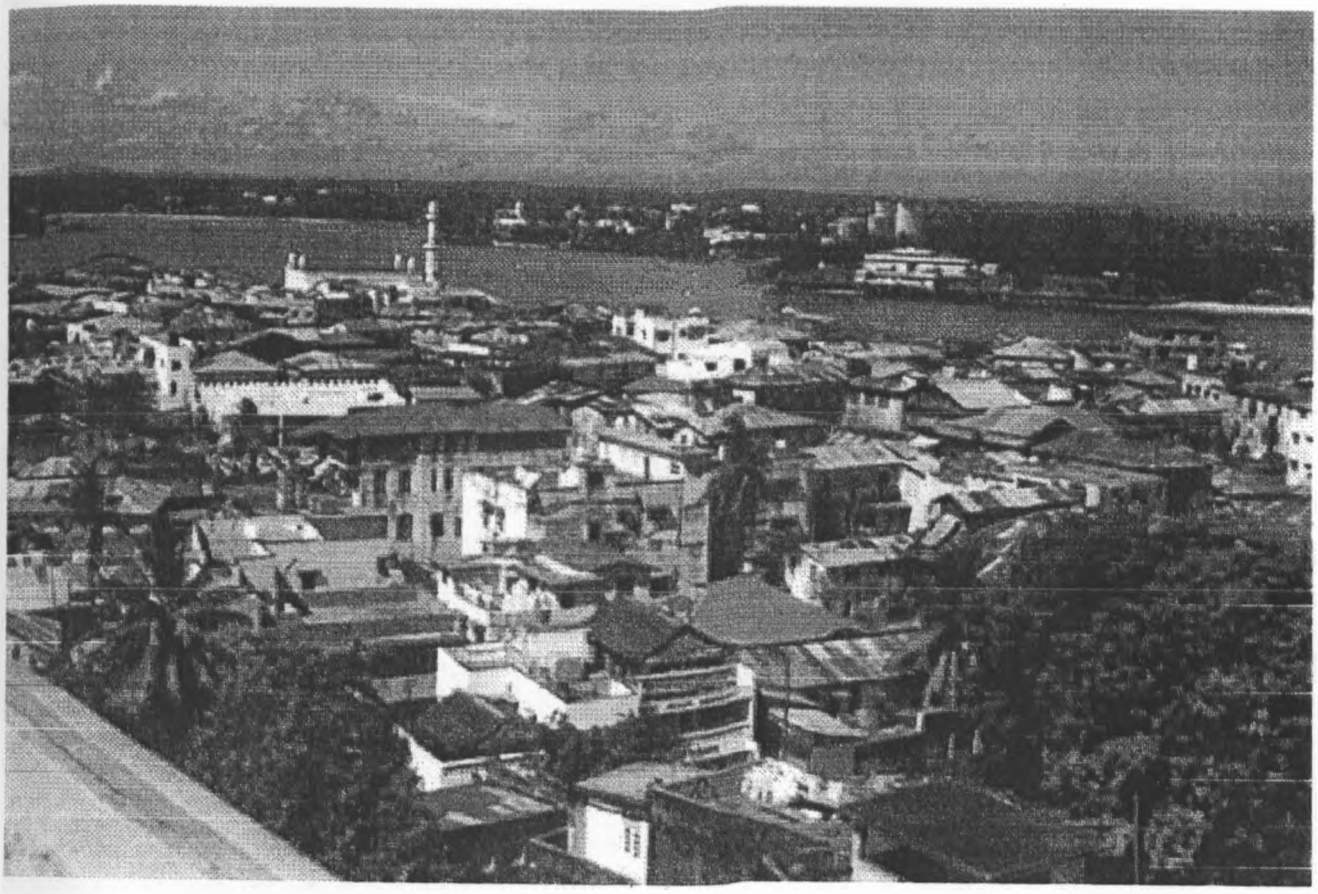
Continuity and Change in Historic Planning:

Towards a Sustainable Townscape of Old Town of Mombasa



By

Mugwima Bernard Njuguna

B. Arch (Honours), Jomo Kenyatta University of Agriculture and Technology

A thesis submitted in partial fulfilment of the requirements for the degree of Master of Arts in Planning

UNIVERSITY OF NAIROBI

2004

DECLARATION

This thesis is my original work and to the best of my knowledge has not been submitted for a degree in any other university.

7-10-2004

Mugwima Bernard Njuguna

This thesis has been submitted for examination with my approval as the principal university supervisor.

07TH OCTOBER 2004

Charles Dadu Karisa

Department of Urban and Regional Planning
University of Nairobi

JULY 2004

ACKNOWLEDGEMENT

I feel obliged to express my gratitude to the Dean's committee, Faculty of Architecture Design and Development (FADD), University of Nairobi, for having recommended me to the Board of Post Graduate Studies, for the award of University Scholarship. Further, am equally indebted to Jomo Kenyatta University of Agriculture and Technology (JKUAT) who granted me the necessary study leave to pursue M.A. Urban and Regional Planning at the University of Nairobi. I specifically wish to thank the Mr. Kigondu, Chairman, Department of Landscape Architecture, JKUAT.

I extend my appreciation to all staff of the Department of Urban and Regional Planning, University of Nairobi, for their high level of guidance and responsibility and particularly to Prof. Ngau for his tireless pursuit of the department's excellence and his keen interest in this study. Further gratitude goes to Mr. Abonyo for encouraging me to pursue this course. Dr. Mburu also introduced me to the field of conservation and I owe him gratitude.

Special gratitude goes to my supervisor, Mr. C.D. Karisa, for his selfless input and commitment to this study. Without his insights and criticisms this study would not have reached a logical conclusion. There would have been fewer errors and obscurities in the study if I had followed his advice even more diligently. He has subjected the penultimate draft of this document to the searching scrutiny that most documents need but few are lucky to get.

Appreciation is also accorded to the Mombasa Old Town Conservation Office staff for their assistance in the data collection process. Also acknowledged are the residents of Old Town of Mombasa who availed the information I badly needed.

Further I extend my gratitude to my friends and classmates for their unwavering support and stimulating though sometimes seemingly cynical criticisms. It is my humble aspiration that this document in some way will reflect your support.

Although all of the above and many more people helped in some way in the researching of this study, I would of course stress that any inherent flaws in no way reflect their contribution and I alone am responsible for any errors or short comings there in.

UoN, 2004

M.B.N

DEDICATION

To Nyambura and Nyaboke

TABLE OF CONTENTS

CHAPTER 2: LITERATURE REVIEW 30

LIST OF MAPS

LIST OF PLATES

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

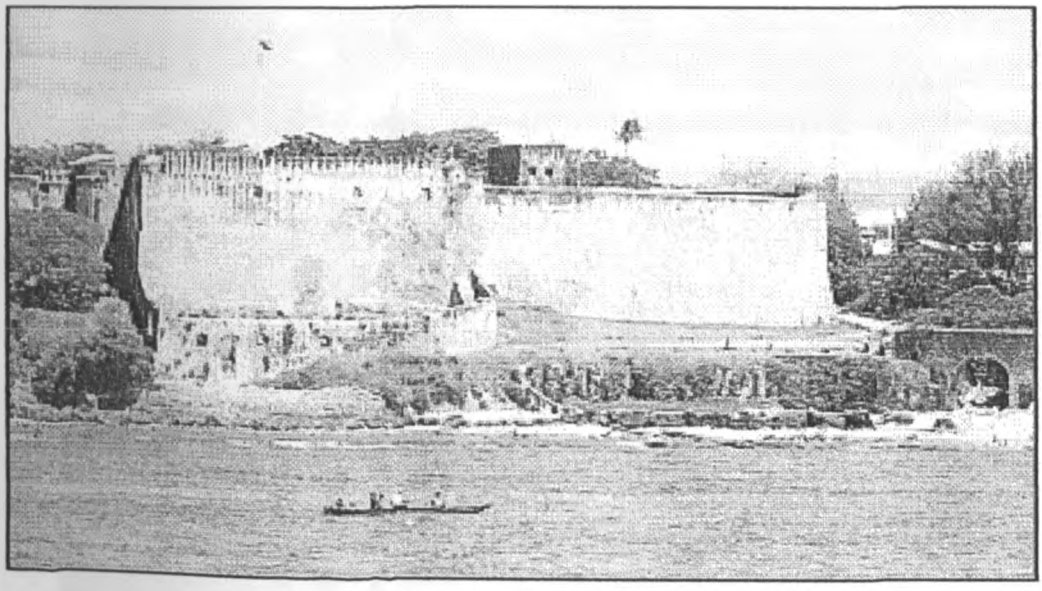
Historic urban environments are deteriorating in socio-cultural, architectural, economic and historical continuity. This is due to the challenges of rapid growth, blurred vision and lack of commitment to substantive positive change. The architectural heritage, which is an outward expression of irreplaceable spiritual, cultural, social and economic value, is in danger. The Old Town of Mombasa is one such historic urban area, threatened by the alarming rate of loss of historic character. As we endeavour to restore some order out of the existing situation, there is need to draw a balance between the obsolete and fashionable styles in the context of a dynamic society. In a society that has started de-linking itself from the past, one has to make the inhabitants empathise with styles that enrich their environment and ensure that development in the long run will be sustainable

To these ends this study examines the evolving character of the Old Town of Mombasa townscape and establishes the problems associated with its planning and management. The study also elicits attitudes towards the perception of the neighbourhood character; and explores ways of making the neighbourhood sustainable. The study situs is the field, in the Old Town of Mombasa. The main research method employed is the structured interview designed along the semantic differential scale. Focussed group discussions and observation of the physical environment are used to bolster the inferences made from the largely qualitative data.

From the analysis, it was clear that attitudes are neither arbitrary nor idiosyncratic but divulge common patterns of preference. The inhabitants of the Old Town of Mombasa were found to value their heritage, but were at crossroads because the buildings did not offer much economic value to them. They were therefore inclined to let them deteriorate since the law does not allow for their demolition. It is from these that the study proposes an intervention framework by suggesting planning and design strategies that can lead to a sustainable townscape. The area around the government square is isolated as a strategic area to revitalise among other economic opportunities for the sustainability of the historic character.

The adaptive re-use of the obsolete buildings is advocated for in the study since it does not require a lot of monetary injection yet can allow for the introduction of added density of use and more current accommodation. It is further proposed that strict zoning of use should be shunned. To manage and plan the historic area, the study advocates for the formation of a Conservation Areas Development Authority.

Chapter 1
Introduction



Fort Jesus Source: Jewell (1987)

CHAPTER 1: INTRODUCTION

1.0 Introduction

Historic planning involves conservation. This is an inclusive term to cover the breadth of activities aimed at safeguarding heritage for the future (Sarkar, 1996). As such, conservation involves continuity and change and attempts to resolve the problems and conflicts that arise in the presentation of relics. It has been an ongoing concern among researchers on the various methods that can be used to conserve historic buildings and even neighbourhoods.

The aim of conservation is to 'control the rate of change (Sarkar, 1996). Perhaps the most exciting part in the conservation exercise is to stand between the two worlds - the past and the present and to mould the resources in a balanced way for the future in a sustainable manner. Normally, people in general are sceptical in the under-developed/ developing countries once a private building is listed under the heritage category. This is because they feel it loses its development potential. This misconception is strongly engraved in the mind of general mass as 'conservation' is often equated with 'conservatism' (ibid). As pointed out by Fielden (1990), conservation is not an impractical or nostalgic attempt to see history reversed; it is logical step in evaluating the whole environment.

Although there have been important advances in the field of conservation world-wide, the situation is still not under control, and the actual resources are even more at risk due to the rapid growth of population. At the present several international organisations are in the process of reviewing their policies and strategies in order to cater for the current needs. It is strongly felt that much of the work depends on public awareness and right attitude of the policy makers towards the heritage resources (Sarkar, 1996).

Rapid and uncontrolled technological evolution has become so institutionalised that change is now seen as synonymous with progress (Fitch, 1990). The sheer prestige of the new has suffocated the old, the traditional craft and conventional wisdom in general. Only in recent times are we being compelled to re-examine the ultimate cost of this new attitude towards making and using artefacts (ibid). Feldt (1998) points out that globalisation is not a threat in itself. To him it is paramount that we protect what is distinctive.

Papageorgiou (1970) observed that the most important factor in conservation is the attitudes of the inhabitants of the historic centres to their protection and survival. Conservation does not only deal with the urban morphology. It also deals with, as Ahm

(1998) pointed out, with people's lifestyles and their innermost dreams and aspirations. Therefore as noted by Amiry (1998) one of the most problematic issues of conservation of historic towns is the concern with the physical aspect of the place rather than the community living in that place.

It is for this reason that the study will probe into the perception of the people in Old Town of Mombasa towards their environment. As such this research is conceived with the prime aim of finding out the old town residents' attitudes towards their historic fabric, so as to complement efforts of the conservation planner or architect, among others, enhance the historic neighbourhood quality by applying user attitudes as a guide. The old stone town landscape belongs to another age and should not be rendered into to a museum piece. It is a living tissue. Life thrives within it both defining and being defined by history. Since the inhabitants will ultimately be responsible for conserving this historic heritage, a view pegged on sustainability in historic planning is necessary in this zone. Such an approach towards urban design is important because construction will not cease if this valuable fabric is to sustain itself yet there is an inherent need to achieve historic continuity.

Viability of Old Town of Mombasa will depend on many mutually reinforcing activities that can help stimulate economic growth, alleviate poverty and improve the urban environment.

1.1 Problem Statement

Dynamics of growth, coupled with limited resources is putting enormous pressure on the Old Town of Mombasa, on its buildings and infrastructure. Moreover, changing living standards are compelling residents to radically alter the old buildings. Modern building materials and construction technologies are being used to put up new structures that are moribund, both aesthetically and structurally. There is little doubt that if allowed to continue unchecked, these changes will undermine and eventually obliterate the historical structure and character of the Old Town.

Modern built forms in this zone have created new spatial patterns, leading to both visual and functional contradictions such as inappropriate scale and colour. This has led to the possibility of offence to the traditions and cultural heritage of the community (Ghaidan, 1976). The cultural consequence of this is that the new artefacts tend to discredit then replace the local older forms and concepts by their shear prestige of being new, modern, cosmopolitan or generally not insular.

Aside from the rich cultural heritage of the Old Town, the architectural fabric is in danger of destruction as a result of the haphazard alteration of residential houses, either to cash in on the visiting tourists to the area, or on the increasing locals seeking employment (Kiamba, 1995). The result is increased stress on the existing infrastructure, be it housing, sewerage, water provision or electricity. As Fitch (1990) correctly observed, the old artefact has begun to be regarded as an intolerable restriction upon increased productivity. The long established spatial order is in danger of disintegration due to little or no regard to basic planning principles.

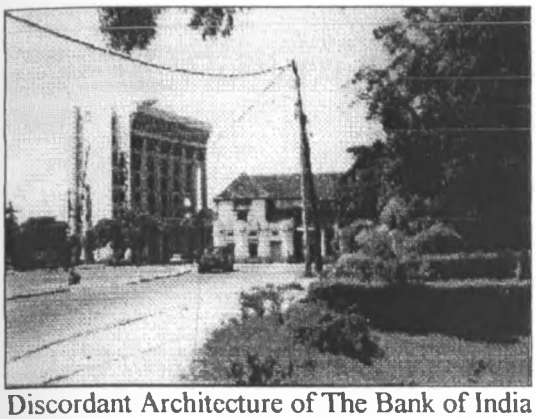
The imitative new architecture coming up in the Old Town of Mombasa is not contextual and blurs the visual distinction of the growth of the city image. Neither are some of the new buildings in the conserved zone, which may be forced into an old mould, that is not always appropriate to the functional requirements of today's buildings. The result is that the city silhouette and its social fabric have been undermined.

Lack of comprehensive custodial agency has made the task of managing the Old Town difficult, if not impossible. The absence of protective legislation gave free rein to earlier architects who did not hesitate to demolish old buildings of considerable architectural and historical importance in order to use their sites for new projects. The legal and administrative measures, which have been evolved today, are intended to protect the remaining buildings against destructive alterations or demolition. But these protective measures, important though they are, do not help where aesthetic interventions are concerned. On the contrary, they simply deal with formulation of legal provisions and special building regulations for historic urban centres.

Architectural obsolescence is now approaching the level at which massive physical repair costs outweigh the temporary advantages provided by obsolete accommodation and this obsolescence produces highly damaging environmental effects. A state of visual inertia exists and the historic town scene is not seen to be evolving but imposition of alien architecture and other developments is evident. This is partly because the role of the local community is usually ignored in the planning process and it is not the community's image that guides the planning process adopted. This may lead to non-tolerance of new buildings.

Thus there is need for a framework for contextual response. However, this is not an easy task for a planner. It is one that requires visual awareness, sensitivity, study and thought.

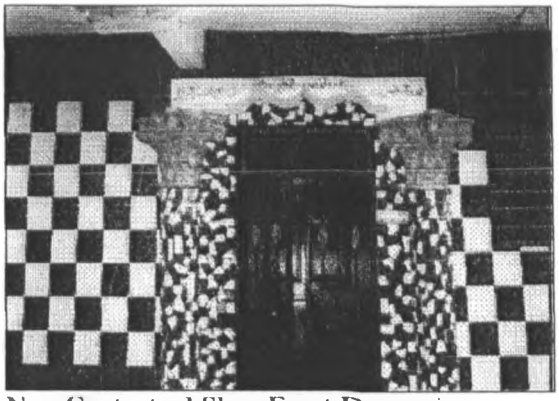
Plate 1, The Problem



Discordant Architecture of The Bank of India

Neglect of a Historic Building

Neglect of a Historic Building



Non-Contextual Shop Front Decoration

Large Vehicles in the Narrow Streets

Unsightly Down Pipes With Vegetation

Source: Field Survey (2004)

1.2 Purpose of Study

According to Ebong (1983) the environmental quality and the quality of life are two variables of the same equation. The quality of the environment, being an important health element, affects not only the well being of the people, but also their productivity, their manner of living as well as the ordinary decencies of their lives. The question is; how do the residents of Old Town perceive their living environment? This remains a moot question, yet residents' perception of the quality of their historic environment can provide useful clues for community planners charged with the responsibility of land use planning for the well being of society.

The purpose of this research, therefore, is to examine the townscape character of the Old Town of Mombasa and how it has been changing or evolving, the perception of the local people about their environment and how best the historic area can be conserved. As mentioned earlier, conservation must ensure continuity in history, tradition and culture yet be able to accommodate changing lifestyles in a sustainable way without rendering the historic area a museum piece.

Research Questions

- What is the evolving character of the historic townscape?
- How has this character been changing in recent times?
- What are the planning and management problems associated with the historic landscape?
- How do the residents of Old Town of Mombasa perceive their current environment and the recent changes?
- In what ways can the Old Town of Mombasa be revitalized?

1.3 Study Objectives

The main objective of the study is to evolve a sustainable conservation and development framework that will enhance the Old Town of Mombasa historic character in a contemporary setting. The specific objectives are as follows:

- To examine the evolving character of the townscape in the conserved zone of the Old Town of Mombasa.
- To establish the problems associated with the planning and management of the historic character.

- To establish the attitudes of the old town inhabitants towards their historic environment.
- To identify and expound on the opportunities for the sustainability of the historic character
- To evolve a sustainable conservation and development framework that will enhance the Old Town of Mombasa historic character in a contemporary setting.

Study Hypotheses

Lawson and Walters (1974) advanced the broad hypothesis within which this research falls and is stated thus:

> *"... if a gross environmental change occurs in an established residential area then a gross community reaction will be observed".*

It is this hypothesis that forms the point of departure for this study. The established residential area in this case is the historic Old Town of Mombasa; the gross environmental change is brought about by the introduction of modern artefacts, inappropriate developments and a rapidly social life. Although this historic zone has not been grossly changed it slowly will unless measures are put in check (Ghaidan, 1976).

- **Alternative Hypothesis (H_A)**

Discordant changes in the evolution of the townscape character significantly affect the inhabitants' perception of their historic neighbourhood.

- **Null Hypothesis (H_o)**

Discordant changes in the evolution of the townscape character do not significantly affect the inhabitants' perception of their historic neighbourhood.

1.4 Study Assumptions.

- **General Assumptions.**

The study is based on the following broad assumptions that:

i. The conservation of historic neighbourhoods is desirable and therefore of importance to a community. This is the basis for giving priority to the past's built heritage. It therefore renders Old Town of Mombasa an asset and not a liability.

ii The residents of Old Town of Mombasa are rational in their decision making process.

iii. The Old Town of Mombasa will continue to grow in time and space. This means that new developments will continue to be undertaken in this conserved zone and this will affect the townscape character and hence the sense of place.

iv. A harmonious symbiotic relationship can exist, as visually manifest in the built environment, between contemporary developments and those that are considered historic. Implied in this assumption is that contemporary developments can also be historic in their own right. Therefore the growth of the historic area can posses both continuity and change at the same time

- **Specific Assumptions.**

More specifically, the study assumes that:

i. Cultural outlook and frame of judgement does not vary significantly for all the inhabitants. This is so because the area is predominantly Muslim and Islam acts as a unifying factor. All responses will therefore take on the same weighting. The townscape character will be the main factor that influences their perception of the historic neighbourhood.

ii. Despite the differences in verbalising the reasons for their underlying attitudes, if common patterns of preferences in relation to the environment are observed, such preferences will be interpreted as representing the universal.

1.5 Study Significance

According to Doshi (1990), an eminent architect of India, the chaos in urban areas is the lack of philosophical backbone to the planning process adopted. To him, "first the environment, then development and then architecture". In his opinion, indigenous character of built form provide a setting for the continuation of fundamental values of the society and a "sense" of continuity of fundamental these values should be the essence of the approach to plan a good habitat.

Fielden (1990) writes,

> ...*Conservation of a heritage area has to be based on profoundly human needs, the need to live in surroundings that remain familiar affording a cherished local pride, while allowing the desirable and inevitable changes for their improvement and enhancement of traditional values and amenities.*

The aim of conservation is to retain or recover the cultural significance of a place or of a particular society and three aspects to be taken care of are the security, the maintenance and the future of it.

