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial organization &amp; use</td>
<td></td>
<td></td>
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<tr>
<td>Technological &amp; building systems</td>
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</tbody>
</table>
3. To what extent did the following factors shape the historical character of Lamu Stone Town? (Key: 1=the least; 5=the most)

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
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<tr>
<td>Rituals &amp; Spirituality</td>
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<td>Spatial organization &amp; use</td>
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<tr>
<td>Social &amp; Gender</td>
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<tr>
<td>Technology &amp; Building Systems</td>
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</tbody>
</table>

4. To what extent do the following factors shape the identity & character of Lamu Stone Town? (Key: 1=the least; 5=the most) Identity

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
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<tr>
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<td>Spatial organisation &amp; use</td>
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<tr>
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<td>Town Planning</td>
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</tr>
</tbody>
</table>
5. Compare and rank the importance of the following factors in shaping the identity & character of Lamu Stone Town:

<table>
<thead>
<tr>
<th>Rituals &amp; spirituality</th>
<th>Spatial organization &amp; use</th>
<th>Culture</th>
<th>Social &amp; Gender</th>
<th>Technology &amp; Building Systems</th>
<th>Politics &amp; Power relations</th>
<th>Town planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rituals &amp; spirituality</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Spatial organization &amp; use</td>
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<td></td>
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</tbody>
</table>

6. How, if observed, have the following characteristics changed with time in Lamu Stone Town?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Element changes</th>
<th>Reason for changes</th>
<th>Degree of change (1=Low; 2=Moderate; 3=High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial organization &amp; use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technological &amp; building systems</td>
<td></td>
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<tr>
<td>Political &amp; Power relations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. What, if any, are the non-material effects associated with the above changes?

**Area of Change**

- Social systems
- Political & Power relations

8. What are the coping mechanisms for the above changes?

<table>
<thead>
<tr>
<th>Area of change</th>
<th>Coping Mechanisms</th>
<th>Positive/negative outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial organization &amp; use</td>
<td></td>
<td></td>
</tr>
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<td>Technological &amp; building systems</td>
<td></td>
<td></td>
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<tr>
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</tr>
</tbody>
</table>

9. Historically, what were/are the perceived role(s) and defining characteristics of the following areas of Lamu Stone Town?

<table>
<thead>
<tr>
<th>Area</th>
<th>Perceived Role</th>
<th>Social-Spatial characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>House courtyard (Kiwanda)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daka</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. What, if any, are the positive and negative effects associated with the above changes?

<table>
<thead>
<tr>
<th>Area of Change</th>
<th>Complements (+ve)</th>
<th>Counteracts (-ve)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological &amp; building systems</td>
<td></td>
<td></td>
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<tr>
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8. What are the coping mechanisms and positive or negative outcomes associated with the above changes?

<table>
<thead>
<tr>
<th>Area of Change</th>
<th>Coping Mechanisms</th>
<th>Positive/negative outcomes</th>
</tr>
</thead>
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<td>Daka</td>
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<td></td>
</tr>
</tbody>
</table>
10. How do the perceptions influence the present image and function of those areas named in Q9 above? Explain

11. Have those perceptions changed? Explain

12. List the characteristics that enable Lamu Stone Town to be perceived as a traditional/historic town and those that obscure that perception?

<table>
<thead>
<tr>
<th>Traditional characteristics</th>
<th>Modern characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. How do the above listed characteristics enhance the identity of Lamu Stone town as a Swahili town?

Explain

14. What are the changes (if any) in the following areas in Lamu Stone town?

<table>
<thead>
<tr>
<th>Change Area</th>
<th>Nature of changes</th>
<th>Change Factors</th>
<th>Degree of change (scale 1 - 5 for least and most)</th>
</tr>
</thead>
<tbody>
<tr>
<td>House courtyard (Kiwanda)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Daka</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mtaa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood mosque</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usita wa mui</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mkunguni square</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. What are the positive or negative effects to the historic identity of Lamu Stone Town attributable to the above transformations?

<table>
<thead>
<tr>
<th>Change Area</th>
<th>Change Factors at Play</th>
<th>Positives</th>
<th>Negatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>House courtyard (Kiwanda)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood mosque</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usita wa mui</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
16. Characterize the following elements of the town as manifested in Lamu Stone town

<table>
<thead>
<tr>
<th>Space or element</th>
<th>Examples/Name of Space or element</th>
<th>Evaluative questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meeting points</strong>: Squares, Public places</td>
<td></td>
<td>• How did they develop?</td>
</tr>
<tr>
<td><strong>Paths</strong>: Streets</td>
<td></td>
<td>• What were the traditional roles/uses/perception?</td>
</tr>
<tr>
<td><strong>Landmarks</strong>: Prominent Buildings, structures</td>
<td></td>
<td>• Who were the traditional users?</td>
</tr>
<tr>
<td><strong>Edges</strong>: boundaries, buffers, e.t.c</td>
<td></td>
<td>• What are the defining characteristics?</td>
</tr>
<tr>
<td><strong>Buildings &amp; Components</strong>: House typologies, balconies, &amp; barazas</td>
<td></td>
<td>• Where are/were they located?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What principles guided their creation?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Who were the creators?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Who were the caretakers?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What has changed?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What has caused the changes?</td>
</tr>
</tbody>
</table>