Sarkar (1996) asserts that in developing countries conservation of historical towns and monuments cannot solely depend on the 'romantic attitude', which rich countries can afford to do. This is because in the developing countries the scenario is quite different where priorities are given to other aspects like education, food, unemployment, housing and so on. In Kenya, therefore practical gains have to be thought out. This is not very difficult considering the established fact that in many cases, fund requirements is much less for a conservation project compared to a total development of a new site. There are many direct and indirect benefits of conservation and/ or historic planning.

- **Direct Benefits**

These include, but not exclusively:

- Preserving the traditional skills and craftsmanship.
- A new employment opportunity for a particular class of society that is the artists, craftsmen, architects, technologists, etc.
- An encouragement for business promotion through the specialised construction activities amongst the contractors, developers, material suppliers and the traders.
- A commercial gain and general employment gain through 'tourism promotion activity', in the government sector such as a way of foreign exchange earnings and in the private sector through hotel business and travel agencies.

- **Indirect Benefits**

These include:

- Improvement of the socio-economic picture of the country.
- Stability among the various ethnic groups.
- A harmonious architectural style blending past and present trends.
- A social identity of its own in the world.

1.6 Relevance of the Study

This is an opportune time, therefore, for the developing countries to seriously think about conservation of their heritage resources. The Old Town being a locus of invaluable architectural and urbanistic heritage requires concerted efforts to protect the urban context

and sense of place *(genius loci)* and to - revitalise the old town to ensure that its links to the surrounding city is reinforced. (Serugeldon, 1977)

Landry (1997) pointed out that cultural heritage provides us with confidence and security to face the future. This cultural heritage is historical, industrial and artistic heritage representing the assets in the built form. A cultural earthquake should not be precipitated by the introduction of a discordant built environment. More importantly;

> *We must recognise that the value of these cultural resources have in their ability to serve as tangible link to the past which narrated history cannot. The direct access to the past that these resources provide, if lost, cannot be recaptured. (Thakar, 1989 quoted by Sarkar, 1996)*

The identity of any particular society is the heritage resources of its own which may find out its own way to continue for its future generations. This is summarised by Sarkar (1996) in the following words, "If we lose our memory we lose or soul".

According to Procesi (1990) the general deterioration and uncontrolled development that is rapidly changing the face of the Old Town of Mombasa conserved zone combine to keep the average tourist to a very short time. The shorter a tourist spends in the conserved zone, the less he spends and the less chance that he will help the local economy. Efforts to increase tourism and its economic benefits must focus on keeping them for a longer period of time. This will involve creating greater attractions and improving the infrastructure. These changes must be facilitative and not debilitative of both socio-cultural and economic expression of those using them (Kiamba, 1995). Tourists, important as they may be, cause untold pressure on the historic fabric, which has not been designed to accommodate them. These invading admirers demand that the street design be thought anew and certain facilities must now be provided. Street furniture therefore has to be provided but the framework for such provision does not exist. If an area is to live changes must be accepted in the furnishings of the street as readily as changes to the surrounding buildings. The study therefore addresses these issues at great length.

A contextual approach to urban design in the revitalisation of Old Town of Mombasa is advocated for in this thesis because each development in any city is ultimately viewed as an attempt to decorate the city, the functional role that such development plays notwithstanding. There is need to look at the environment as a totality and relate all the different aspects of the environment together.

The street scene in the Old Town of Mombasa is one of the eye-catching features. Every street, wall, tree, back alley and every space is important in its own right. A strategy will be necessary for the improvement of the environmental quality, including visual delight through sensitive design. To 'civilise' the environment of this historic town is an enormous yet necessary task. Any design work carried out in the Old Town of Mombasa must fulfil both the functional and aesthetic requirements.

What is also lacking is a spark for creativity, which produces schemes in harmony with the surrounding area and that allow for intelligent interpretation. The planner must therefore aim at creating a kinetic a sensation but avoid excessive visual virtuosity that can detract from the existing scene. Overdressing the locality in the name of modernity must also be avoided yet we must continue to carry out development in this area to cater for modern functional needs.

Historic places, objects and manifestations of cultural, scientific, symbolic, and religious values are important expressions of the culture, identity and religious beliefs of societies. Their role and importance, particularly in the light of the need for cultural identity and continuity in a rapidly changing world, need to be promoted. Buildings, spaces, places, and landscapes charged with spiritual and religious value represent an important element of stable and human social life and community pride. Conservation, rehabilitation and culturally sensitive adaptive reuse of urban and architectural heritage are also in accordance with sustainable use of natural and human-made resources. Access to culture and the cultural dimension of development is of the utmost importance and all people should be able to benefit from such access.

1.7 Study Scope

A heritage area is defined as an area of special architectural, historical as well as of cultural interest - *the character and the appearance of which is required to be preserved and conserved* (Sarkar, 1996). It is the traditional identity of that locality. Such areas may be large or small town centre or the whole town, a square or a group of buildings, streets or the open spaces, features of archaeological interest or the natural environment. It can be anything out of these, but the important part of it is that it has a distinct character, which separates if from the other.

In this research, Old Town of Mombasa is considered as a representative of such zones as described above in the East African littoral. In Old Town Mombasa, the study focussed on the area declared as a Monument in Gazette Notice No. 2092 of 11th May 1990. The

Gazette Notice No 1779 of 3rd May 1991 subsequently confirmed the gazettement of this Conservation Area as a monument. Concerning the above gazettement, the definition of the conservation Area as...' All that area of land measuring approximately 13.0 hectares, known as the Old Town....' is incorrect in the number of hectares, which are 31. It is not clear whether this anomaly was ever followed up.

For detailed cluster studies and exploration, the study conveniently concentrated on all that area North of Fort Jesus, bounded by Mbarak Hinawy Road to the West and extending up to and including the fish market. The Indian Ocean completes this circuit. This zone is of special interest because it has distinctive qualities that make it worthy of attention. 'Buildings' not only include houses and other forms of shelters but also other structures such as a warehouse, a square, a club, a market, a jetty and even a mosque in the neighbourhood. It is an area most frequented by tourists. The study uses this area to work out a proposal for the revitalisation of the Old Port.

The theoretical scope considers the character of the townscape as it relates to the rest of the greater Mombasa. Of importance here is neighbourhood perception in the conserved zone and the meanings or symbolisms accorded to modern developments in the region. The study is primarily concerned with the attitudinal aspects of perceptions of an evolving townscape.

The analysis of the physical environment primarily constituted an appraisal of the built environment, their sizes, orientation and adequacy of use. The quality and condition of the infrastructure services was also undertaken. The study also investigated ways of rendering the historic townscape sustainable.

Map, 1 Geographical Scope of the Study

1.8 Proposed Outline of Thesis

The research is classified into six chapters each focusing on different aspects.

Chapter one features the introduction, study objectives, the hypotheses, and research variables, accompanying assumptions, justification scope and limitations. The chapter generally looks at the conservation scene in a global perspective, while the problem statement probes the existing problems in the conserved zones as relates planning. The purpose of the study is succinctly stated in study objectives. The chapter also discusses the relevance of study in today's society and its application to a wider section of society. The study scope outlines the confines of the study. The problems and inhibitions in the study are in the study limitations. The research methodology is succinctly discussed in this chapter.

Chapter two is a critical review of relevant literature. This chapter is introduced by look conservation in general. The concept of townscape is addressed and this is to be followed by various issues in conservation zones that elicit public attitudes. The chapter also discusses the importance of cultural property as it relates to heritage areas. Case studies from various parts of the world are also given detailed attention. This chapter is summarised by a theoretical framework, which identifies a research gap that form the point of departure for the research.

Chapter three focuses on Mombasa Municipality and Old Town of Mombasa. A historical development is to be outlined. Townscape elements in this zone are considered at length.

Chapter four looks at the perception of neighbour quality followed by attitudes towards modern developments. Under this section accumulated facts and figures are analysed and presented in a comprehensible form. The chapter further looks at challenges in planning and management of Old Town of Mombasa. The changes that have been taking place in the townscape conclude this chapter.

Chapter five summarises the findings of the research and then give recommendations based on these. Economic opportunities for the sustainability of the historic character are also explored. The chapter further contains proposals on zoning and general development criteria to be adopted in the conserved area. It further enumerates specific building guidelines. The proposed institutional framework is discussed here and contains a proposal for the formation of a conservation authority. The Chapter is concluded by a detailed strategic intervention proposal for the old port.

Chapter six comprises conclusions and recommendations. It is argued that the physical effect of the policy of minimum change is un-sustainability of the building function. The chapter further contains an integrated urban conservation approach and is concluded by goals and strategies that provide direction for many facets of the conservation milieu. This section also proposes areas for further research that are not covered in this study.

1.9 Definition of Terms

Adaptive Use: The reuse of a building or structure, usually for a purpose different from the original. The term implies that certain structural or design changes have been made to the building in order for it to function in its new use.

Artisans: Persons whose vocation consists of manufacture by hand of pottery, textiles, woodwork, masonry or the like.

Conservation Technology: Equipment and methods used in conservation of artefacts, works of art, and/or natural resources. In the US a distinction exists between conservation and preservation along these lines: conservation does not apply to buildings but to other cultural objects and natural resources. However, the British usage of the term, which is embraced in this study, covers all aspects of historic heritage management.

Cultural Landscape conservation: Conservation of cultural landscapes, or areas "where the interaction between man and nature created a 'unique whole' or 'places in nature that have acquired significant associations with human activities and human events',-these landscapes seem to retain their natural forms and features, (but) they are transformed in the minds of those who associate historic events with them. These landscapes are no longer strictly a product of nature, valued for their inherent characteristics, but also become a product of the human mind.

Cultural Resource Management: Administration or protection of a cultural resource, or "a building, structure, district, site, or object that is significant in history, architecture, archaeology, or culture"

Design Criteria: Standards of appropriateness or compatibility of building design within a community or historic district. Often in the form of a handbook, design criteria (also called design guidelines) usually contain drawings accompanying "do's and don'ts" for the property owner. In the Old Town of Mombasa, the Conservation Office has authority to administer the design criteria.

Effect is defined here to mean the change, the result or outcome; the change produced by a cause, in this case modern developments. Effectiveness therefore means producing the intended effect.

Heritage Areas: As opposed to a park, historic district, or scenic byway, a heritage area possesses the following broadly-defined components: a 'sense of place', regional scope, natural or cultural resources that unify the region; varied land uses; (usually) private ownership; local, regional, state and/ or national significance. The Old Town of Mombasa constitutes a heritage area.

Historic Conservation Planning: Refers to broad strategies plans for conservation, not specific plans being made for conservation of any one building.

Historic neighbourhood: This is a neighbourhood that gives a sense of wonder and makes one want to know about the people and the culture that produced it. It has an architectural, aesthetic, historic, documentary, archaeological, socio-economic, political and spiritual or symbolic values, but the first impact is always emotional for it is a symbol of our cultural identity and continuation-that is a part of our heritage.

For a town or an urban sector to be regarded as a historic settlement or neighbourhood, Papageorgiou (1971) insists that it must possess:

- An original and characteristic urban sector (originality of the composition)
- Significant architectural qualities (architectural and interesting buildings) whose structure points to a marked degree of continuity in the urban development of the settlement (aesthetic and historic value of the composition)
- A continuing social life i.e. some sort of civic activity, which presupposes the existence of an active population (living condition of the settlement)

From the above definition, it emerges that:

- Contrary to common belief, historic settlements do not have to be very old. The attribute historic refers to the whole historical development of the settlement and not simply to its origin in time. Consequently, interesting urban formations of quite recent times may also be classified as historic settlements.
- The designation of a settlement as a historic centre depends on the existence of an active social life and as such excavated sites and archaeological remains and even dead towns whose buildings have been well preserved do not constitute historic centres. Papageorgiou (1971) gives the example of Pompeii.

- Since many inhabited settlements today do not possess an 'original urban structure' and lack 'aesthetic value' it naturally follows that not all urban settlements can be classified as historic.

Historic Sites: This term is reserved for use for historic sites related to famous or important events or persons.

Historic Transportation Corridor: A Historic Transportation Corridor is a historically significant route along which people and/or goods have moved. The Indian Ocean dhow route is an important Historic Transportation Corridor. HTCs may be considered linear landscapes that combine the natural and cultural environment. The general definition includes trails (including aboriginal travel routes), roads, waterways, and railways.

Infill: The use of vacant land and property within a built-up area for further construction or development, especially as part of a neighbourhood conservation or limited growth program.

Inhabitant: In this study, it means a person who lives or has a home in Old Town and not a visitor. This is the local resident who have lived here for over five years. Sometimes, this term inhabitant is used interchangeably with 'resident'.

Mixed Use: As distinguished from a single use plan (as set out often in zoning regulations and laws), mixed use refers to a variety of authorized uses for buildings and structures in a particular area. This could appear as, for example, a property's being utilized in more than one way, such as a street level market and upstairs apartments.

Modern building materials are those building materials that are universally accepted and used in the construction industry. They could either be imported or locally manufactured. They include steel, glass, plastics, concrete and so on. This implies that they are of the present or recent times; i.e. are contemporary. The built structures arising from these materials are the modern buildings and developments.

Perception is taken to denote the ability to understand or have an insight. More so it means a way of seeing things, in this case the historic environment. Operationally, perception will be the response on the psychometric and psychological scale in Questionnaires I and II.

Conservation Techniques: Methods of maintaining the historical integrity of a building with limited alterations or additions; methods of stabilizing and preventing further decay.

Restoration Techniques: Methods used in rebuilding buildings and structures with historically accurate materials to achieve historical authenticity in keeping with a particular time period or event.

Revival: Used to describe later recovery/ reintroduction of historical styles.

Street Furniture: Refers to objects such as streetlights, benches, and so forth that are part of a streetscape.

Sustainability: The term is used in this study to mean that we should be able to exploit our resources today for every day needs yet not extinguish them for the sake of future generations. The heritage resources therefore should be exploited in such a way that they meet our current and future needs amicably. Sustainability therefore means using, developing and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. Sustainability requires simultaneously meeting environmental, economic and community needs It embodies stewardship and design with nature. Specifically, sustainability integrates natural systems with human patterns and celebrates continuity, uniqueness and place making, a central concept in this study.

Sympathetic Additions: Additions to structures, which follow or complement the architectural style or scale of the original building.

Traditional materials will mean those building materials that have been in use through a long established tradition. They are locally available and include makuti, mangrove poles, coral rags and lime plaster among others.

1.10 Research Methodology

1.10.1 Introduction

Ebong (1983) quotes Bowman (1977), as has having recognised that direct investigation of a person's experience of his environment is methodologically difficult. He however presumes that people can articulate their perception. Thus semantic differential, a verbal technique is used to find out respondents attitudes towards their historic environment in this study. Semantic differential is one of a number of techniques, which have been used to elicit and measure environmental images (Heisel, 1969). As originally developed by Osgood and Tennenbaum in 1957, the technique is a method grounded in psycholinguistic theory (Ebong, 1983). It is used here to measure the meaning of word labels in relations to

psychological meaning of the concepts, which the labels describe. Today semantic differential is particularly useful in the study of environmental psychology.

It is assumed, that by computing the data into simple percentages valuable insight can still be gained into the diverse images people hold in their minds about the environments in which they live. The following environmental factors and descriptor scales borrowed from Herschberger (1972) by Ebong (1983) are identified for the interview schedules to get the general feeling of the inhabitants' attitude towards their historic neighbourhood in the first part of data collection.

Neighbourhood Characteristics	Descriptor scale
1. Aesthetic	Unique - common
2. Ornate	Decorated - plain
3. Age of buildings	New - old
4. Quietness	Calm - noisy
5. Friendliness	Friendly - hostile
6. Facilities	Adequate - inadequate
7. Space	Spacious - crowded
8. Burglary/ Safety	Safe - unsafe
9. Disease	Healthy - unhealthy
10. Sanitation	Clean - dirty
11. Waste Disposal	Effective - ineffective
12. Air quality	Fresh - stingy
13. Accessibility to work	Close - far
14. Accessibility to market	Close – far
15. Accessibility to hospital	Close – far
16. Accessibility to School	Close – far
17. Accessibility to open space/ park	Close – far

Respondents are to mark any of the five spaces between pairs of bi-polar adjectives which best describe how they perceive their environment in terms of the above characteristics. To find out altitudes from inhabitants concerning their feeling towards new developments in the Old Town of Mombasa the Osgood scale is altered so that the dimensions underlying the adjectives can be unearthed.

The Osgood scale:
Bad ____ ____ ____ ____ ____ **good**
The type of scale used in this study:
Good
Slightly ____ ____ ____ ____ ____ very

To generate a logically comprehensive list of adjective pairs applicable to this study, reference is made to the extensive lists of adjective pairs generated from previous studies using the semantic differential. These adjectives are grouped under the following headings:

1. Pleasantness
2. Complexity
3. Unity
4. Aesthetic Dimension
5. Social status
6. Affection
7. Originality
8. Organisation

1.10.2 Research Approach

A major objective of this research is to how establish residents perceive their historic environment through attitude measurement. To achieve the above, the study has employed descriptive research methods to confine itself within the objectives by describing and measuring as precisely as possible characteristics and their relations in the defined group. As Zeisel (1981) advises, clear concepts are developed and translated into things that can be counted as manifestation of the concepts. In the past, descriptive research methods have been used successfully by Rainwater (1966) and Nelson et al (1972) as noted by Zeisel (1981). These are therefore good precedents for this undertaking.

1.10.2 Research Design

Old Town of Mombasa is taken as representative of other historical towns along the East African Coastline. Once this is done for reasons of convenience, the research is designed as a survey. The cross-sectional survey (Borg et al, 1963) was used to collect standardised information from a sample drawn from a predetermined population. Information was then collected at one point in time. The survey data is put on a descriptive framework.

1.10.3 Research Situs

The *situs* or the setting is the natural, as existing in Old Town of Mombasa. Natural settings are particularly important because they offer a unique opportunity to observe phenomena a contrived setting cannot recreate. Elements, relationships and dynamics that are salient are to be observed. A situation and its contents cannot be fully observed if certain portions are excluded from the study as they might be if the situation were transferred to a contrived setting (Zeisel, 1981). This study was therefore conducted in a natural setting that is, the Old Town of Mombasa was the object of the study.

1.10.4 Research Methods

- **Nature and sources of data**

In this study both primary and secondary methods of data collection are employed. The data collected was both qualitative and quantitative.

Secondary Data

Existing available information, both published and unpublished is used. Locating the sources and retrieving the information was used as the starting point. The data was sourced from many libraries and the relevant literature extracted. Earlier research was considered

and so were media commentaries on the relevant issues. The Internet was also extensively used.

Primary Data

Data was gathered directly from the field using the following techniques

- **Structured Interviews**

This is the main method employed. For the ease of data processing simple structured interviews were administered to the respondents. They were expected to provide and reveal their attitudes and opinions on a variety of variables. Standardised questionnaires were used and aided in refining ideas from pertinent literature review.

- **Observation of The Physical Environment**

This method was used to reinforce inferences made from the interviews and focussed group discussions. It consisted of observing how the historic town is physically structured, the land use patterns and how people have adapted to this historic setting. It also involved an examination of how new developments have contributed on the moulding of form, space and order in this zone. How they have affected aesthetics, originality, proportion et cetera was a major concern. This helped in establishing the relationship between contextual and discordant developments.

- **Focus Group Discussions**

Guidance was given to various community-based organisations for discussion about pertinent issues. Attempts were made to focus attention on given experiences and their effects.

1.10.5 Sampling Procedures.

- **Sample Frame**

The conservation area is divided into 12 sections, XXIX through XXXVI in their entirety, and parts of sections XXV, XXVI, XLII and XLIII.

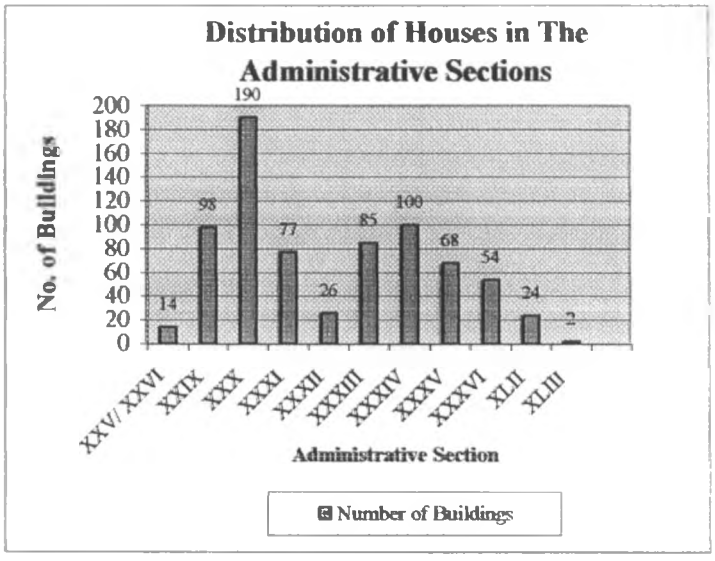
The area has 774 plots of which 738 have buildings.

- **Sampling Method**

The study utilised stratified random sampling to achieve desired representation from the various administrative sections. The administrative sections already exist in the Old Town of Mombasa and this guaranteed that each section was properly represented.

It was known from secondary data sources that there exist a total of 738 buildings in the conservation area. The buildings are distributed among the area as follows:

Figure 1, Distribution of Houses in the Administrative Sections *(Refer to Map 15)*



Source: Procesi, 1990

The 738 buildings are categorised into the following groups:

- Swahili house
- Mombasa traditional house
- 1930-1950 shop house
- Religious buildings
- Commercial buildings
- Contemporary non-conforming buildings
- Other non- conforming buildings (Procesi, 1990)

Mugenda (1999) quoting Gay (1983) states that for descriptive research, 10% of the population is enough, therefore, within this area, a 10% sample of the plots on which there are residential buildings was selected. This is a reputable sample size because it has been used in successfully in previous studies in the area (particularly by Procesi, 1990). Since the building type and location was known the sample was stratified along this lines to arrive at a sample number of 54 plots and hence the households. More over this is above the 30 cases recommended by Mugenda (1999). Random sampling determined which building occupants were interviewed if more than one building was situated at a plot. Further, random sampling was employed to determine which household was interviewed if more than one household resided in a single building.

1.10.6 Data Recording Tools

- **Questionnaires**

The respondents' attitudes were recorded using questionnaires. Standardised questions were used to enable collection of the same amount of data from all the respondents. Written questionnaires were presented to the respondents and were administered in two ways:

1. Door- to-door execution, with the help of research assistants
2. Hand delivered to respondents that were collected at a later date

- **Drawings and Sketches**

Sketches of particular interest where new spatial structures were found to be emerging were made to provide highly imageable scenarios. This were analysed against sketches of the existing built environment.

- **Photographs**

Photographs were extensively used to record the physical environment and other features that may need a quick documentation. Due to their accuracy, the use photographs reduced the lengthy descriptions of a given phenomenon.

- **Observational Checklists**

This involved ticking off and filling a prepared list of features deemed important. This is important for verification and confirmation purposes.

- **Physical Measurements**

Measurements were conducted to establish the spatial patterns created by the built forms. These included linear dimensions, area and volume:- both internally and externally.

1.10.7 Plan For Data Collection

- **Permission to Proceed**

Consent was obtained from the relevant authorities both at the national and community level. It involved obtaining a written informed consent. The University of Nairobi, through the department of Urban and Regional Planning as the institution organizing the research assisted in obtaining permission from the Ministry of Education, Science and Technology. The District Commissioner, Mombasa further authorised the research through a letter copied to all the District Officers under his jurisdiction.

- **Tasks in Data Collection**

The collection of data for the purposes of execution of this study entailed the following:

- Familiarization and rapport building in the study area

- Site-specific observations through walks.
- Participant observation in environmental interpretive utilisation
- Interviews with the following:
    1. Household heads/ house wives, village opinion shapers, local authority officials, social workers.
    2. Focus group discussions
    3. Spontaneous / random subjects at sites of interest.

Summary of time estimate used during data collection

Task	Duration In Days
Records Study	14
Familiarization and Rapport Study	12
Site Specific Observations	15
Participant Observations	7
Interviews	21
Focus Group Discussion	4
Subtotal	**73**
Allowance for time required to locate study units (at 25% of the total)	18
Total	**91**

1.10.8 Data Processing and Analysis

The process involved:

- **Data sorting**

This entailed ordering the questionnaires and other field records for subsequent processing and analysis. The questionnaires were numbered and arranged in order.

- **Quality control checks**

The data was edited to check on accuracy, usefulness and completeness. Both field and central editing were used. Some gaps in the observation checklist were filled by reconstruction.

- **Categorising data**

The data was divided into various groups of similarly based control themes. These were used for coding of the data. The labels were entered on both the questionnaire and the master sheet.

- **Data coding**

This was used to convert (translate) the data gathered into symbols appropriate for analysis.

- **Summarising the data on the master sheet.**

The raw data was summarised by tallying all the answers of individual respondents on a master sheet.

- **Data processing**

This was done both manually and by computer. The computer based processing involved data entry, verification, validation and output. Elsewhere, data validation was concerned with checking the respondents' account with what actually existed.

- **Data Analysis**

The Statistical Package For Social Sciences (SPSS) and Excel were used in analysing and presentation of statistics. Sketches and photographs are also used to analyse pictorial data.

Content analysis is also used for the systematic, objective, and qualitative description of the content of research data procured through questionnaires and observations. Descriptive statistics also called summary statistics (Borg et al, 1963) were used to describe the data collected on the sample along the various variables. The percentage is the main descriptive statistics employed. The main advantage derived from this descriptive statistics is that the researcher used one or two numbers to represent all the individual scores of subjects in the sample. The reduction of a mass of raw data to a few descriptive statistics simplified the task of data interpretation.

1.10.9 Reliability.

The reliability of the data collected from the field is concerned with consistency, that is, probability of obtaining the same if the study is conducted again. Since the questionnaire to the inhabitants contained attitudinal questions and not single questions, this enhanced reliability of the results of the subjective judgements. The reliability was further enhanced by use of internal checks through direct observation.

1.10.10 Data Presentation.

For the data to be meaningful at glance, the following data presentation methods are used

- Tables
- Graphs
- Photographs
- Sketches and descriptions
- Maps

1.10.11 Study Limitations

- **Financial constraints**

Financial constraints resulted in the tailoring of the study to limits attainable with the available funds. This included limiting the number of buildings to be visited for detailed observations, the size of the sample group and the data collection methods used and the time used to study individual buildings and other townscape elements.

- **Unavailability of part of the sample population**

Some of the people earmarked for interview were not available or did not answer the questions. Other members of the sample could not be reached for their cooperation. Attempts were increased to find the subjects and obtain their cooperation.

- **Cover-up**

There are some factors that people not want to reveal to a stranger or even to intimate friends because of embarrassment, guilt shame or other social and political reasons. The research was particularly impeded by the fact that data collection coincided with a terrorist fever at the Old Town of Mombasa. During the initial weeks of field data collection several terrorists killed policemen through suicide bombing and were reported to have disappeared into the study area. The government responded by mass arrests and even threatened to do a door-to-door search for the villains. This worked against the study because some people were chary and suspected the researcher to be a government agent operating under cover. Confidence was built in them through production of the research permit and by having lengthy discussions with them in the presence of a research assistant who lived in the study area. However, it cannot be ruled out that the subjects did not deny, exaggerate, minimise or otherwise knowingly operate upon the truth to shape it into a form they felt was more acceptable. Observation of the physical environment is therefore used as a check to prevent misinformation where possible.

1.10.12 Analytical Framework

Research Objectives	Type Of Data	Sources of Data	Techniques for Analysis	Expected Outcome
1 To examine the evolving character of the townscape in the conserved zone of the Old Town of Mombasa	-Physical/functional characteristic changes • Edges • Districts • Nodes • Land marks • Paths -Social-cultural changes -Economic changes -Functional/ physical changes	Maps Photographs Interviews Social surveys	Mapping Visual interpretation Sketching Modelling	-Socio-spatial dynamics/ changes due to environmental variations over time
2. To establish the problems associated with the planning management of the historic character.	-List of problems • Social/cultural • Political • Economic • Physical -Attributes of the problems -Remedies to these problems	Social survey Interviews	Sketches Tables Graphs	-Varying degrees of problems -Nature and causes of the problems associated with conservation -Likely/ possible interventions
3. To establish the perception of the townscape quality of the Old Town of Mombasa	Perception of: • Beauty • Convenience • Health • Accessibility	Interviews	Descriptive statistics Tables and graphs	-Degree of environmental stimuli. -Quality of environment with respect to the variables listed.
4. To identify opportunities for the sustainability of the historic character.	-Physical developments • New developments • Location of new developments • Reasons for the development proposal -Cultural opportunities • Tourism • Knowledge systems	Maps Social survey Interviews	Mapping Sketches Visual interpretation Modelling	-Opportunities for optimal townscape conservation
5. To institute planning interventions for a sustainable historic townscape				-Planning and design strategies for sustainable townscape.

Source: Author, 2003

Chapter 2

Literature Review

A Street in Old Town of Mombasa.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

There is need for a comprehensive approach to conserving historic areas or centres that are considered part of the cultural heritage. A comprehensive approach means considering all issues related to conservation including restoration, housing renewal, adaptive re-use, rehabilitation of services, and social and economic regeneration to improve living conditions and standards, thus revitalizing a whole city or quarter.

To understand the conservation process and what is involved, we need to understand the nature and characteristics of historic cities and to be able to analyse the various factors that have affected and shaped their development through history. Such factors are both constant and variable. On the one hand, cities develop within the limits of constant physical factors such as location, topography, climate, and available local materials. On the other hand, variable social, economic, and political needs and priorities as well as technological and security developments continue to transform the shape of cities over time.

In the course of history, cities change. From defensive bastions, some become commercial centres. From vibrant cultural and religious cities, others become dormitories and dilapidated residential areas and slums. As cities shrink and expand, as they change colour, texture, and shape according to external and internal factors over centuries, they also develop their common and special characteristics.

Generally, the process that reshapes cities is affected by three main influences:

- Incremental and sporadic development through limited repair and rehabilitation projects, carried out according to individual needs.
- Sudden major events, whether natural disasters such as earthquakes and floods or human-made ones such as wars or civil disturbances. Such contingencies require intensive redevelopment and reconstruction during a short period of time.
- Carefully planned initiatives by local and central authorities for a comprehensive program covering all sectors related to development of the city while focusing on preservation. This is a fairly recent practice.

The literature review presented here looks globally at issues affecting all historic centres and tries to relate these specifically to the Old Town of Mombasa. Further, it looks at the conservation in Kenya and narrows this to the Old Town of Mombasa itself. The detailed literature review includes library case studies from other regions in the world.

2.1 What is Conservation?

2.1.1 Definition

Conservation is full of ambiguous and difficult to define. It is concerned with change and is a reaction to anxiety about the present and the immediate past. Initially, it begun for ad hoc reasons – threats to particular monuments but has now switched to wider uses e.g. heritage, the balance of the past present and the future, the atrocities of modern architecture and planning in such a way as to imply criticism of modern life and taste.

Conservation addresses itself to the tangible and physical amid a horde of planning imponderables. Planning and conservation are ambivalent in similar ways since they are both past and future oriented. Planning by definition is interested in the production of a deliberate future, but is nearly influenced by its ideological inheritances from often-incompatible sources. Conservation is bound to the continuation of past buildings although altered in varying degrees, in the face of low architectural abilities and project motivation, into the future for the sake of posterity.

The earliest use of the word conservation in relation to monuments or building in Britain seems to be that of Society of Antiquaries in 1855 when they set up a conservation fund to reset restoration (Dobby, 1975). The term has only been widely used since 1960 with the establishment of conservation areas under the Civil Amenities Act of 1967. Until then, preservation was the usual expression for the retention of buildings but later replaced by conservation because of its static connotations. However, conservation has been redefined to allow for more change than preservation. While preservation implies no more change than necessary to keep an artefact in existence, conservation allows for an indefinite degree of change and embellishment.

Some terms used in conservation and the degrees of change implied in a particular artefact or area are shown below.

Table 1, Degree of Change in Interventions

Action	Change			
	None	Some	Much	Total
Repair	■			
Preservation	■			
Enhancement		■	■	■
Conservation	■	■	■	■
Restoration		■	■	■
Reconstruction		■	■	■
Demolition		■	■	■

Source: Adapted from Dobby (1978)

It is therefore evidence that conservation can cover all circumstances from absolute retention to demolition, for sometimes partial or complete demolition may be necessary for the benefit of the overall project.

- **Rationale**

Duncan (1971) as quoted by Dobby (1978), says of conservation:

> *It's more than a question of aesthetics. Conservation touches our basic value...pride in the past is the surest foundation for confidence in the future. We must jealously guard our roots in history.*

This shows that aesthetics, patriotism, history and loss are basic to conservation. Buildings have a capacity for survival and do therefore provide us with a historical record of previous ages and symbolize permanence and continuity as against the finite human lifetime. Given the ability to be almost permanent, historic buildings and monuments place responsibilities upon successive generations for their continued existence. If one generation takes care of buildings a subsequent one will feel guilty not to.

Today, we see a standardization of appearance through the redevelopment of cities and hence the loss of the *genius loci*. This is in other words a clear loss of individualism or 'place'.

2.1.2 Pro-Conservation Arguments

The main arguments invoked to support conservation apart from the economic elements are related to history, artistic design and associations. The historic justification is the easiest to uphold. This is because of material evidence of the past artefacts, and architecture is like 'frozen music'. The existence of scholarly work in conservation shows that the interest shown by an increasing minority goes some way to argue for conservation (ibid).

Our age displays a lack of confidence and it may be expected that a yearning for symbols of permanence and security from a not very recent past will allow a wide range of taste. This catholic interest may be used to criticize today's monotonous cityscapes. It is hoped that this will help us to undertake a creative examination of our past and inject some creative planning. Another reason for conservation is the associational and psychological needs which derive by and large from the concept of symbolism. Some of these areas could have historical epochs associated with them or even persons of remarkable standings inhabiting them.

2.1.3 Anti-Conservation Arguments

Dobby (1978) argues that the varied interpretation of the word conservation causes antagonisms from the many shades of opinions. Due to its close resemblance to conservative, it becomes even more provocative. It has sometimes been argued that conservation inhibits progress and change, materially and imaginatively. But it must be stressed that ideas on conservation and progress derive from the same era, that of the renaissance.

Conservation imposes distortions upon the market system. This sometimes does reduce profitability in the public interest (ibid). Economists and more so developers see conservationists as preventing and inhibiting the natural growth and change of areas. This argument is more so held in the commercial areas where the town centres coincide with the historic centres. Any attempt to resist change on the physical fabric is seen contrary to the need for more shopping areas. Normally commercial units will require large horizontal areas of sales space yet the historic areas provide retail units in small vertically divided sections. Developing new shopping areas slightly away from these centres could solve this, and the latter can provide small-specialized drops (ibid).

The concept of social injustice is sometimes put forward to argue against conservation. The protagonists see conservation as condemning people to unsuitable conditions simply because the buildings are argued to be historically good. Ordinary people continue to work in crumpled conditions.

Improvement schemes, favoured over total redevelopment because of unacceptable social disruption, have been shown to cause more displacement than earlier thought. This is because of increased rents and the prohibitive improvement costs and the added incurrence of being further away from the town centre. It is further seen that conservation of the physical environment of the residential areas is in no way related to the retention of the communities in them, in whose name the actions are taken.

The conservation of particular areas is sometimes at the expense of other areas. A council may want to undertake road development and may meet stiff resistance from organized conservation groups. The net effect is that they will take the line of least resistance thus making the weaker community pay for the more powerful section of the community. According to Dobby (1978), conservation is often criticized, as the action of a minority imposed on weaker majority at the latter's cost. The only flaw in the agreement is that the minority who support conservation is growing as the recognition of the value of the past

environment increases. It is foreseeable that it is only a matter of time before it becomes the action of the majority against the private interest of the few.

Historians may regard conservation as an artificial attempt to interfere in inevitable change even to the extent of trying to stop time or reverse time in selected environments. The argument is that if in the past conservation had the scope it has now, resistance to development would have deprived the present of the many monuments we now regard as sacrosanct. This is a conjectural position that will require detailed philosophical expositions.

The criticisms of conservation therefore lie on the environment and perhaps as Lord Esher put it...*it has become clear that what is needed is good planning rather than conservation areas (*Dobby, 1979).

2.2 Cultural Property

2.2.1 Introduction

Cultural property is the general term that encompasses all kinds of material objects, structures, architecture, architectural ensembles, and archaeological sites associated with, and created by man's multifaceted cultural traditions (Fielden, 1979).

Examples of cultural property are the Palaeolithic cave paintings from Lascaux, France (14000-10000 BC); Inca textiles from Peru (c.1350 AD); the Great Wall of China (c.300 BC); the Aboriginal bark paintings from Australia; the Parthenon, Greece (497-432 BC); the Pyramids of Egypt (2680-2565 BC); painted tepee of the Sioux Indians of North America (c1860 AD); a basket of Pueblo Indians of North America (c.700 AD to present); the Tay Mahal, India (1654 AD); an Andy Warhol painted soup cup, USA (c.1966 AD). These examples given by Fielden (1979) are drawn from the five continents and also from the full range of human history.

Cultural property is a material manifestation and expression of what is uniquely human since it is only man, among other animals, who can conceptualise. Human culture has evolved with man himself and is thus indivisible from and fulfilling a need in human beings. Cultural property can be divided into two groups.

- **Movable Cultural Property**

This includes works of art, craft, artefacts not connected to structures, architecture or sites.

- **Immovable Cultural Property**

Under this category are historic sites and all works of architecture. The concept of a historic site as Fielden (1979) explains, embraces every place whether urban or rural, formed by man or by nature, and whose historical, aesthetic, artistic, ethnographic, scientific, and legendary or literacy qualities justify its protection and enhancement

2.2.2 Causes of Deterioration of Cultural Property

Only a small function of all the objects of artistic and historical value created in the past remain. Losses and deterioration of cultural property are due to natural and human actions, acting together or independently. The natural forces of deterioration include earthquakes, floods and hurricanes. Others are prolonged actions of weathering, pollution and vibration. Man however is the main cause of loss of deterioration through destruction, purposefully, for economic gain. There is also destruction for ideological reasons e g. during 'wars of religion'

USES OF DECAY AND DAMAGE TO CULTURAL PROPERTY

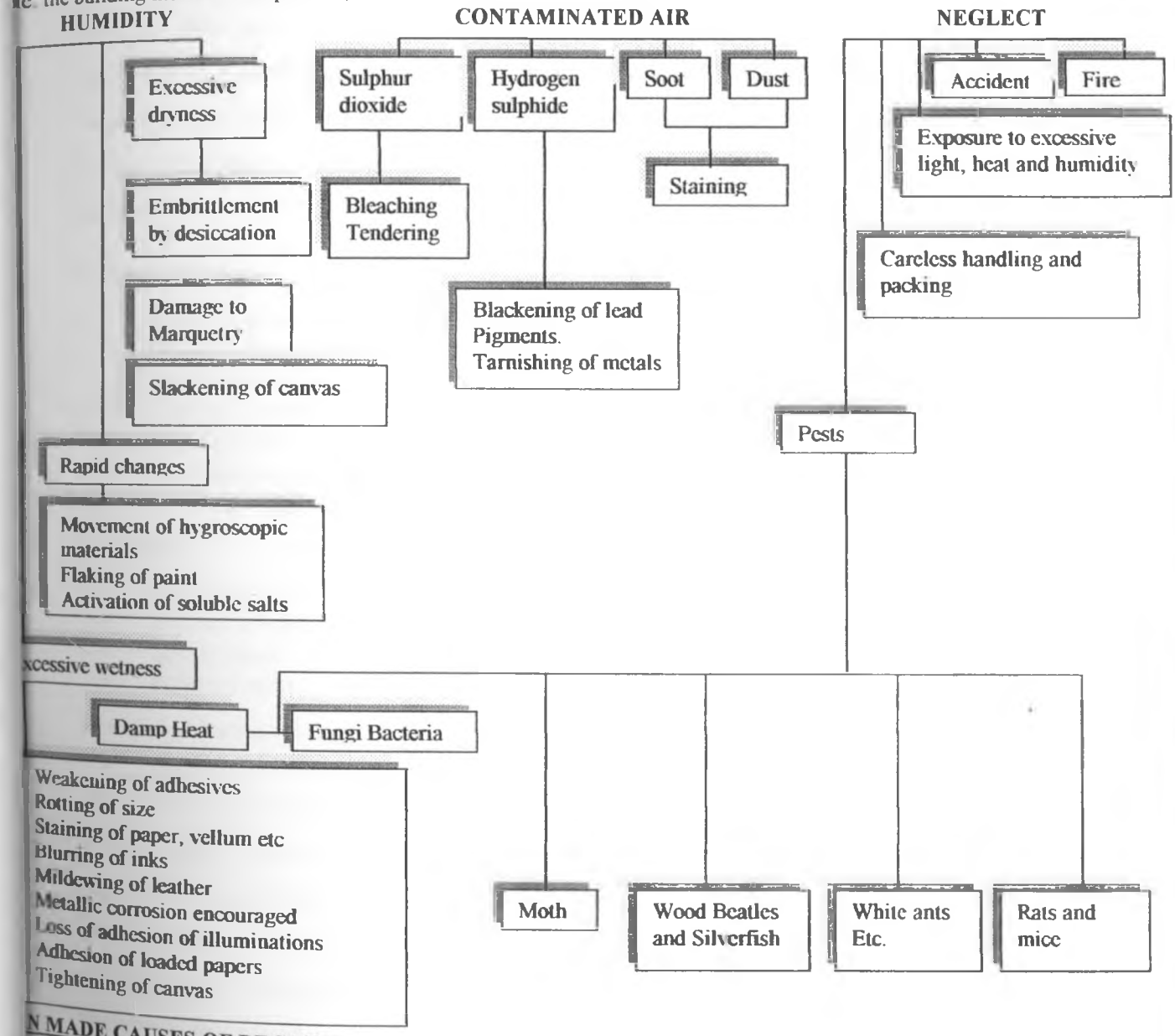
TERNAL CAUSE OF DECAY:

sun produces LIGHT with ULTRA VIOLET and HEAT RADIATION

matic Causes	Biological and Botanical Causes	Natural Disasters
sonal temperature changes	Animals	Tectonics
temperature changes	Birds	Earthquakes
pitation of rain and snow	Insects	Tidal waves
and frost	Trees and plants	Floods
and water and moisture in soil dust	Fungi moulds and lichens	Avalanches
		Volcanic eruptions, Exceptional winds Fire

TERNAL CAUSES OF DECAY:

tc: the building modifies and protects)



N MADE CAUSES OF DECAY:

lect of preventive servation

Wars
Purposeful alteration

Environmental pollution
Water abstraction

Vandalism and arson
theft

e: Adapted from Fielden (1979)

2.2.3 Values Assigned to Cultural Property

Among all known cultural individuals consider some object or artefact to have more value beyond the actual material components and labour that goes into its production. The assignment of those cultural values to material objects is at the base of all conservation. Cultural property transmits vital messages from the past and the present, enabling us to understood ourselves better, know who we are, where we came from and how we arrived. This property belongs to us all as individuals and is an essential ingredient to our lives.

The conservation of cultural property as pointed out by Fielden (1979) demands the management of resources and a good sense of proportion. Objects chosen for treatment and the degree of intervention are predicated upon the values that can be assigned to cultural property. The values provide a framework for systematically setting the overall priorities in the scheduling of interventions. These values can be grouped into three headings namely:

Cultural Values: -

- Documentary value
- Historic value
- Archaeological and age value
- Aesthetic value
- Architectural value
- Townscape value
- Landscape and ecological value

Use Values

- Functional value
- Economic value
- Social value
- Political value

Emotional Values

- Wonder
- Identity and continuity

For movable objects, the question of values is easily defined. For architectural conservation, problems often arise because the utilisation of the historic building, which is economically and functionally necessary, must also respect the cultural values. Fielden (1979), further recommends that the cost of conservation be allocated partially to each of the above separate values in order to justify the total to the community. Conflicts between values do exist and a sound judgement based upon wide cultural preparation and mature sensitivity will give the ability to make correct value assessments.

2.2.4 Interventions on Cultural Property

Interventions, in all practicality involve the loss of a 'value' in the cultural property. This is however justifiable in the name of conservation for the future. Conservation involves making interventions at various scales and levels of intensity, which are determined by the physical condition, the causes of deterioration and the probable future environment of the cultural property under treatment (Fielden, 1979). This involves planning, and each case must be considered individually as a whole, taking all factors into consideration.

Bearing in mind these principles and aims of conservation, seven degree of interventions are identified by Fielden. However it is necessary to note that several degrees may take place simultaneously in various parts of the whole

- **Prevention of Deterioration**

This is also sometimes called indirect conservation and entails protecting the cultural property through the control of its environment and thus preventing agents of decay and damage from being active. This includes control of humidity, temperature, light, and measures to present, arson, theft and vandalism.

- **Preservation**

This deals directly with the cultural property with the aim of keeping it in the same state. Maintenance, cleaning and good management are some of the factors that aid in preservation. Regular inspections of the cultural property are therefore necessary as a first step in preventative maintenance and repair.

- **Consolidation (or Direct Conservation)**

This is the physical addition or application of adhesive or supportive materials into the actual fabric of cultural property in order to ensure its continued durability or structural integrity. This could involve the injection of cement mortar to cracked walls as is common in Old Town of Mombasa. A study of the building spatial system is necessary before extensive consolidation especially in cases where there is evidence of structural failure.

The use of traditional building materials and technology in consolidation is important as there were used to create the object or building under consideration. Where this is not available or possible, modern techniques may be used but they must be reversible, proven by experience and applicable to the scale of project and climatic setting.

- **Restoration**

The object of restoration is to revive the original concept or legibility of the object. Restoration and reintegration of details and features occur frequently and are based upon respect for original material, archaeological evidence, original design and authentic documents (Fielden, 1979).

For restoration, the respect of the contributions from all periods must be respected. Restoration also entails superficial cleaning, but with full respect for the patina of age.

- **Reproduction**

This often entails copying an extant artefact, often in order to replace some missing or decayed, generally decorative parts to this maintain its aesthetic harmony. If a valuable cultural property is under threat, it may be moved to more suitable grounds and a reproduction substituted to take its place.

- **Reconstruction**

The reconstruction of historic buildings and centres using new materials may become necessary due to disasters like fire, earthquake or war, but the reconstructions cannot have the patina of age. Reconstruction of necessity should be based upon accurate documentation and evidence, never upon conjecture. The re-erection of fallen stones to create an accurate and comprehensible version of the original structure is a special type of restoration called *anastylosis* (ibid).

Another type of reconstruction involves the moving out of entire buildings to new sites in the public interest though this entails some loss of essential cultural values and the generation of new environmental risks. The classic example is the temple complex of Abu Simbel, XIX Dynasty, Egypt, moved to prevent its inundation by the Aswan Dam (Fielden, 1979)

- **Re-evaluation**

The best way of preserving buildings is to keep them in use, a practice sometimes called modernization and adaptive alteration. This adaptive reuse of buildings is often the only way that historic buildings can be brought up to contemporary standards by providing modern amenities (ibid). Care must be exercised so that radical surgery does not take place in the adaptive alteration. This thesis advocates for conservative surgery.

2.3 Perception in Historic Townscapes

2.3.1 Perception and the Aesthetic Experience

Oakley (1970) observed that an aesthetic structure is devised to organise the experience of seeing and perceiving and has its aim as the production of pleasure, intellectual delight or emotion at a high level of cultural feeling. If such feelings are to be produced then what is presented to the observer must be comprehensible (the language that he knows), be ordered, proportioned, in scale with itself-the parts to the whole and be related to man. The particular unity that hives behind the aesthetic unity will be determined by the level of the intention to which the designer operates and the social/cultural/visual language of the features. Historic towns are very rich in aesthetics and this should be conserved. This is evident through the accumulation of a variety of architectural details.

2.3.2 Aesthetic Experience

In the face of identical frames of reference some people react favourably and are moved, others react unfavourably. Whilst colour and shape is objective "A consensus can be obtained on what colour is which and in this sense one may speak of colour as being objective. The colour of things we see, however is a subjective experience and varies with culture, personal traits, abilities and lighting conditions" (Oakley, 1970).

The assessment of beauty is subjective and is personal to the beholder. Recent work on psychology and allied fields has indicated that aesthetic judgements are structured both by the brain and a recognisable difference in human preferences. It is also a truism that people generally agree on what is beautiful and what is not. For this reason, common preferences do emerge and these preferences are taken as representing the universal. In the Old Town of Mombasa, the study looks at these common preferences and attitudes towards the historic landscape.

2.3.3 Feeling of Space in Architectural Creations

Various art historians and architectural theorists of repute have rightly pointed to the difference between the feeling of space in antique architecture (Eastern Mediterranean area and Mesopotamia) and Western architecture (whose origins lay in ancient Rome). The main characteristics of antique architecture were the autonomous nature of individual buildings, which were erected in isolation within the urban space, the great importance attached to plasticity and the invocation of absolute standards (Papageorgiou, 1971). It can therefore be argued that antique architecture created self-sufficient, 3-dimensional forms,

that it distinguished sharply between internal architectural space and external urban space and that it is based on an internal or absolute scale and completely ignored the human scale.

Papageorgiou further notes that there has been a suggestion that these deep rooted differences were due to racial characteristics but he counter argues that a more plausible explanation would be the different construction techniques and functions fulfilled.

2.3.4 Feeling of Space in Townscape.

Two principles have been isolated which interacts to produce the character of the townscape (ibid).

- The 'flat' principle
- The principle of 'static modelled form'.

These two principles constantly vie with one another for supremacy. The flat principle, which is of importance here is based on the fact that to the human observer the townscape of structured urban space, like any other visual image always appears as a flat perspective image. Due to the binocular nature of the human vision, perspective images which are actually flat, are enriched by an impression of depth, which is in fact an imperfect perception of physical volumes and the three dimensional nature of space is the only way man is able to grasp the essence of space. From this it is clear that although the townscape actually represents a 'flat' perspective image, the human observer is nonetheless able to perceive the 3-dimensional nature of buildings and the spatial character of their setting.

2.4 Facets of a Townscape

2.4.1 The Townscape as a Visual Composition

The townscape is the visual and aesthetic aspect of urban composition (ibid) This man-made composition has numerous constituent elements, all of which have specific functions, residential, educational, work sphere, traffic, energy and telecommunications networks. But these functions exert no visual effect and so play no part in the formation of the townscape, which derives solely from the visual organization of the constituent elements within the urban cluster. The Old Town of Mombasa enshrines these various elements. These come in the form of paths, edges, districts, nodes, and landmarks. These city elements continuously interact to provide a visually coherent historic district. The study isolates these at a later stage and makes a detailed analysis of all these elements to

determine how they influence the neighbourhood quality and how they can be strengthened.

2.4.2 The Townscape as a Spatial Composition

This kind of townscape reflects the reality of three-dimensional space. The townscape of urban centres invariably represents a specific conception of the organization of structural urban space. The most important characteristic of this organization seems to be the rhythmic interplay or the harmonic and asymmetrical arrangement of 'mass and space', which are found;

- In the relationship between solid wall surfaces and apertures on the facades of buildings.
- In the relationship between volumes of buildings and open areas within the urban fabric.

The study later on isolates all the design principles used in the ordering of space in the Old Town of Mombasa with a view to determine how these can be adopted to a modern setting.

2.4.3 The Townscape as a Sphere of Human Activities

The townscape fulfils a further function as a sphere of human activities (ibid). To be more precise, this provides a mirror image of the technological facilities, the aesthetic attitudes and the dominant social structure of every historical epoch. If the visual aspect of the townscape represents the conscious attempt to create architectural structures, its social aspect represents the human significance and emotional impact of the urban cluster.

The townscape reflects and provides the framework for urban experiences and social activities. This is why people who live in historic settlements are so attached to their townscape. This fascination should not be dismissed as a nostalgic and romantic yearning for the past. Generally, most townscapes were not formed within a single historic epoch and Old Town of Mombasa is no exception. There is evidence of accumulation of various past achievements, which means that any planning in a historic area should reflect this continuity of human life and man's cultural development.

Some of the activities that characterise land use in the Old Town of Mombasa do not always enhance its character. There are various acts leading to environmental degradation such as air pollution and irresponsible garbage dumping. Other activities like tourism are income generating and should be carefully reinforced.

2.5 Collective Memory

Boyer (1983) observes that the failure of the architect to build images of the city reflect the refusal to allow the past to be experienced with the present in a new constellation. In consequence therefore, our modern cityscape show little awareness of their historical past. New architectural structures, spaghetti highway interchanges and historic preservation projects are seldom integrated with the existing urban texture. Instead the historic centres of cities are dangerous to modern life, they had to be completely removed or reduced to museum pieces (Krier, 1977).

Conservation of historic areas should therefore encourage collective memory and any increments of the built up forms in the Old Town of Mombasa should be sympathetic to the existing, but this is not to argue for mimetic built forms, which do not have any authenticity. In this way therefore, a collage of the new and the old should be allowed to aid the integration of new uses in old spheres. This is because the old city is a repository of history where memory becomes the conducting thread of the entire experience.

2.5.1 Reading the Townscape

Lynch (1960) asserts that there are many individual images of a city that overlap to produce a public image. Alternatively there could be a series of public images, each held by some significant number of citizens. Such images, he continues, are necessary if an individual is to operate successfully within his environment and to cooperate with his fellows.

The contents of the city images can be conveniently classified into five types of elements, which the current study takes as comprising townscape:

- Paths
- Edges
- Districts
- Nodes
- Landmarks

- **Paths**

Lynch (1960) defines paths as channels along which the observer customarily or potentially moves. They may be streets, walkways, transit lines or railroads among others. These have been found to be the predominant elements in their image. People observe the townscape while moving through it and it's along their paths that other environmental

elements are arranged and related. The major paths in the Old Town of Mombasa are the Ndia Kuu and Mbarak Hinawy roads.

- **Edges**

Edges are liner elements not used or considered as paths by the observer. They are boundaries between two phases; linear breaks in continuity e.g. shores, railroads cuts, edges of development and walls (Lynch, 1960). They are lateral references rather than co-ordinate axes. Edges could also be barriers, which are more or less penetrable which close off one region from another, or they may be seams, lines along which two regions are related and joined together. Edges are not usually as dominant as paths but are for many people important organizing features, particularly in the role of holding together generalized areas, as in the outline of city by water or wall. The waterfront forms a major edge in the island of Mombasa.

- **Districts**

Lynch, (1960) describes districts as medium to large sections of the city conceived as having two dimensional extent which the observer mentally enters "inside of" and which are recognised as having same common identifying character. Always identifiable from the inside, they are used for exterior reference if visible from the outside. He has further shown that people structure their city to some extent in this way, with individual differences as to whether paths or districts are the dominant elements. It seems to depend not only upon the individual but also upon the given city. The major districts in the study area are the waterfront, the Swahili neighbourhoods, the commercial street frontages, and the ocean.

- **Nodes**

Nodes are points, the strategic spots in a city into which an observer can enter and which are the intensive foci to and from which he is travelling (Lynch, 1960). Nodes could be junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another. Nodes could also be concentrations, which gain their importance from being the condensation of some use or physical character, as a street-corner hangout or an unclosed square.

Some nodes are the focus and epitome of a district over which their influence radiates and of which they stand as a symbol. They, according to Lynch, (1960) may be described as cores. It is also important to note that many nodes of course, partake of the nature of both junctions and concentrations. The concept of a node is related to the concept of a path

since junctions are typically the convergence of paths, events on a journey. Nodes are also related to the concept of district since cores are intensive foci of district, which acts as their polarising centre. The Old Town of Mombasa has several nodes; Fort Jesus, the Municipal Council offices, the Leven Steps, the treasury Square, the Piggot place and the Government Square.

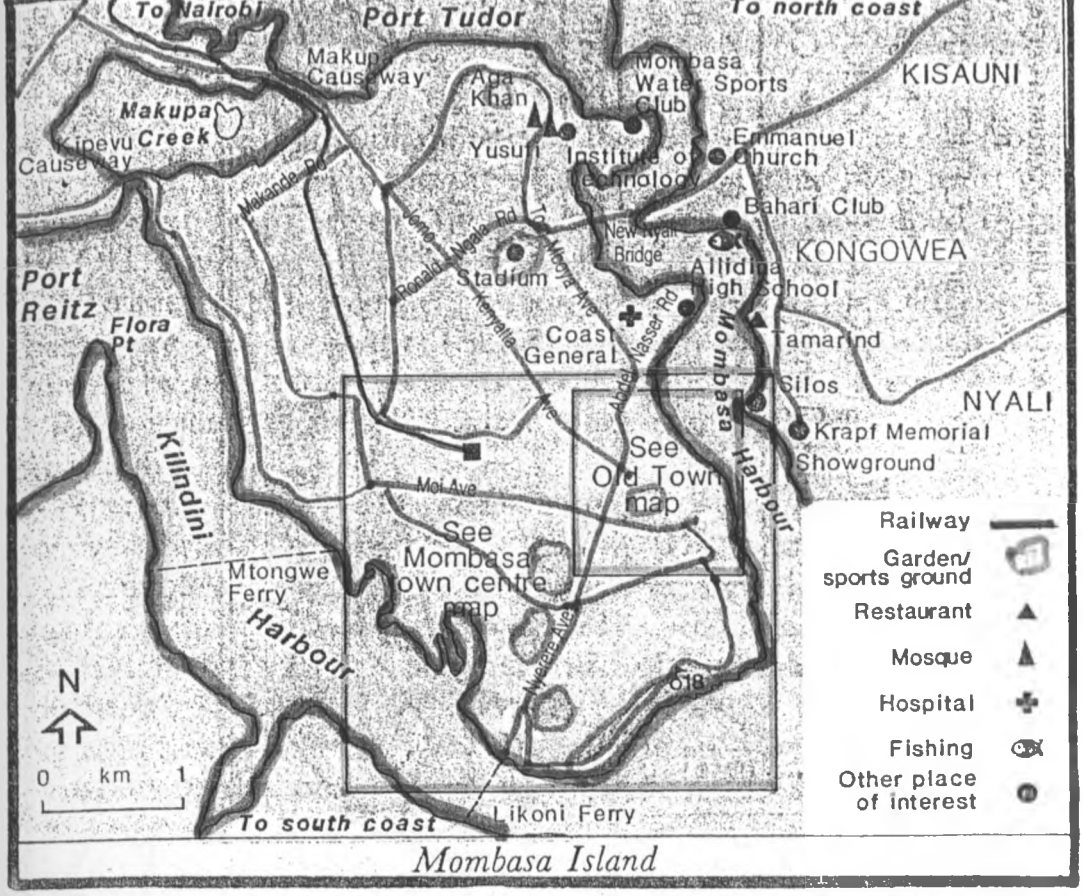
- **Landmarks**

Lynch, (1960) depicts landmarks as another type of point-reference but in this case the observer does not enter within them, they are external. They are usually a rather simply defined physical object e.g. building, signs, store or mountain. It has been shown that their use includes singling out of one element from a host of possibilities. Some Landmarks are distant ones, typically seen over from many angles and distances, over the tops of smaller elements and are used as radial references.

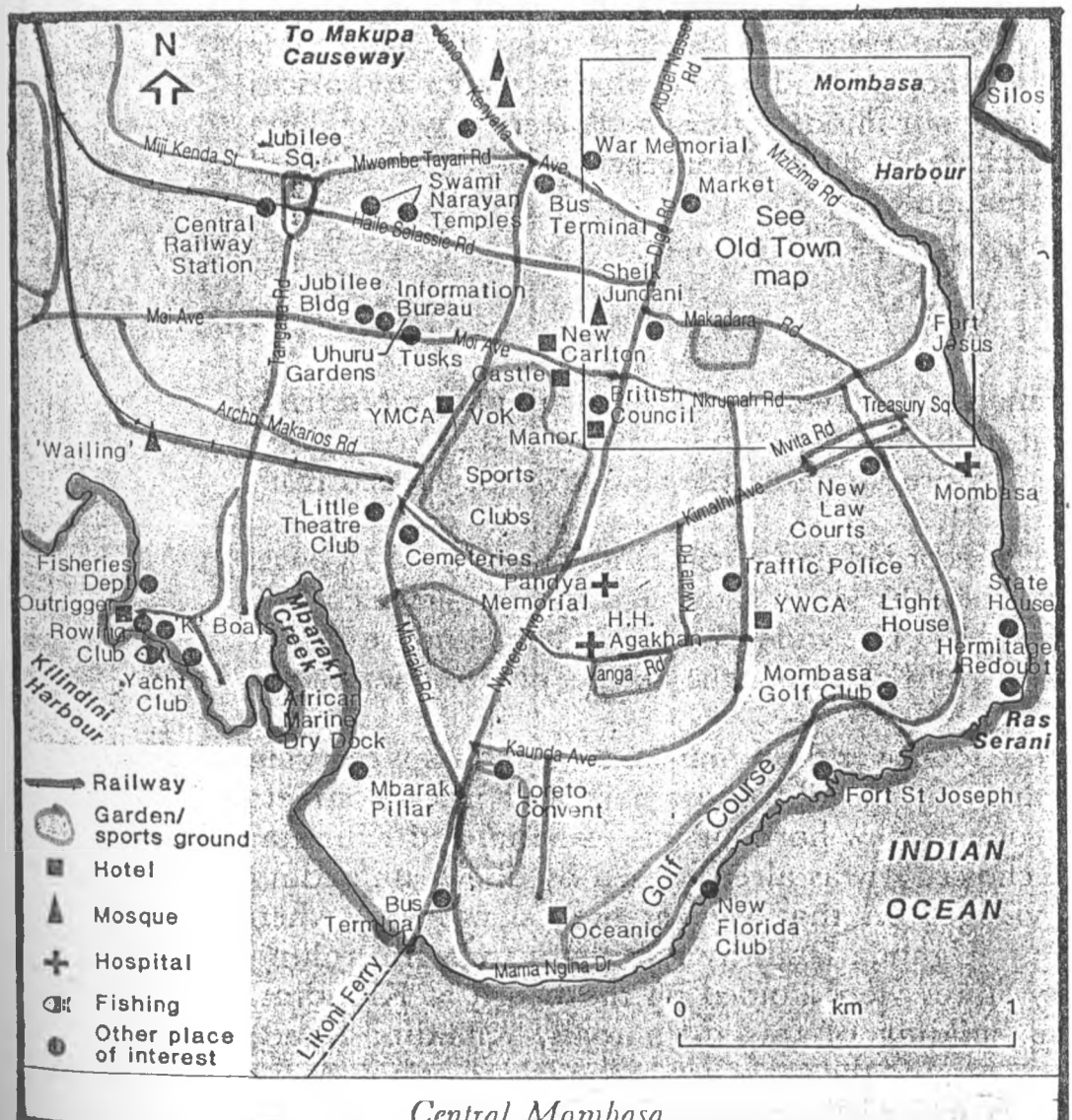
Landmarks may be within a city or at such distances that for all practical purposes they symbolize a constant direction. Such could be isolated towards golden domes or great hills (ibid). Other landmarks are primarily local, being visible only in restricted localities and from certain approaches. There are innumerable signs, shop fronts, trees, doorknobs and other urban details, which fill the image of must observers. Landmarks are frequently used clues of identify and even of structure and seem to be and increasingly relied upon as a journey tends to become more and more familiar. These are abundant in the Old Town of Mombasa.

The elements of the cityscape may take on different meanings with different circumstances of viewing. A road may appear as a path for a driver or as an edge for the pedestrian. Depending on the scale of organization, central area for a city could be district or a node. Stability has been known to exist for a given observer operating at a given level (Lynch, 1960).

Lynch further shows that none of these elements exist in isolation in real cases. Districts are structured with nodes, defined by edges, penetrated by paths and sprinkled with landmarks. Elements regularly overlap and pierce one another.



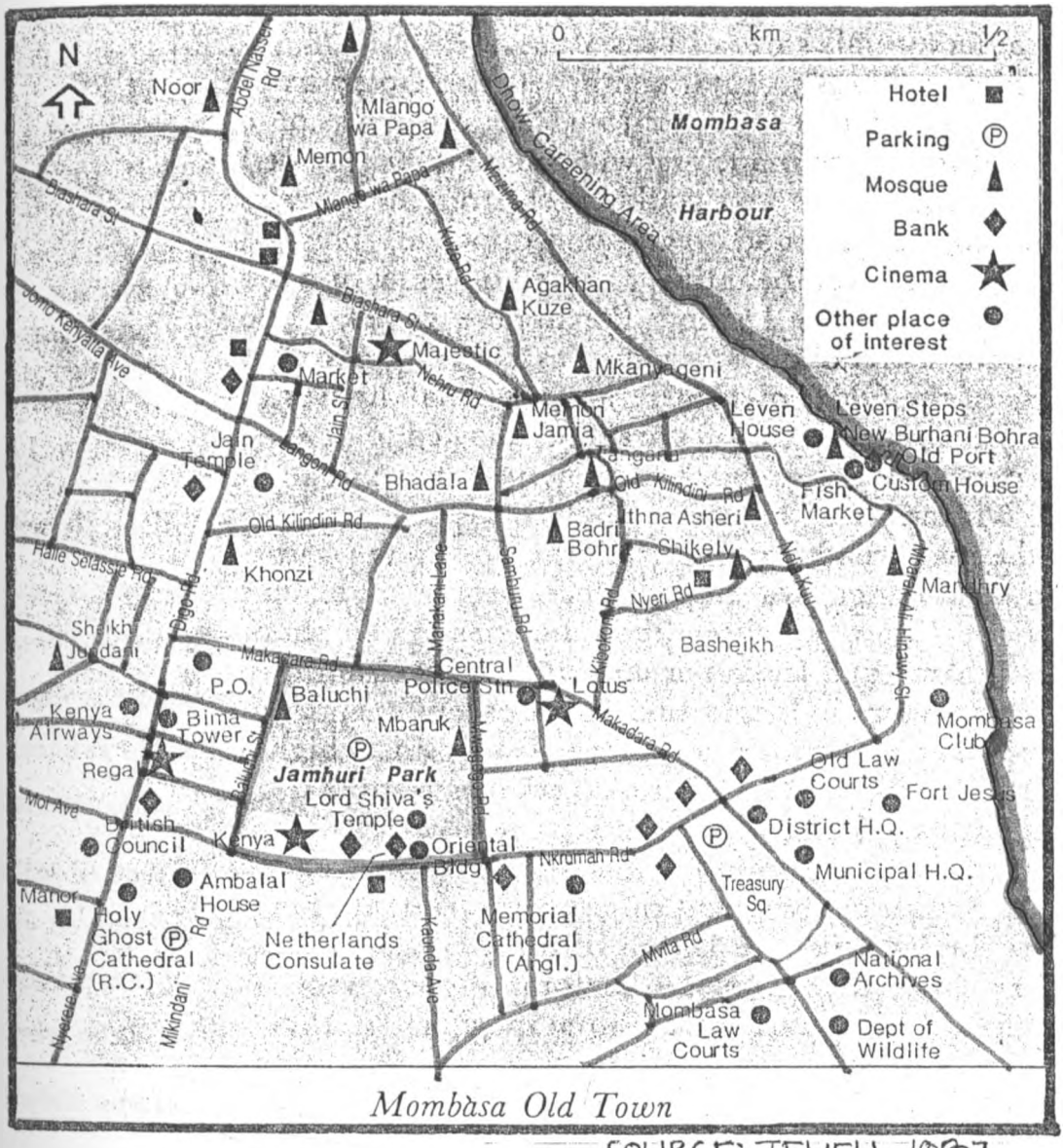
Mombasa Island



Central Mombasa

SOURCE: JEWELL, 1987

MAP 3. TOWNSCAPE ELEMENTS IN OLD TOWN OF MOMBASA



SOURCE: JEWELL, 1987

2.6 Townscape Visual Problems and Aesthetics.

2.6.1 Advertising Signs and Lighting in Protected Areas

The quality of the townscape is influenced to a considerable degree by the decorative forms and the elements that are found on the streets and on the facades of buildings in protected areas and by the quality of the communal objects. These may be in keeping with the townscape or clash with it. It is often maintained that the preservation and systematic use of old objects in historic centres must be a romantic and illusory undertaking (Papageorgiou, 1971). This argument is of course based on a fallacy for there is a fundamental and essential difference between the objects and the building in the historic centres. The Old Town of Mombasa exhibits an amalgam of many of these artefacts, which do not exhibit authenticity and as such a sustainable framework planning in this historic area is paramount.

2.6.2 Signs

According to Siravo (1986) the traditional shop signs in the Old Town of Mombasa with curved letters are scheduled in colour and embody a high standard of design. Today it has given way to the multicoloured, oversized, mass-produced sign of the publicity agent. As these signs are often posted or nailed indiscriminately onto walls or doors, they conceal many features of the buildings, and the larger ones are out of scale with the architecture and character of the street.

According to Papageorgiou (1971), the positioning of commercial and shop signs must be carefully thought out so as t fit in the architecture of the facades, thus ensuring that the buildings are not deformed. By extension therefore, the character of a townscape can be sustained if unsuitable forms of signage are purged from the Conservation Area

2.6.3 Public and Private Objects

Public and private objects, which influence the streetscape, would have to be kept under surveillance to ensure that the appearance of these historic townscapes is not spoilt by inferior elements (ibid). These objects include street signs and house numbers, verandas, benches, kiosks, shelters and floral displays.

2.6.4 Local Colour

The specific townscape of historic centres with its characteristics; streetscapes, aesthetics, visual density et cetera is often thought of by the general public as local colour (Papageorgiou, 1971). This concept has given rise to a serious misunderstanding. The

regrettable and completely irresponsible desire for a quick profit which is rendered even more pernicious by a total lack of culture, has frequently prompted businessmen, restaurateurs and even private individuals to up value their traditional urban image by conjuring up a special kind of local colour based on their personal tastes and ideas. This un-aesthetic and lamentable tendency has found its principle outlet in a sort of pseudo-architecture in which flimsy materials (fibre board, plywood and lathes) are used to produce what are virtually theoretical decorations.

By turning out bad copies of traditional styles and painting them in glaring colours, these would be designers think they can embellish their historic milieu (ibid). Papageorgiou further points out the creation of local colour has posed a greater threat to historic centres than either the ravages of war or the demolition squad of land speculators. The effects of local colour movements are more insidious and threaten to degrade many historic centres.

2.6.5 Outdoor Publicity

Cullen (1961) has identified street publicity as being our contribution of modernism. He asserts that it is startling and conspicuous. He however argues that it is the most characteristic and, potentiality, the most valuable, contribution of the twentieth century to urban scenery. In his opinion, dismissing entirely the whole field of publicity when landscaping new towns would seem an act of genteelism reminiscent of the days when the designer ignored everything that didn't fall into line with his own private taste.

The arguments put against street advertisements are:

- Advertisements are incongruous and therefore injurious to amenity.
- They exploit the public highway and the public has no choice but to take note of them.
- They vulgarise public environment and degrade public taste.
- They distract the attention of motorists and other road users (ibid).

However, as he further argues publicity should not be dismissed outright for the following reasons:

- Publicity is already accepted as a normal element of life.
- It is difficult to find other places to locate outdoor publicity other than on the paths.
- Publicity is already vulgar and has the merit of vitality and therefore the vulgarity should be expressed, as it is a form of education

- Although the pedestrian and motorists attention is distracted, this danger is often exaggerated by anti publicity factions.

It is therefore important that any act of outdoor publicity in the Old Town of Mombasa must take cognisance of these arguments. Publicity is here to stay and only careful planning will make it congruent.

2.6.6 Aesthetic Problems in Historic Centres

The fundamental criterion to be applied in the rehabilitation of historic settlements is the original creative idea underlying its composition (Papageorgiou, 1971) Even so, we are still faced with a wealth of aesthetic and practical problems, which have to be solved if we are to establish specific criteria for the treatment of buildings in the protected area. Individual buildings in a historic area must invariably form a part of the larger historic area by virtue of their interaction with the neighbouring buildings, and to the characteristic townscape of their historic area.

The buildings in protected area fall under three broad categories.

i. Architectural monuments, which have either been classified or have been accepted for classification.

ii. Accompanying buildings of limited aesthetic values and limited historical and symbolic significance. These have usually survived in large numbers and are usually of the same type. Such buildings, though not monuments interact with the more valuable historic monuments to form a morphological entity that is a constituent part of the total townscape.

iii Buildings without aesthetic values. (The mere fact that a building does not fit stylistically with other buildings in the historic area does not mean it is 'unaesthetic'. This is due to the unavoidable diversity of the structured urban centre). If these disparate buildings are to be integrated into the existing urban cluster, then their basic dimensions must not be too much at variance with the structure (ibid). Their morphology on the other hand, specifically on the facades, can be completely different and will not disrupt the townscape.

2.7 Public Attitudes and Public Participation in Conservation Efforts

The most crucial factor in the whole of conservation is undoubtedly the attitude of the inhabitants of historic centres (and of neighbouring urban sectors) to their protection and revival (Papageorgiou, 1971). This therefore means that the success of operations in the protected areas depends to a very large extent on the sympathetic understanding and the moral and practical support of the population.

Papageorgiou further states that the inhabitants of different historic centres adopt widely divergent attitudes to the question of conservation. This, he further argues, is due partly to variations in local conditions and partly to variations in cultural and intellectual levels of different urban groups.

The present attitudes of the inhabitants of historic settlements, although understandable in themselves are mutually exclusive (ibid). Some want to live in a new district with modern sanitation, others insist on their absolute right to dispose of their property as they see fit, while others are genuinely attached to their traditional way of life. What is needed is a rational educational program, geared to the needs of the various social classes, which would provide a basic training in aesthetic appreciation, thus enabling these people to adopt a sympathetic and informed approach to the rehabilitation of their historic centres.

As far as the future is concerned, it is absolutely essential that we should gain the confidence of the public. We must create a climate of opinion in which it will be difficult not to approve of conservation efforts. Public discussions and demonstrations must be organised and whenever possible these should be held in urban sectors earmarked for rehabilitation. Thus the inhabitants would not only be informed about the intrinsic value of historic urban areas, they should also be given tangible proof that provided they are rehabilitated, such areas will be both viable and attractive. By proceeding this way we could create a new mental rapport between individual and his historic environment.

2.8 Building Form Authenticity

According to the Venice Charter conceived in 1964, authenticity is a central concept of contemporary conservation. The etymology of authenticity is straightforward: the word derives from Greek term '*anthenti'* meaning genuine. According to the charter it is our duty to hand over the historic buildings to future generations in their full glory. To avoid confusion it is emphasised that the evaluation of authenticity does not limit consideration to original form and structure but includes all subsequent modifications and additions over the course of time which themselves posses; artistic and or historic value (Sarkar, 1996).

The authentic form of buildings according to (Papageorgiou, 1971) are affected by:

- Natural ageing e.g. by variation in temperature, weathering and corrosion
- Mechanical forces e.g. by earthquakes, inundations, fires and acts of war
- Human intervention over the course of centuries leading to alterations in functional arrangements of buildings.

Structural repairs to buildings are necessary but constitute a serious loss of authentic matter. Over a period of 30 years regular repair work can easily destroy one tenth of aesthetic substance (ibid). This figure should depend from building to building. The process of artificial ageing in which the renovation material is made to look old is patently dishonest as it is opposed to the whole process of renovation. Continuity and change must be evident in the renovation process.

Their various occupants have modified many buildings in the Old Town of Mombasa over time. Therefore an accumulation of architectural symbols in the neighbourhood is evident and these should not be destroyed in the name of maintenance but must be transmitted to the future generations as is. It is common to find Arabic, Indian and even European symbols in the same built form.

2.9 Concept of Patina

The process of natural ageing is accompanied by a parallel process of ageing with 'grace' in which a transparent film settles on the external surfaces producing what is called 'patina' (Papageorgiou, 1971). The two ageing processes constantly modify the authentic form and substance of the buildings albeit in completely different ways, for while the aesthetic value of the building is decreased by natural ageing, it is increased by patina.

> *"Patina increases the aesthetic value of buildings of all ages with the exception of our own and probably those of the future. Contemporary buildings receive no benefit from the effects of patina, but have to be constantly renovated and cleaned. Contemporary buildings employing industrial products such as glass and synthetic materials which are largely impervious to distortion and hence highly polished surfaces with the result that they resist corrosion far better than traditional materials like stone and wood. Although these industrial products are highly susceptible to the effects of pollution and so dirty very quickly, they do not benefit from the effects of patina". (Ibid).*

The dark veil of patina help to underlie the visual homogeneity of a town but it can also destroy the original chromatic contrast between materials used in the different buildings. It is therefore plausible to argue that modern building materials can carefully be used in conservation work and yet not steal away the grace. Reinforced concrete is both durable and economical and can be used for the replacement of beams and columns because it still retains the original monolithic nature of these structures despite not being original.

For these reasons, buildings in the Old Town of Mombasa should not necessarily be cleaned in the name of maintenance as this removes accumulated grace. This is especially

so if the buildings are of authentic materials which age gracefully. This is however a contentious issue in the conservation of historic centres as some conservationists argue that buildings should be returned to their original conditions. The position occupied by this study is that this is not feasible as historic centres are by and large a product of time among a myriad of other factors.

2.10 Sculptural Decor

This is the most fragile part of historic buildings and can be carried out according to the following methods:

- The replacement of a damaged or missing part by an exact copy executed in different materials.
- The introduction of a new composition executed in the same format and materials and illustrating a similar theme as the missing original but conceived as a contemporary work of art.
- The replacement of a damaged or missing part by a bas-relief, which is executed in the same material as the original, but which merely, indicates the general outline (ibid).

The Old Town of Mombasa is replete with buildings having missing parts and these could be replaced using any of the above methods. One method that should be avoided is the replacement of missing sculptures by exact replicas executed in the same material as this strives after false authenticity.

2.11 Developing Historic Areas

2.11.1 Reconstruction in Historic Centres

Reconstruction work as Papageorgiou (1971) shows is necessary in historic centres, to revive the commercial, cultural and administrative functions. This involves the re-erection of whole groups of buildings or even whole urban areas within historic centres. The symbolic significance may have to be preserved especially in the view of strong attachment shown for them by the local inhabitants.

In all the cases the object is to create entirely new structures, which would make fuller use of the sites. This provides for renewal of buildings in these sites, which is often desirable. Powerful psychological resistances have to be removed before the mass population can grow accustomed to radical change or renewal and learn to accept it.

Accordingly, the implementation of this such work has led to the development of the following conservative trends:

- 'Historicizing' reconstruction, in which perfect but counterfeit replicas of demolished buildings are produced.
- 'Harmonic integration' in which the demolished buildings are replaced by others designed as contemporary structures but in the same spirit as the traditional ones
- 'Harmonic contrast', in which reconstruction is based on contemporary principles of town planning and contemporary architectural morphology.

These options can be further explored for urban renewal programmes in the Old Town of Mombasa.

2.11.2 Building Translocation

Conservation projects can be complimented by 'translocations', which involve the removal and re-erection on a different site of whole facades and sometimes-whole buildings (ibid). This has been done in Egypt during the construction of the Aswan High Dam where a whole temple was moved to a new site. The principle for this is to fill a gap, which has been created in the historic areas using completely authentic materials. Translocations could also be done when a group of historic buildings impedes an urban development project, which is necessary for the rehabilitation of a historic centre.

2.11.3 Diversity of Individual Buildings

Siravo et al. (1986) observed that new building models and materials in Lamu, Kenya, are altering expectations and standards of living, which have existed for centuries. They further assert that in adapting buildings for use as offices and commercial establishments, the freestanding veranda houses have proved more flexible than the traditional stone houses, and the conversions have been successful. However a few of these houses, however, particularly along the sea front, appear top-heavy, and out of scale as a result of roof top additions which have not been set back from building lines.

The problem posed by juxtaposition within the urban cluster of various groups of building dating from different epochs produces a morphological diversity. This diversity is not only a characteristic of the townscape, but it is also encountered in individual buildings as observed by Siravo et al.

The problem posed by the formal diversity of historic buildings and the accumulation of architectural forms and substances are therefore considerable, and the decisions taken in this sphere are highly susceptible to criticism since they are largely based on subjective responses. For this reason it would be useless to try to establish rules and criteria for determining the evolutionary phase to be stressed and which faces are to be eliminated.

2.11.4 Road Network

Apart from the practical value as traffic routes and communication systems, road networks have also fulfilled the aesthetic functions, which is no less important (Papageorgiou, 1971). In these conserved zones, the roads are narrow. Further characteristics of these roads are constant variations, free alignment and the total absence of the rectangular grid. Such networks are readily recognisable by virtue of their complete spontaneity.

Where alterations are made to the alignment of road networks, foreign elements are generally introduced in an authentic urban composition, thus destroying the original layout which has an evolutionally history. It is suggested therefore that the treatment of roads in conserved areas should not serve to indicate them as an extension of the ones in the larger metropolis because they will be assumed to serve the same purpose as the main thoroughfares. Therefore the treatment of these paths should be in keeping with the character of the historic district.

2.11.5 Greening of Historic areas

The Greenway Principle according to Reichek (1966) is a basic linear system of connecting greenways, focusing on significant symbols such as churches, schools and clubs. It forms a skeletal backbone, which gives significance and meaning to a series of individual projects and provides a sequence of sensations for the people moving through it. It is a very humanistic principle that the people who inhabit it will see the community as a series of meaningful space sensations.

In the old towns, apart from the isolated groups of trees, there are virtually no trees in these towns for the simple reason that the narrow streets cannot accommodate them. Romantic gardens introduced of course clash with the historical setting. The Old Town of Mombasa has several open spaces and the most prominent, though not the largest is the Government Square. Others are the Treasury Square and the Piggot place. These open spaces should help in ordering urban spatial dispositions and orientations within the Old Town of Mombasa.

2.12 Town Planning and Urban Conservation

2.12.1 Introduction

Some societies have to a large extent kept their traditional consistency of life almost until today. For them, the physical side or the practical, has gone hand in hand with the religious and spiritual each complementing the other and establishing a harmonious whole (Fielden, 1979). Technological innovations have caused rapid changes in the physical fabric, drawing people from the countryside to the urban communities, which are usually the centres of innovation.

This migration destabilises the self-regulating system and precipitates a cultural earthquake. Natural systems for ventilation, for example, are lost to air conditioning. Generally insupportable living conditions are created in these historic centres, precious energy resources get wasted in the process and the quality of life far below the traditional results.

The physical change creates an alienation from religious and spiritual values, thus breaking up a people's cultural framework. Historic buildings with their environmental unity became mere tourist attractions.

2.12.2 The Concept of Gradualism

As long as traditional continuity prevailed, conservation was a natural feature of life and any necessary adaptations were made in a coherent way. This century has shown no respect for gradualism. The present technical form of society is rapidly consuming structures and the spatial and visual qualities of the urban environment. Generally, the increasing density in of urban population causes a radical disruption of the layout of towns The traditional functions of the settings are also affected. This could be commerce, political affairs, leisure activities etc.

2.12.3 Radical Surgery Versus Conservative Surgery

Historic districts can sometimes disappear as a result of speculative building projects or because the overcrowded streets are abandoned to the less privileged social categories. This causes them to quickly deteriorate .The building of fast traffic networks tear down the urban fabric apart. A historic districts' inability to simultaneously cope with the use of land, the creation of jobs and the abrupt alteration of paths to create faster communication systems leads to a steady deterioration of the living urban environment. The application of technology creates new and even more severe problems when 'social engineering under the

guise of urban planning' has been applied to town (ibid). Thus any planning intervention, though designed to create utopian conditions creates an inhuman environment.

This thesis advocates for conservative surgery to the problem solving exercise in Old Town of Mombasa. The resources we have should be used to the best advantage without crystallising a catastrophe. The attempt at imposing industrial culture upon humanity with a standardised city in mind should be eschewed.

2.12.4 Historic Planning

Human settlements are extremely complex systems and involve many interactions; ecological, social, anthropological and psychological. Therefore, the position in this thesis is that planning in a historic area should be less categorical and authoritarian. The concerns of the needs of the local populace should be taken into consideration and local support should be sought.

The aims of historic planning are more modest and attainable than conventional planning. It is necessary to see conservation activities in the context of the whole planning process because all historic areas must be considered as a whole and in the context of the larger city. Intervention criteria should be based on a clear analysis of the existing situation. The inhabitants must be informed of these analyses so that the conservation efforts are appreciated and acceptable to the community as a whole. Theirs is a living heritage tissue and it is important that they should participate for the maintenance, enjoyment of their new historic environment.

Fielden (1979) stresses that interventions in historic centres should be compatible with existing typologies and respect the relationship of scale, volume, mass, silhouette, rhythm, texture and colour. These are qualities that constitute their essential character. Of importance is the insertion for new construction as a part of the historic process of renewal in a town. This is possible a long as it respects the historic character, aesthetic qualities and social balance.

Historic planning should define and protect cultural property by using legislation. It should abet land value speculation that usually leads to destruction of cultural property. It should prevent causes of decay e.g. atmospheric pollution form vehicles and supersonic aircraft, pilings as well as subsidence from ground water extraction, tunnelling, mining and road widening. The agent of environmental change should be called upon to prove that his

proposals will not damage cultural property and an environment impact statement should be presented.

2.12.5 Adaptive use

Adaptive use, (sometimes called adaptive re-use), often the best means of conservation of historic buildings to ensure their continued use and economic sustainability, often requires additions. There should be small in proportion to the whole and executed in the current architectural style so as not to falsify the construction.

Fielden (1979) advices that substantive changes in the structure and decoration of the buildings should be avoided: To him a study of its morphological development is a prerequisite requirement. Experience, he, further shows, in most cases suggests how the fabric may be adapted with minimum intervention thus meaning lower costs. Adaptive re-use must not destroy the inherent values of the buildings. He further argues that *facadism* or façade retention cannot be justified on either conservation or economic grounds.

2.12.6 Infill Buildings

Fielder (1979 advocates that the integration of new buildings in historic towns without destroying their identity should be part of the organic growth process and decay. However, it should be carried out with sensitivity, respecting their historic character, qualities, social balance and the local architectural forms.

Planners decisions of inventing modern functions must respect the typological characters of each house or building and the capacity of the area to absorb change. To avoid a discordant townscape, the conservation guru suggests that with the exception of small changes, modern additions and constructions must be compatible in their workmanship, typological characteristics and qualities with existing features: The spatial concepts must be respected; the aesthetic qualities and rhythm must follow the established criteria. Also important is the social structure, which must be taken into consideration since it is a prime aim of conservation planning.

2.12.7 The Concept of Vernacular and Planning of Historic Areas

Reverend J.L. Petit first used the term 'Vernacular' in direct reference to buildings in 1861 (Collins 1965 as quoted by Furan, 1989). These buildings according to Rev Petit displayed the characteristics of houses built by people who took into consideration their requirements, societal conditions, environmental factors and materials. Today such vernacular developments are in danger due to the growing 'professionalism'. Such

developments, beyond providing romantic nostalgic dimension as an inspiration for professional practice, do comprise a source of theoretical and practical knowledge.

The study occupies the position that the Old Town of Mombasa exhibits vernacular architecture and by extension has what the study calls vernacular planning. Sensitivity to planning in vernacular areas should therefore be a central concept.

Practically, as (Furan, 1989) shows, the lessons to be learned from vernacular developments are numerous:

- Person-nature dialogue in terms of built environment as a language and a means;
- Response to environmental factors.
- Limitations of materials.
- Culture and technology as a tool in construction.
- Building activity in respect to social relations

The theoretical reference to vernacular encompasses both the living and non-living environments in specific cultural and environmental functions and aesthetics. Planning in a region with vernacular developments poses challenging questions on how vernacular can accommodate social change and the existence of specialization in development constituting a special form of professionalism in itself (ibid).

Professionalism, as we know it today serves the purpose of impressing the client at the expense of the larger society. This does not mean that anything vernacular is good Nostalgia for a long neglected phenomenon, or a blind reflection of vernacular built forms is not a sound basis for planning. Planning in historic areas must recognize the process in time and space. It must take cognisance of the social relations within which this is realized. Thuran (1989) has pointed out that the intricacy of the social relations creates the complexity inherent in the vernacular.

2.13 Planning in Islamic Areas

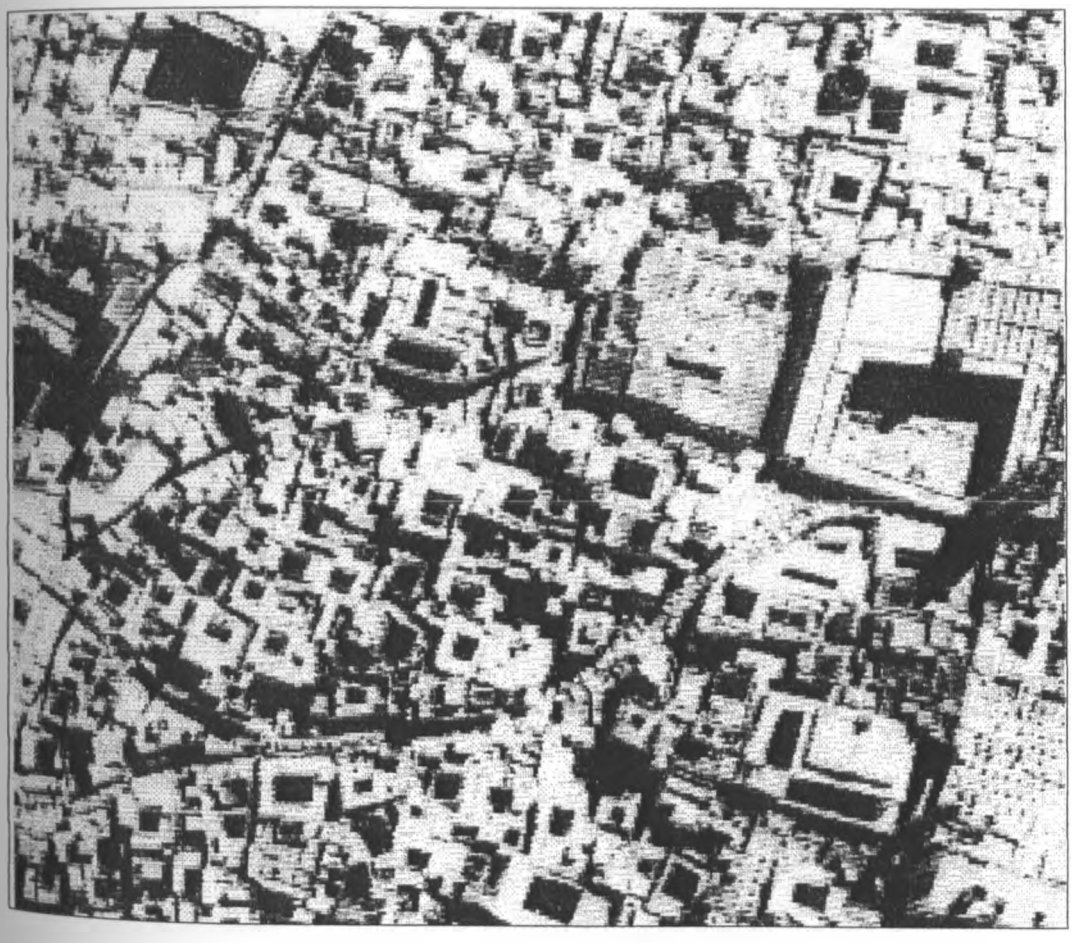
Broadbent (1990) contends that whilst the rules for regular planning were well known in classical times, those for informal planning were developed in quite a different culture, Islam, during that period which the West tend to think as dark ages.

These ages were certainly not dark for Islam for as Broadbent shows, as Islam expanded whatever seemed appropriate from the conquered territories was absorbed and developed. What was absorbed included medicine, philosophy and the sciences, not only of Greek and Rome but also of the earlier cultures, which they in their turn had absorbed from

elsewhere. Islam was therefore more than a bridge over which ideas of Antiquity passed medieval Europe.

The Koran and the Sunna, a record of the prophet Mohammed own divinely inspired-behaviours, provided the basis of the first encoded rules of this informal planning. Hakim (1986) as quoted by Broadbent (1990) says that Islamic law was extracted from the Koran and the Sunna by Al-Shaffi (died 819), al Bukhari (died 870) and Muslim (died 875). Once a system of laws had been encoded, the *Akham* or building solutions was extracted and codified out of these more general laws. These principles are evident in the Old Town of Mombasa but a detailed study is required to explain them further. A brief mention of these principles is undertaken here, which have been transmitted to the Old Town of Mombasa through historical times by the Arabs.

Plate 2, Aerial View of Tunis, An Islamic Town



Source: Broadbent (1990)

2.13.1 Planning Maxims in Islamic Cities

The principles behind the building solutions aforementioned, as explained by Broadbent include those of:

- ***Harm:*** by which one is encouraged to exercise one's personal rights to the full provided that in doing so one causes no harm to others. The guidelines that emanate from this include those concerned with locations within the city for activities that cause smoke, create offensive smells, make offensive amounts of noise and so on.
- ***Interdependence*:** which considers people within the city and the structures they inhabit interdependent in an ecological sense.
- ***Privacy:*** by which every family is entitled to acoustic, visual and other kinds of privacy. Since the women had to be protected from the eyes of strangers, there were strict rules against overlooking of any kind. These affected the positions of windows including their height above the street *(Shari)*. Doors and windows should not face each other directly across the *fura* (cul-de-sac) into someone else's doorway or windows. Visual corridors had to be avoided and this led to irregularities in façade design. Nor should one be able to look into any part of one's neighbour premises especially the roof or the courtyard where the women might be. Even the *muezzin*, as he climbs the minaret of the mosque to call the faithful is forbidden to overlook neighbouring premises
- ***Original usage:*** Which means that order and established uses such as the positioning of windows, party walls and so on, have prior rights over any later uses and especially over new proposals.
- ***Building higher:*** Consisting of a right to build ventilation towers as high as one pleases provided they are contained within one's air space. It is interesting to note that this right applies even if such building will deprive ones neighbours of air and sun. This right can however be refused if there was evidence of the intent to harm ones neighbours.
- ***Respect for the property of others.***
- ***Pre-emption***-by which in selling ones property, one must, in the interest of keeping building lots together, offer first refusal to ones neighbour (s), adjacent property-owner(s) or even one(s) partner.
- ***Seven cubits is the minimum of width of public sharis (thoroughfare).*** A cubit is about half of a metre and this dimension allows two fully laden camels to pass

without colliding. A fully laden camel might be seven cubits high which gives minimum headroom under which a building can span across the street. The *fine* (alley) may be narrower than the Shari but at least one laden camel should be able to pass down it, so the minimum width will have to be four cubits.

- ***A public thoroughfare should never be obstructed by permanent or even temporary obstructions.*** Generally, the owner had the right to use that part of the *fina* immediately outside his house for the loading and unloading of his beasts and so on, but still had no right to block the *fina*.

These maxims are evident in the Old town of Mombasa and as such, the town resembles many old Islamic cities. The antecedents for its planning are reputable and need protection. The public thoroughfares should not be choked-up, as is the case now where enormous buses and lorries block the streets.

2.14 Heritage Areas in the Eastern African Region*

- **Bagamoyo Historical Town, Tanzania**

Bagamoyo historical town is located along the Indian Ocean coast about 65 km north of Dar-es-Salaam in Tanzania. It is one of what are considered as new Swahili towns, i.e. historical towns along the East African coast that emerged during the 18th and 19th centuries as a result of flourishing slave and ivory trade. Any earlier dates of its origin could be referring to the 7th century historical town of Kaole that is located just 5 km away.

Bagamoyo served as an important *entrepôt* for slaves and ivory brought overland by caravans. From the town the slaves and ivory were shipped to Zanzibar where they were sold or transhipped to other Swahili city-states or elsewhere in the Indian Ocean World. The town was also Tanzania's first Christian centre with the first church built there in 1872. Furthermore, it provided a set off point for missionaries and explorers bound for the hinterland. Dr Livingstone, Burton, Speke, Stanley and Grant all began their journeys into the interior from the town.

Towards the end of the 19th century, Bagamoyo was made the capital and main seaport of Tanganyika by the then German colonial administration. This status of the town was, however, short-lived and as such had very little impact on its physical development.

*Complied from *http://www.auf.org/historicaltowns.html*

- **Dar-es-Salaam City Centre, Tanzania**

Dar-es-Salaam is located on the eastern part of Tanzania along the West Indian Ocean coastline. Sultan Seyyid Majid of Zanzibar established it in 1862 as a port and trading centre The sultan made a *grand design* for the city and brought labourers and slaves from Zanzibar to carry out its construction. Buildings and streets were made of stone. After the death of Sultan Majid, eight years after establishment of the city, development projects were abandoned and the city was left to decay until 1891 when it was made the seat of the German colonial administration in Tanganyika. The British colonial administrators maintained the role of Dar-es-Salaam as the seat of government when they took over from the Germans after the World War 1 in 1919. Albeit a large part of the early developments has been destroyed by non-contextual urban renewal and development of the city in the 1960s and 70s, there are, however, several historical urban components still remaining mainly in the eastern part of the present city centre

- **Great Zimbabwe, Zimbabwe**

The ruins of Great Zimbabwe are located on the Zimbabwe Plateau about 28 kilometres southeast of the city of Masvingo in the present day Zimbabwe. The ruined settlement presents one of Africa's greatest pre-colonial cities. It was built around 1200 AD by the ancestors of the Shona, one of the largest Bantu-speaking groups in Zimbabwe. The settlement is believed to have lasted three to four hundred years before it was abandoned. Archaeologists and historians believe that from its inception to the 15th century, Great Zimbabwe was the capital and an important trading centre for a large area in southeast Africa or what has been referred to in some quarters as medieval Zimbabwe state. The ruins comprise stonewall enclosures built of granite blocks without use of mortar. Covering an area of nearly 1800 acres, the ruins are the largest ancient stone construction south of the Sahara. The ruins have been grouped into three architectural groupings known as the Hill Complex, the Valley Complex and the Great Enclosure. It is believed that at its apogee in the 14th century, Great Zimbabwe may have had a population of up to 18 000 inhabitants.

- **Kilwa Kisiwani, Tanzania**

The now ruined town is located on an island off the south coast of Tanzania. Also known as the pearl of the south during its glorious years, Kilwa Kisiwani was one of the largest and wealthiest trading cities of the medieval East Africa. Today, however, the historical town is buried under the ground except a couple of ruined buildings. Documentary

evidence suggests that the ruined town was established in the 11th century with the spread of Shirazi Islam along the East African coast.

From its establishment to the 16th century, Kilwa Kisiwani was an autonomous Swahili city-state and a great player in overseas trade along the East African coast. Through exporting gold and ivory that originated from as far places in the hinterland as Mozambique and Zimbabwe, Kilwa Kisiwani observed considerable economic and physical growth. Most of the ruined town was built during this period. Travellers who came to the town like Ibn Battuta, a famous Arabic traveller, have described the size and character of the town during this period in earlier literature. Ibn Battuta described the town in 1331 as one of the finest and substantially built towns he had seen.

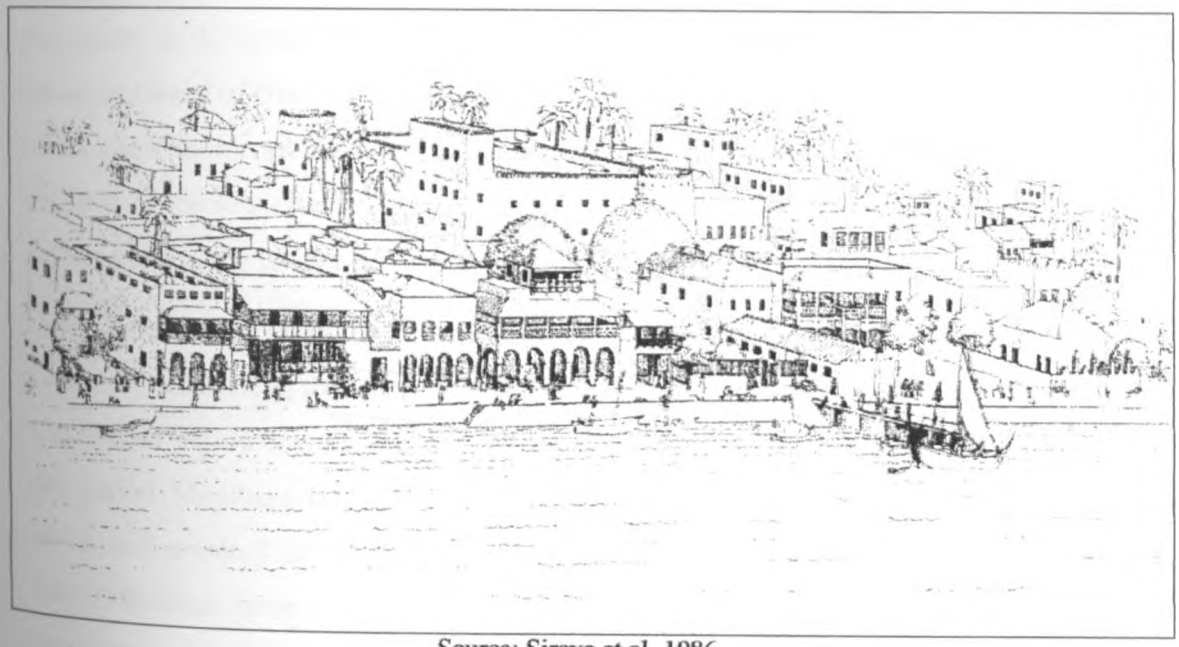
With the occupation of the East African coast by the Portuguese from the 16th and 17th centuries, the economy of Kilwa Kisiwani declined rapidly. This decline has been linked to Portuguese control of Kilwa Kisiwani's sources of gold in Mozambique and above all prevention of free movement of goods in the India Ocean. With exception of the earlier Gereza, the local name of a fort built by the Portuguese; there was more or less total physical stagnation of the town during this period due to the changed economic circumstances. That notwithstanding, Kilwa Kisiwani remained an independent Swahili city-state during this period except from 1505 – 1512 when the Portuguese occupied it.
The departure of the Portuguese from the East African coast by the end of the 17th century resulted in resurgence of sea-borne trade with ivory and slaves as major exports from Kilwa Kisiwani. Accumulated wealth provided by the improved economic conditions stimulated urban expansion and regeneration activities that include construction of the earlier mentioned Makutani Palace and surrounding buildings, and rehabilitation or perhaps reconstruction of the Gereza. Even during this period, Kilwa Kisiwani continued to be an autonomous Swahili city-state until 1784 when it came under Omani protectorate rule. Without any changed economic circumstances in the region, Kilwa Kisiwani began degenerating both physically and demographically in the beginning of the 19th century and by the 1840s the town had been abandoned and reduced to ruins.

- **Lamu, Kenya**

The historical town of Lamu, locally known as the old town, is located on an island in the Lamu archipelago in Kenya. The present historical town site dates back to the 15th century. Any earlier dates of origin of the historical town could be referring to Hidabu and Weyuni, two ruined independent townships to the south and north respectively of the

present historical town. These townships are believed to have been forerunners of the present Lamu historical town. Earliest historical reference to the town describes it as a city with natural wealth from the sea and orchard fruits. Like the other historical towns along the East African coast, the original inhabitants of Lamu were Waswahili. In this case, however, the autonomy of the indigenous residents over the town was rather for a short period. The town fell under Portuguese rule by the beginning of the 16th century when Tristan da Cunha, a Portuguese, blockaded it and imposed tribute. Physical development in Lamu declined with the Portuguese rule as evident from dates of origin of extant and ruined spatial structures in the town. Renewed development activity in Lamu was witnessed in the 18th century with construction of several stone buildings including the Palace of Pate, and rebuilding of ruined mosques. During this period, Lamu was a subsidiary of Pate under the rule of the Mazrui clan. The building boom in the town continued during the 19th century when Lamu was under protection of Muscat. Lamu Fort was built during this period. However, the building boom declined drastically with the British colonial rule in Kenya from 1895, mainly due to changed administrative and economic circumstances.

Plate 3, Lamu Town Waterfront



Source: Siravo et al, 1986

- **Manda, Kenya**

Manda ruined historical town is located on the Lamu archipelago in Kenya. Archaeological evidence suggests three main periods of occupation of the town. The first period spanned from 8th to 9th century and consisted of non-stone buildings. The second period consisted of stone and burnt brick buildings. It spanned from the 10th century until the abandonment of the town in the end of the 11th century. The third period commenced with the reoccupation of the town in the 15th century. An interesting spatial feature of Manda is its extensive reclamation walls.

- **Mombasa, Kenya**

Mombasa city as a whole is situated on the south coast of Kenya. Its historical town, locally known as the old town, is located on the eastern side of the present day city centre. The foundation of the old town is estimated to have been about the beginning of the 10th century. According to Ibn Batuta, a renowned Arabic traveller, by 1331 the town was large and abounded with bananas, lemon citron and fish. On the basis of available historical records, Mombasa was an autonomous Swahili city-state from its origin until the arrival of the Portuguese in 1498.

The arrival of the Portuguese started what was to be a sequence of bitter wars for the town that lasted to the 19th century. It is because of these wars that the town is also known as *Mvita* or *Island of War*. The construction by Portuguese in 1594 of Fort Jesus, which is one of the most important historical artefacts in Mombasa today, was in response to the war situation in the town then. The Portuguese occupied Mombasa until 1698 when they were defeated in a battle for control of the town by Omani Arabs.

Omani rule in Mombasa could be categorised into three periods. During the first period that lasted until 1724, Mombasa was under direct control from Muscat, the Omani capital. The second period also known as the Mazrui Period, spanned from 1726 to 1837. During this period Mombasa was under the rule of a resident Omani Arab clan called Mazrui, which had revolted and declared independence from Muscat. In the third period, 1837-1895, Mombasa came under direct control from Muscat again. After this period, which is also known as the Busaid Period, Mombasa fell under British colonial administration until the independence of Kenya in 1963.

With exception of the Portuguese built Fort Jesus, ruins of some pillar tombs and mosques, and perhaps the pattern of movement channels and urban spaces, nothing much remains of

Mombasa's early physical developments. The historical town as it is today consists mainly of urban solids generated during the 19th century and early part of the 20th century.

- **Pate, Kenya**

Pate ruined historical town is located on the south of Pate island in Kenya. Recent archaeological evidence suggests that the town was a major activity centre as early as the eighth century. Nevertheless, most of the existing of ruins, comprising of mosques, tombs and houses date to 17th century onwards.

- **Zanzibar Historical Town, Tanzania**

Zanzibar historical town commonly known as Zanzibar Stone Town presents the very early settlement of the present day Zanzibar city. The historical town is located on a triangular peninsula called Shangani on Unguja Island in Tanzania. Before the 20th century, the peninsula was separated from the rest of the island by a creek to the east, with only a narrow neck of land at the southern end providing a link between the two. The creek was reclaimed during the 20th century.

The historical town originated in the 12th century as a fishing village. Nevertheless, it was not until the 1530s when real urban physical development of the town began albeit in small scale. From this period to the end of the 17th century, Zanzibar was a dependent city-state that was under local Swahili rulers who were under the hegemony of the Portuguese. During this period, important physical developments included construction of a small factory, a small chapel and several merchant houses by the Portuguese.

During the 18th century, Zanzibar fell under indirect rule of Omani Arabs. Like their predecessors, the Omani Arabs exercised their rule over the city-state through loyal local Swahili rulers. During this period, the economy of the town, which had observed decline during the Portuguese era, recovered quickly mainly due to emergence of slaves and ivory as lucrative commercial commodities along the East African coast and for which Zanzibar was a major market. Nevertheless, despite the economic prospects offered by the 18th century, only a handful of physical developments took place in the town. They include partial demolition by Omani Arabs of the Portuguese built chapel and a merchant house in their efforts to incorporate the two building structures into a fort. The latter is extant and known today as the Old Fort.

In the 19th century, the growing Zanzibar economy that had hitherto been dominated by maritime trade was given a further impetus with introduction of plantations on the hinterland from the 1830s. Commercial crops that were grown included cloves, coconuts, sesame and gum and were exported through the town's port. The economic growth continued even after the Sultan of Oman, Seyyid Said, transferred permanently his administrative capital to Zanzibar in 1840 in order to exert direct rule to the town and the rest of the East African coast.

In addition to the economic diversification, the 19th century saw expansion of the town's international commercial trade beyond the Indian Ocean region to include Europe and North America. Accumulated wealth from the economic prosperity during this period resulted in substantial urban physical growth in terms of construction of different types of stone buildings, e.g. mosques, commercial/residential buildings, a new palace, roads, etc. The accelerated physical growth of the town could also have been enhanced by the administrative status of the town. Most of historical urban spatial structures in the historical town today were generated during this period.

2.15 Urban Conservation In Kenya

2.15.1 Introduction

The National Museums of Kenya (NMK) has for many years been interested in the preservation of history and the cultural heritage of the various peoples of Kenya. (Procesi, 1990.) It is towards this goal that the NMK has carried out activities that include the setting up of regional museums and historic sites for the interest and education of the general population.

2.15.2 Cultural Heritage in Kenya

In Kenya, protection of a heritage starts when it is declared a national monument and when it is gazetted. According to the law (the National Museums Act Cap 216), the National Museums of Kenya has the power to preserve all the antiquities and monuments. Cap 215 (the Antiquities and Monuments Act) also gives NMK power to preserve objects of archaeological, palaeontological or historical interest.

For any immovable heritage to be gazetted, it should have historical/ architectural interest (i.e. built before the year 1895) or should be a place of cultural interest or be an area of archaeological and/or palaeontological interest. Some of the structures in the Old Town of Mombasa were declared monuments under the former consideration and the whole of the conservation area is gazetted under the later.

The categories of listed monuments are: -

- Prehistoric/ palaeontological sites e g. Koobi Fora, Olorgesailie, Kariandusi
- Ritual/ ceremonial sites e g. Mukurwe wa Nyagathanga, Njuri Ncheke
- Swahili/ Islamic settlements e g. Mombasa, Lamu
- Ecclesiastical sites and buildings e.g. Rabai Church
- Castles and Forts e g. Fort Jesus, Lamu Fort
- Colonial buildings e.g. Old P.C.'s office, Nairobi and Kipande house, Nairobi
- Secular sites and monuments e.g. Thimlich Ohinga, South Nyanza
- Historical ruins e.g. Gede, Jumba la Mtwana, Pate
- Islamic mosques/ pillars e.g. Kongo, Mnarani
- Cemeteries e.g. Tom Mboya's grave, Jaramogi Oginga Odinga's grave
- Ancient living towns e.g. Mombasa, Lamu

Apart from the above-listed monuments, the NMK also gazettes cultural landscapes like the "Kayas", which are abandoned settlements of the Mijikenda tribe living on the Eastern Coast of the country. Other areas of interest for gazetting purposes are bio-diversity areas like "botanical gardens" (Khan, 2002).

- **Thimlich Ohinga**

Khan (2002) explains that Thimlich Ohinga is a 14th century stonewalled complex consisting of six skilfully constructed structures which represents the relics of the first settlements in the South Nyanza region that introduced a unique dry stone walling tradition and a communal centralized power system. The site served as an active cultural area for several centuries. The walls are constructed using random-sized stones laid on top of each other without any mortar. They have an average width of 1.2 metres and heights ranging from 1 meter to 4 metres.

The World Monuments Watch has declared Thimlich Ohinga, one of the 100 most-endangered sites in the world. A grant was awarded to the NMK to rehabilitate the site and, by 2002 work was in progress. The work being undertaken includes reconstruction of walls, landscaping and general site preservation. A site management plan was to be drawn. Architectural and photographic documentation was to be undertaken at the same time. Finally it was hoped that the site would be opened up to the public when all the developments have taken place (ibid)

2.15.3 The Historic Old Towns Program

The Historic Towns Conservation Program (HTCP) started as far back as 1972 when an Inter-Governmental working party was set up to investigate the future of Lamu District in Kenya. One of the recommendations was that further studies should be carried out to ensure the existing architectural and social cohesiveness of Lamu town is not destroyed through unsuitable design and to identify buildings for restoration. These recommendations were accepted and the NMK was given the mandate. The HTCP grew steadily over the years. Lamu Stone Town itself was gazetted as a national monument in 1986 and, later followed by the Old Town of Mombasa, which was gazetted as a national monument in 1991.

2.15.4 Conservation of Historic Towns

Historic towns means not only towns with buildings of historic and architectural significance, but also urban centres or built up areas whose overall urban planning and design as well as buildings of historical and architectural significance (Mturi, 1983 quoted by Kiamba, 1995).

Kiamba (1995) further explains that the conservation of historic towns, therefore, is the action taken to protect and preserve such towns and/or buildings with a view to preventing their decay. Thus the individual buildings, group value of such buildings, skyline, townscape and streetscape all need to be taken into account when formulating the conservation as well as the appropriate development and development control measures.

Conservation of historic towns, therefore, is geared towards the totality of the built or settled environment rather than the individual features and structures of such environment though buildings and sites of historic and architectural significance will naturally form the principal landmarks of such built environment (ibid).

Conservation of historic towns involves:

- The urban planning and design scene to encompass temporal and spatial distribution and relations between the individual components of the built environment including buildings of historical and architectural significance;
- The social and economic base which generated and sustained the growth and development of such centres and which continues to influence its existence; and
- The integration of conservation with the overall social and economic planning and development (ibid).

Kiamba further notes that policies based on this broader conceptualisation require the combination of the traditional approach to conservation or archaeological, artistic and technical nature with a new dimension of economic and social problems related to the enhancement of the heritage by revitalization and rehabilitation.

2.15.5 Physical Heritage and Urban Conservation Efforts in Kenya

The rather embryonic urban conservation efforts in Kenya as captured (particularly in the case of Mombasa) in conservation studies which culminated in 1990 with the report Conservation Plan for the Old Town of Mombasa, Kenya (King and Procesi 1990) and the subsequent building regulations for the Mombasa Old Town Conservation Area, deal mainly, and in differing degrees, with architectural, structural and physical planning aspects of conservation (Kiamba, 1995). This is because the conservationist style of planning gives primacy to the physical heritage and tends to ignore the fact that historic areas are living organisms. Detailed analyses of social aspects of historic areas are therefore necessary for a holistic approach to conservation.

2.15.6 The Legal Framework for Urban Conservation in Kenya

In 1983, the Antiquities and Monuments Act (Chapter 215 of the Laws of Kenya) was passed by Parliament and provided for the preservation of antiquities and monuments in Kenya (Kiamba, 1995). The Act provides wider and the fuller machinery for the control of antiquities and monuments that existed under Preservation of Objects of Archaeological and Palaeontological Interest Act (Chapter 251) which was first enacted in 1934 and revised in 1962; and is now repealed (ibid). An object or area of land declared by or under this older Act to be an antiquity or a monument or a protected area shall be deemed to be the same under new Act. The new Act incorporates of much of what is the old one but expands and elaborates on its provisions. The Antiquities and Monuments Act defines antiquities and monuments as follows:

- **Antiquity**

> Any movable object other than a book or document made in or imported into Kenya before 1895, or any human, faunal, or floral remains of similar minimum age which may exist in Kenya. (It is interesting to note that the year 1895 is the year when Kenya was proclaimed a British protectorate and, effectively the beginning of British colonial rule in Kenya; but despite this Kenya was declared a colony in 1920.)

- **Monument**
  - An immovable structure built before the year 1895;
  - A rock painting, carving or inscription made on an immovable surface before 1895;
  - An earthwork or other immovable object attributable to human activity constructed before 1895; and
  - A place or immovable structure of any age and of historical interest (Kenya, 1983).

Kiamba (1995) explains that in all the above cases, the monument will include the site thereof and such land as may be required for maintenance of the monument. Maintenance as used the in Act includes the fencing, covering in, repairing and cleansing of a monument or the fencing or covering of a protected area, and the doing of any act which will be necessary for the purpose of maintaining or protecting a monument or a protected area or of securing convenient access thereto.

It is the last meaning of a monument, which is of relevance in the case of the conservation of historical towns-and the one that has been used to deal with the conservation of the historical towns of Lamu and Mombasa.

2.15.7 The Administrative Framework for Urban Conservation

National Museums Act (Chapter 216) was also passed on 1983 to provide for the establishment, control, management and development of National Museums and for connected purposes and the establishment for the National Museums Board of Governors with the general responsibility of carrying out these functions (Kiamba, 1995). The Act specifically gave the power to the Board to operate as an "authority" within the meaning and for the purposes of (and indeed the responsibility of the administration of) the Antiquities and Monuments Act. An "authority" in this regard is the body, which is invested with the guardianship powers over monuments. The owner(s) of a monument of which an authority has been constituted guardian shall continue to have the same estate, right, title and interest in and to the monument as thereforeto; in the case of land which is the subject of the monument or on which the monument is sited or a part of the protected area, the legal land owner is the same as the owner of the monument.

The Antiquities and Monuments Act (Section 18) provides that an authority (hence the National Museums Board of Governors under the National Museums Act) may enter into a "written agreement" with the owner of a monument and any other person or persons for the protection or preservation of the monument. Such an agreement may provide for:

- The maintenance of the monument;
- The occupation or use of the monument by the owner or otherwise;
- The restriction of the right of the owner or occupier to built or to do other acts or things on or near the site of the monument; and
- Notice to be given to the authority in case the owner intends to offer the land on which the monument is situated for sale, lease or other disposal thereof and the right to be reserved to the authority to have the first refusal of any such sale, lease or other disposal.

The "authority" is further given power by the Act to enforce the protection and preservation of monuments as follows:

- If the owner of a monument refuses to do an act which is in the opinion of the authority necessary for the protection, preservation and maintenance of the monument in accordance with the terms of the agreement or instrument, or neglects to do the act within such reasonable time as may be fixed by the authority, the authority may authorize the doing of such act, and the expense thereof, if and so far as it is established to have been the responsibility of the owner or other person, shall be recoverable from him.
- If the authority establishes that the owner or the occupier of a monument intends to build to do any other act or thing in contravention of the terms of the instrument or agreement, the High Court may grant an injunction to restrain the building or other act or thing.

If a site, an area or any artefact has been declared a historical monument under the Antiquities and Monuments Act but it is felt that it is danger or being destroyed, injured or allowed to fall into decay, the Act allows for its acquisition by way of compulsory purchase or acquisition under the provisions of the Compulsory Land Acquisition Act (Chapter 295). This procedure may also be followed if the owner of the land on which a monument is situated was unwilling to have the monument gazetted or declared as such voluntarily.

This meant that Kenya had finally the all-important and detailed legal and institutional and framework to safeguard all its monuments and places and structure of historical importance.

Kiamba, (1995) quotes as DHV Consultants (1990) arguing thus:

> *No general legislation, however, can provide the detailed planning and measures needed to manage a historical town which need to both conserved and developed at the same time. The Act can provide adequate protection of monuments so long*

> *as the rights of the private owners of the land and buildings are not disturbed. But how this should be applied to a living town, without disturbing the rights of owners, is another question altogether (1990).*

Under Section 43 of the Antiquities and Monuments Act, National Advisory Council may be formed to advice on matters relating to the conservation of towns and monuments in Kenya. This would serve as the authority on the national level to guarantee that the necessary institutional and legal measures are taken and that budgets are allocated for the conservation of historical towns and other monuments.

- **Daily Administrative Actions**

The daily management of urban services and facilities (e.g., town cleaning, sewage, street lighting, development control etc, in Kenya is the joint responsibility of local authorities and the Central Government in accordance with the Local Government Act, the Building Code (The local Government [Adoptive By-laws] [Building Order 1968), the Public Health Act, the various land and planning legislation, etc. Many activities carried out within the framework of conservation are closely related to the duties of the local authorities and Central Government departments under these legislations. Conservation areas fall under local authorities and therefore, the authority must under the Local Government Act adopt and subsequently enforce such by laws before they are affected in the area (Kiamba, 1995).

- **Weakness in the Administrative Framework**

These by-laws are very important because they give the legal basis for the review of building applications and monitoring of private construction activities within the conservation area. The Antiquities and Monuments Act does not provide for any legal basis or powers to, e.g. the NMK for the adoption of such by-laws.

Consequently, the major problems that face most local authorities in Kenya, e.g. insufficient management capacity, institutional strength and financial means are likely to also be the constraints that face implementation of any conservation efforts (Kiamba, 1995). Such constraints may even impinge much more on conservation because conservation of towns of a historical character requires most careful management and the scrupulous implementation of planning and building regulations.

The recognition that historic buildings are an important housing resource makes the integration of the conservation towns with the overall social, and economic development process a key strategy in the implementation of conservation programmes (Kiamba, 1995).

This integration goes beyond the need to synchronize and harmonize conservation planning and development control measures with urban planning laws and regulations; it requires that various sectors (e g , housing development, education and culture, tourist development, etc.,) should be co-ordinated and harnessed to contribute to the conservation of historic towns (ibid).

Within these four zones, buildings were permitted under the following conditions:

- No building was to be placed so as to appear on the skyline of the Mount of Olives and to the south of the city.
- No building was to be of a greater height than 11 metres above ground level.
- Roofs were to be constructed of and covered with stone or other approved material.
- No buildings intended for industrial purposes were to be permitted.
- In general, approval would be given only for buildings, which were an extension of the small villages embraced in the area, and for special buildings to the north and west of the Old City (Sharon, 1973)

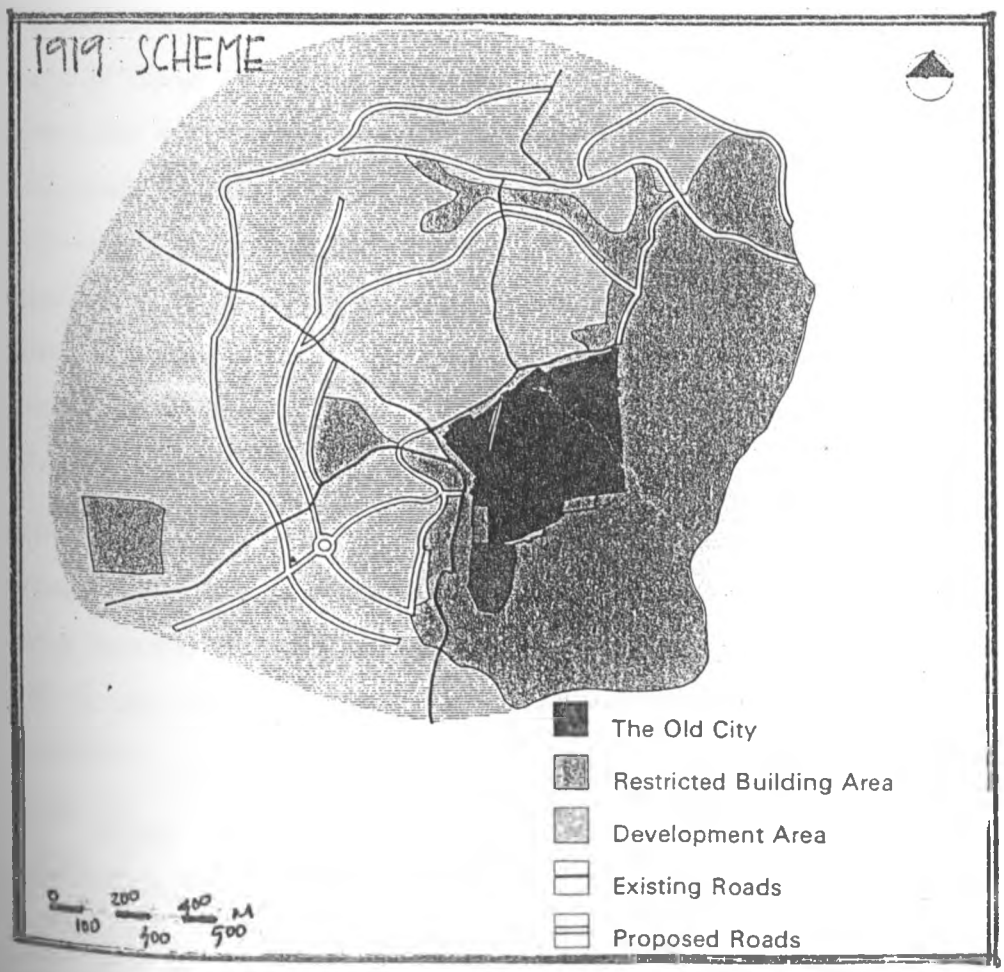
The Commander-in-Chief approved this scheme in July 1918; and its author explained that the scheme was designed to preserve the medieval character of the Old City and to surround it by a belt of land, which should remain in its natural state as far as possible.

- **The 1919 Scheme**

In the following year the noted scientist and town planner Sir Patrick Geddes was invited by the pro-Jerusalem Society to express his views on the expansion and development of Jerusalem, and the subsequently produced his plan. He, too, recommended that a protective belt within which building was to be restricted surround the Old City.

In his scheme, the road network is more flexible; the road alignment follows the topographical contours with a ring road linking the residential quarters around the Old City. He recommended that the road network follow the natural contours. The character of the Mount of Olives to the east and the Kidron Valley to the east and south was to be preserved by designating them as permanent open-space area. Geddes envisaged new building development in the then empty areas west, south-west and north-west of the Old City, and these were steadily built-up with the growing influx of Jewish immigrants following the issue of the Balfour Declaration in 1917 and the end of the war (ibid).

MAP 4 JERUSALEM 1918 AND 1919 SCHEMES



SOURCE: SHARON, 1973

- **The 1922 Scheme**

In 1921, a town planning commission was appointed with the aim of preparing a town-planning scheme. According to this scheme, which became known as the 1922 plan, more clearly defined zoning was proposed. The zones were to be the Old City, which was to be preserved; the protective zone of public and private open spaces around the Old City; residential and business zones; and workshops, factories and industrial zones (Sharon, 1973).

For the first time, three sites for light industry were proposed near the railway station, in Bet Zefafa and in Shneller Quarter (ibid). An attempt was therefore made to follow the quick development of the new residential quarters to the south-west and west, outside the visual space of the Old City, and the fast growth of commerce, workshops and industry in the new Jerusalem (ibid).

- **The 1930 Scheme**

(Sharon, 1973) explains that in succeeding years, an effort was made to coordinate the recommendations of earlier plans and incorporate them into an overall outline scheme. This was completed in 1929 and brought into force in 1930.

The principles in earlier proposals concerning building restrictions into the Old City and the Mount of Olives were maintained. The height of any new building, which might be permitted within the Old City, was rigidly restricted to a maximum of double the width of its skirting roadway. All building in the town was to be carried out in Jerusalem stone. The city walls were to be surrounded by a green belt from 25 to 50 metres wide, which was to be designated as a public open space (Sharon, 1973). Building within this belt was prohibited, and already-existing buildings that obstructed large sections of the ancient walls were to be removed gradually. Local authorities were granted special powers to pull down structures.

However, later on in 1935 and 1941, the Municipality, with the help of the government and pro-Jerusalem Society, succeeded only in clearing the rubble from the Herod's Gate and the Lion's Gate and removing the visually offensive shops near Damascus and Jaffa Gates (ibid). (Only after the Six Day War was the comprehensive task undertaken energetically, and the areas near the walls were cleaned and planted).

The 1930 Scheme introduced zoning regulations, proposed a network of roads, and designated a few, relatively small public open spaces, as well as archaeological sites which

were to remain free from building. It established density control both by fixing a minimum range in the size of building plots – from 600 to 1,000 square metres – and by limiting the extent of building to the main roads, and they were permitted a very much higher density by raising the maximum building percentage per plot (ibid).

The 1930 Scheme was therefore an important step forward in the regulative town planning for the Jerusalem region, by dividing the area into well defined residential, commercial and industrial zones and taking into account the needs of the growing Jewish and Arab communities in different quarters of the city.

- **The 1944 Scheme**

This expansion of the city in the 1930s and early 1940s as (Sharon, 1973) reports rendered the 1930 scheme outdated, and a newly appointed town planning adviser, Mr. Henry Kendall, was asked to prepare a new plan for the city. He produced the 1944 Scheme. Previous plans had dealt for the most part with the Old City and its preservation and restoration, but the 1944 plan had placed the main emphasis on the developing suburbs and the new areas outside the walls. Key sections of this scheme covered communications, zoning, architectural control and open spaces.

Communications. The proposals on the communications network concentrated largely on the four main highways leading into and out of Jerusalem. The Jaffa Gate was the terminal and starting point of two main roads: one to the west, to Jaffa-Tel Aviv and the Mediterranean coast, and the other to the south, to Bethlehem and Hebron. From the Damascus Gate, one highway led north to Haifa and Galilee and another east to Jericho. These four main arteries were connected by a ring road, which encircled the new residential suburbs of Jerusalem (ibid).

Zoning. Ordinances were introduced relating to character, height and density. The residential suburbs outside the walls were classified into six zonal categories, with a varying minimum size of building plot and building commercial zones along the principal streets and their approaches were retained: but the height of commercial building was restricted to 15 metres.

Architectural Control. Ordinances were introduced designed to preserve or enhance the aesthetic appearance of buildings. The construction in local stone was kept as a strict regulation for all building in Jerusalem. Exposed concrete was outlawed as being heavy, 'cold and depressing'. Drainage pipes and spouts were no longer to be installed in haphazard fashion: they had to be 'grouped together and covered by a grille' to improve

the external appearance. Terraces were to be recessed and the number of balconies limited (ibid)

Open Spaces. This scheme followed the proposals in previous town planning schemes to preserve the few remaining open spaces within the Old City, as well as protecting the Mount of Olives. Unfortunately, however, no practical steps were taken to ensure adequate open spaces for the new city suburbs. Sharon (1973) observes that there was no recommendation for stricter legislation on rights of expropriation, which would make it possible to increase the areas and the number of sites sorely needed for public buildings, gardens and parks. In many of the newly developed districts, there was considerable overcrowding, unrelieved by insufficient playgrounds.

- **The Master Plan of 1950**

Within hours of the proclamation of the State of Israel in 1948, the country was invaded by the regular armies of the six neighbouring Arab States (ibid). The war ended in January 1949 and the armistice lines broadly followed the cease-fire lines. In Jerusalem, the line ran roughly north to south. The area west of it, namely the whole of the new city and including Mount Zion, came within Israel. The area to its east including the Old City, fell under Jordanian control and Jerusalem became a divided city.

Sharon (1973) explains that on each side of the line, each country began to develop its part of Jerusalem. The Jordanians continued to expand their suburbs beyond the city walls, again mostly to the north. The development of Israeli Jerusalem was infinitely greater, since the need was greater; for this was the period when the vast influx of immigrants was at its peak, and a complex of new residential suburbs soon sprang up, spreading ever westwards.

During the first decade of the state, a number of impressive public buildings were also erected whose development was guided by the Jerusalem Master Plan of 1950, prepared by the National Planning Authority of the Prime Minister's Office. (Sharon, 1973) shows that unlike past schemes the 1950 Master plan attempted to find an organic solution for the different urban problems and at the same time have the city serve the main functions as capital of Israel and as for its development as a political, cultural and religious centre with a firm economic base, providing for the establishment of light industries and the development of tourism, trade and handicrafts.

The following is a brief outline of the 1950 Master Plan's principal features:

Residential Areas The Judean hills southwest and west of the city were well suited as a pleasant and healthy location for a residential zone and should be added to the municipal area. These hills, the same height as Jerusalem, would constitute natural neighbourhood units and accentuate the setting of the city as a mountain capital in their midst.

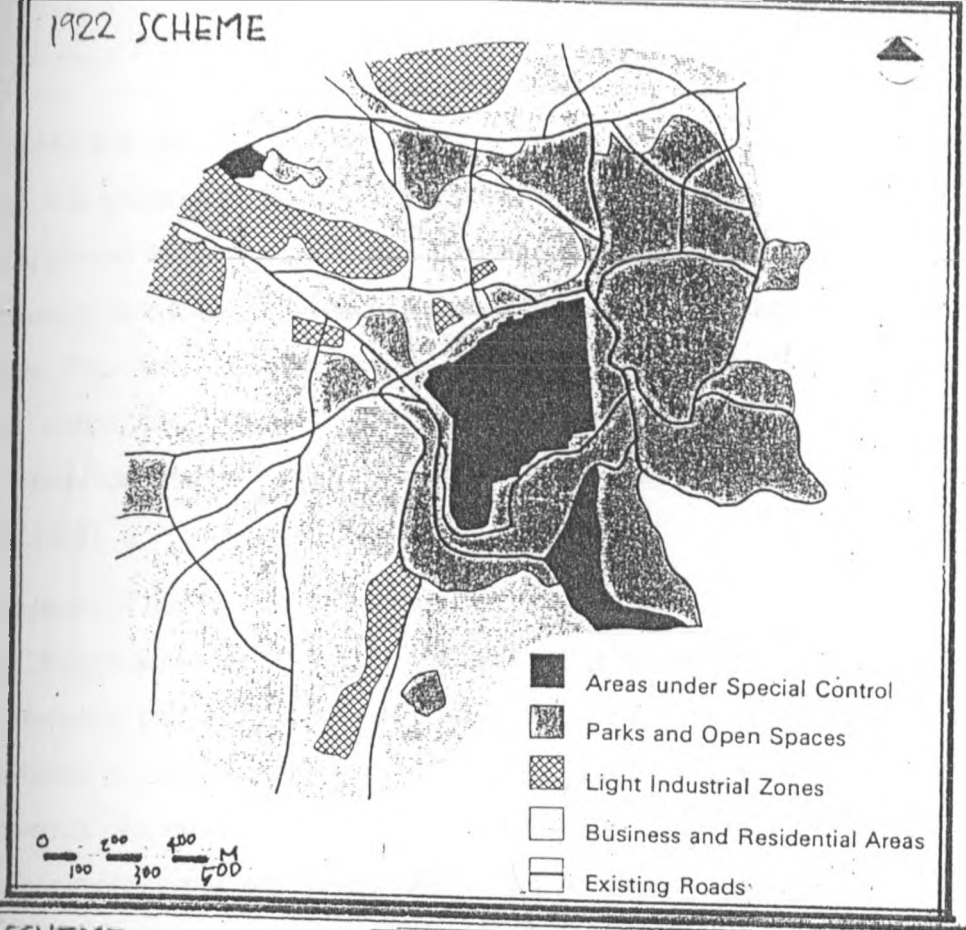
Commercial and Industrial Areas A commercial centre within the city and industrial zones in the outskirts were provided. This would require the reconstruction of the city centre, which would not be difficult as only a small number of the buildings were financially valuable. To reduce congestion, it was proposed that the commercial areas be limited by the laying out of a park around the Mamilla Pool and its nearby antiquities (Sharon, 1973).

The Government Centre (the Kirya) Several hills round Givat Ram, west of the Old City and now at the centre of new Jerusalem, were expropriated and designated as the location of the future buildings of the Knesset, the new campus of the University and the government ministries. This high ground overlooks the entire region. It would be surrounded by a green belt linking it to Mount Herzi and the Hadassah Medical Centre in the West (ibid).

Communications. The plan envisaged a network of communications suited to the mountainous terrain. Two main roads, running west and south, were to link the capital with the rest of the country. They would join the outer road at the western entrance to the city, as well as to the inner ring serving the Kirya (ibid).

Parks and Open Spaces One of the most important part of the plan was the proposal to establish a green belt serving the entire city. The topography of Jerusalem offers a natural solution to this problem. (Sharon, 1973) shows that all *wadis*, ravines and valleys between the hills on which the city stand could serve a network of gardens and parks, a sequence of green strips separating the neighbourhood units. He further explains that the centre of the greenbelt would be Mount Herzi, a steep hill west of the city commanding a superb view of the Judean wilderness to the east and the coastal plain to the west. The green belt would continue until it reaches the proposed National Park area of over 90,000 dunams in the afforested Judean Hills.

MAP 5.
1922 AND 1930
SCHEMES



- **The 1959 Scheme**

This scheme was prepared by the planning authority of the Ministry of the Interior in 1957 and finally approved by the local and district town planning commission in 1959 (ibid). In its basic planning conception, it broadly followed the original guidelines laid down in the 1950 Master Plan for Jerusalem, taking into account the new residential units, the government centre, the Hebrew University campus and the Hadassah Medical Centre buildings, which had risen in the meantime in accordance with the general outline of the Master Plan (ibid).

The basic features of the 1959 Scheme were.

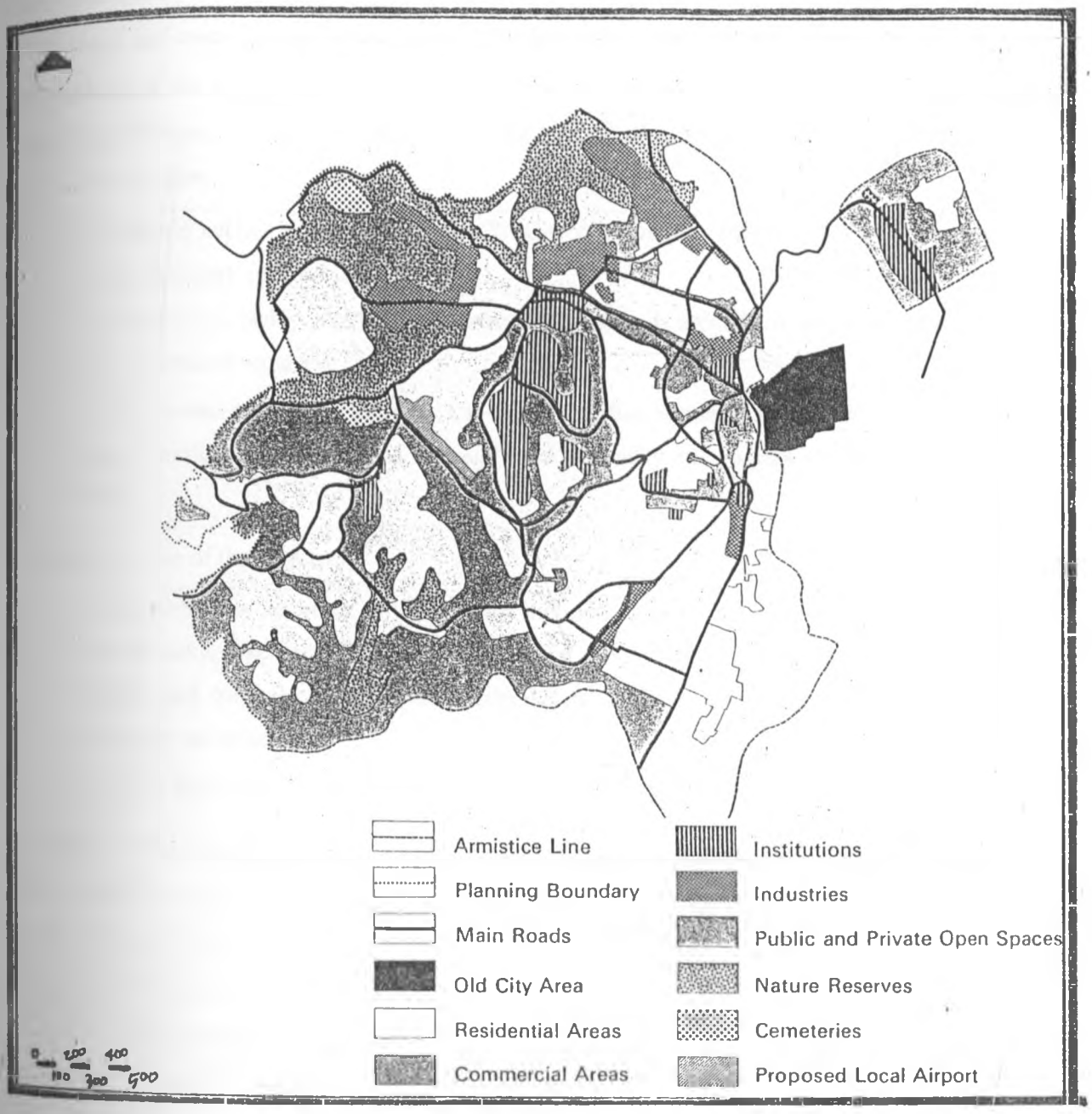
Residential Neighbourhoods. The residential quarters in the east and centre of the town, which for the most part were too densely populated, were subject to reconstruction and renovation based on detailed plans. The western part of the town, adjoining the then built-up area, consists of a number of hills and each was planned as a compact neighbourhood unit, with commercial and educational centres and craftsmen and artisans' services for each unit (ibid). The remaining open spaces – for the most part steep slopes and valleys – were designated as green open spaces to serve the immediate neighbourhoods. This ring of built-up hills with open spaces in the ravines in between was to give the suburbs of Jerusalem their special character.

Industry The industrial zones were to be limited to light industry, requiring less raw materials and therefore no bulky transport, but a high degree of skill. It was estimated that the existing and projected industrial zones would be sufficient for the needs of an envisaged population of 200,000 in the future.

Communications (Sharon, 1973) reports that the inter-urban roads – the Old Jaffa Road and the Security Road entering the city near Ramat Raziel – were marked in accordance with the Regional Plan. Main traffic arteries between the various quarters, connecting roads and additional approaches from the south of the city to the north, by-passing the existing centre, were also planned. A central bus station and parking lots were marked on the plan.

Building Regulations The bylaws requiring the facing of building to be carried out in natural, local stone were kept in force (ibid). However, in view of the high cost of public housing schemes, the zones, which this regulation applied, had to be reduced. The city was therefore divided into building zones of natural stones, artificial stone, and concrete with stucco finish in the suburbs (ibid).

MAP 6. JERUSALEM 1959 SCHEME



SOURCE: SHARON, 1973

- **Jerusalem Master Plan of 1968**

The 1968 Jerusalem Master Plan is a development plan for the immediate conditions (the 1986 plan) and two alternate plans for the consideration (the 2010 plan) (Sharon, 1973). The authors of the plan, the architect-planners, Prof. A. Hashimshony, Joseph Schweid and Zion Hashimshony, based the plan on the assumption of organic interrelation between three urban entities:

- The historic nucleus which includes the Old City of Jerusalem, the mount of Olives and a surrounding park system
- The continuous, highly populated urban ring which spreads around the historical centre up to a well-defined verge and
- A metropolitan area, which includes low-density residential areas, agricultural settlements, small townships (Bethlehem and Ramalla) and especially vast nature reserves. (Sharon, 1973).

The general aims of the plan were:

- To establish an urban centre structure for a unified city, freely accessible both locally and internationally, functionally suitable as the capital of the State of Israel, as the world wide spiritual and cultural centre and as a dignified home for its varied groups of residents, permanent and transitory.
- To ensure the preservation and enhancement of the historical treasures and landscape.

The plan was examined for its adaptability to conditions that may prevail at the end of the century and re-adopted several principles common to previous plans, which were prepared for the city as a whole. These are:

- The preservation of the Old City,
- The establishment of a park surrounding the Old City and
- The use of stone as a cladding material for buildings

(Sharon, 1973) explains that the general layout consists of four zones, the innermost being the historic nucleus surrounded by a park covering the valleys of Jehoshaphat and Hinnom and the Mount of Olives and extending eastward into the Judean Desert. The second zone, he further shows, form the internal city, containing within its boundaries the government centre, educational, religious and cultural institutions and central commercial and social facilities. The third, mostly residential zone comprises the city proper to its verge – a belt of open landscape, which separates the compactly built city from the metropolitan area and

prevents the continuous sprawl of the city. The fourth zone includes the entire metropolitan area with its various settlements.

Out of the 110 sq.km of municipal area 36.5 sq.km were in use in 1967. It was assumed that 26 sq.km of the unused land will be developed in 1985(ibid). The 1967 breakdown of land uses and assumed 1967 breakdown of land use and the assumed increases are listed below:

Table 2, Existing Land Use and Projected Land Use in Jerusalem

Land Use	Area in 1967 (Sq. km.)	Assumed increase by 1985 (Sq. km.)
Residential (net)	11.2	4
Commercial	0.8	1
Governmental	0.5	1
Public Utilities	1.5	0
Public Institutions	4.1	4
Industrial	0.7	1
Public Open Space	4	10
Cemeteries	0.8	1
Agricultural	8.1	-2
Roads (arterial & local)	4.8	6
Total	**36.5**	**26**

Source: (Sharon, 1973)

The plan indicated areas for renewal and reorganized the functional structure, balancing distribution of employment and residential population. The special character of Jerusalem was expressed by the growth of the area allocated to public uses (ibid).

The planned road network was modification of the existing road structure, allowing the efficient linking of the entire city by public transportation system and answering the needs arising from increasing motorization. It is designed for easy orientation and calls for the development of environmental units within it. (Sharon, 1973) tells us that the arterial road system composed of:

- A primary net, which is a continuation of the historic roads leading to the town. These roads, which historically converged on the Old City, were shifted to the brink of the central urban complexes, serving them tangentially.
- A secondary net within the city takes the form of an orthogonal grid, spaced according to the requirements of an efficient bus service. A proposed central boulevard connects the major foci of the city: the university on Mount Scopus, the Mount of Olives, the Old City, the central area, the government centre and Mount Herzi.

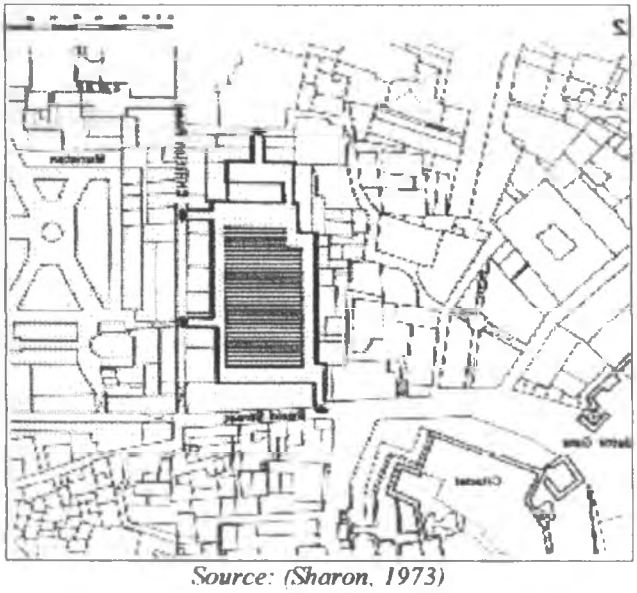
A set of recommendation forms a disciplinary framework, which was to maintain and enhance the cultural and visual image of the city. This framework is outline below.

- Preservation of sites having cultural or visual value listed in an inventory attached to the plan, with special emphasis on the historic nucleus.
- Continuation of the by-law requiring stone cladding for all buildings.
- Reintroduction of the traditional street as an organizing element of the city's texture.
- Strict control of building heights within the visual basin of the Old City.
- Proper treatment of the entrances to the city.
- Provision of a belt of open landscape separating the city from the metropolitan settlements, providing a visually clear defination of the city and an appropriate design of its verge.

- **Restoration of the Pool of Hezekiah, Jerusalem**

This pool has been in existence since the period of the Second Temple, when it was called the pool of the towers (the towers of Herod's Palace, the site of the present Citadel, stood nearby). In crusader times it was called the pool of the Baths, for its waters fed the ancient baths to the east. It was connected with the Mamilla pool (which is outside the walls) by a subterranean canal, which was blocked during the war independence. (Sharon, 1973) by the time of the proposed conservation action, the Pool of Hezekiah was surrounded by dwellings and almost inaccessible. It was dry, abandoned and neglected. It was therefore proposed to restore the pool and once again fill it with water; build a promenade around it, provide adequate access to it, develop a new commercial front in the existing buildings along the new promenade; and restore the Coptic Khan overlooking the pool (ibid).

Map 7, The Pool of Hezekiah



Source: (Sharon, 1973)

Lessons for Old Town of Mombasa

From the on going argument it can be seen that a lot can be borrowed from the Jerusalem Schemes and used in the context of the Old Town of Mombasa.

These include:

- Regulations on building heights
- Zoning Requirements and by-laws
- Regularisation of traffic
- Building Materials and technology guidelines
- Emphasis on nodes and Landmarks
- Economic rejuvenation.
- Enhancement of Local Colour.
- Creation of Buffer Zones
- Appropriate use of materials and technology

2.16.2 Case study 2: Conwy, Britain

Conwy is an ancient monument of national importance in Britain. It is a historic walled town in the North Wales coast in the Country of Gwynedd and a good example of small-scale heritage. Here like elsewhere conflicts exist between the need for social and economic progress and the conservation of historic buildings and street patterns, and it serves to highlight the planning problems and the constraints and opportunities for conservation policy and the practice that are met in planning for the future of this kind of town (Jones 1976).

The historic town is unique for the following reasons:

- It is a monument of national importance.
- It is sited on a key river crossing part in the North Wales and has major traffic problems.
- Being a 'lived town' it is also a major tourist attraction.
- Because of its geographical location and the presence of the city walls access to the to the walled town is difficult and expansion beyond the walls is complicated.

The borough of Conwy was founded in 1283 AD as part of Edward I's new town building programme in an attempt to settle the 'Welsh problem' and subjugate the principality of North Wales (Jones, 1976). It was built as a bastide town, which were common in the 13th Century, set up for defence purposes.

The new town of Conwy was located at the mouth of River Conwy so as to hold a strategic position in controlling the major routes into Snowdonia along the Conwy valley and along the coast of Anglesey (ibid).

- **The Old Town Plan**

The borough was planned as a complete unity. The present day streets preserve this almost intact as it was laid out in 1283. Minor infilling has since taken place in the street blocks In the 19th Century, two major alternations took place.

- For 1826, Telfords road pierced the northwest wall to enter what is now Lancaster Square.
- In 1948 the railway crossed the river in Robert Stephenson's tabular bridge.

- **Architectural Style of The Walled Town**

Jones (1976,) notes that the town displays an interesting vernacular style. Cement slurry and chipped stone rendering on stonework or brickwork are the commonest building materials. He further notes that window and doorways are picked out in smooth cement detailing and the facades are usually washed or painted, often with detailing in a contrasting colour.

The vernacular 'Welsh Stucco' construction is seen to dominate in the area of terraced cottage in the north west of the walled town and among the larger buildings along the principle streets as in Lancaster Square and Castle Street. Welsh slate is the main roofing material but a few buildings are tiled.

In general, the unique scale and detailing of its cottage housing gives Conwy a sense of visual unity and it is unfortunate, therefore, that poor examples have intruded and created a visual confusion.

Life in Conwy

The town's economy depended on three main sources of employment:

- **Fishing**

Jones (1967,) reports that the fishing fleet was small and about 85% of the catch were taken to Billingsgate market in London the remaining being sold locally. It had been difficult to make fishing a very large employer due to the physical difficulties of enlarging the market facilities.

- **Tourism**

Conwy was a natural centre for tourist's activities and tourism is a major support for the town's economy. The shop and restaurants receive a boost from tourist revenue in the summer. Some of the visitors came by coach but the majority by car. The bulk of Conwy's visitors who come for the day were attracted by its historic buildings, particularly the caste

and tour walls. Conwy also attracted visitors as a sailing centre and the demand for berths at Conwy was heavy and there had been a proposal for building of marinas (Jones, 1976).

- **Local Employment**

Local employment largely depended on tourism and therefore fluctuated, being lowest in winter and highest in summer. Several shops that sold Welsh Craft products did exist, however, the only substantial source of male employment near Conwy was in the factories at Llandudno Junction. Other employers in the area ware the aluminium works at Dolgarrog, the County and Borough Councils, the British Rail and the National Bus Company (ibid, 1976).

- **Social Life in Conwy**

A social survey that tried to understand the social bases of life in Conwy was conducted in 1970 (Jones, 1976). Its main aim was to discover the attitudes of residents of the walled town to its character, fabric and social relationships. The general picture which emerged was of a relatively, though not exclusively, elderly population. This simple population pattern of many residents being of local origin was found to be changing, as attracted by its pleasant environment, an increasing number of professional and retired people moved to Conwy particularly for its character and location. Other important sources of affection for Conwy were long acquaintances with the town and the ties of family and friendship.

Anxiety and resentment were expressed at the rate at which cottages fell vacant, were bought up and converted to holiday cottages. There was good reason for this anxiety. While permanent settlers from outside could have be an asset to the town, people who only use their Conwy house for a limited time in the summer were a liability. Cottages empty most of the time of the year provided little support for Conwy's traders and they gave the town an unlived in appearance and those living next door to an empty cottage suffered from coldness and dampness.

Conflicts of Interest in Conwy

Many people wanted tourism to develop further while others were inclined to restrict it. Some residents suggested a number of changes they would like to see on the town while others were anxious that it should remain as it was. A conservation policy that could satisfy most people had to be worked out. This would be one of controlled change, which would seek to preserve Conwy's good points while resolving some, if not all of its disadvantages.

Conservation Policy for Conwy

The whole of the walled town was declared a conservation area in 1968 (Jones, 1976). The castle and Town Walls, Plas Mawr and Aberconwy house are Ancient monuments. A score or more buildings (including quite ordinary cottages) are listed as being of special architectural or historic merit. Conwy was then facing the problems of a deteriorating physical fabric and increase on visual eye sours. The local environment was being threatened by a growing traffic problem. Enough attention was not also given to the social and economic needs of its residents.

Conwy was and still is a community, not just a collection of separate buildings. It is also an attractive example of a complete and unique walled town, or a convenient yachting centre. It is as an intricate network of family and social relationships. This sense of unity is most important to any debate about an appropriate conservation policy.

The conservation policy for Conwy envisaged the eventual removal of through traffic from within the town. Through traffic, with all its environmental consequences, was to be diverted from within the walled town, leaving the ways open for re-organisation of circulation and the development of a pedestrian system.

If a pedestrian system was developed in Conwy, Lancaster Square together with High Street, which contains Conwy's principal shops, could provide an admirable pedestrian precinct linking the commerce of the town with the quay, which is a focal point for both local people and visitors. As far as car parking goes Jones (1976) notes that it cannot be provided at the standards being adopted elsewhere (that is 1½ spaces per household by 1980

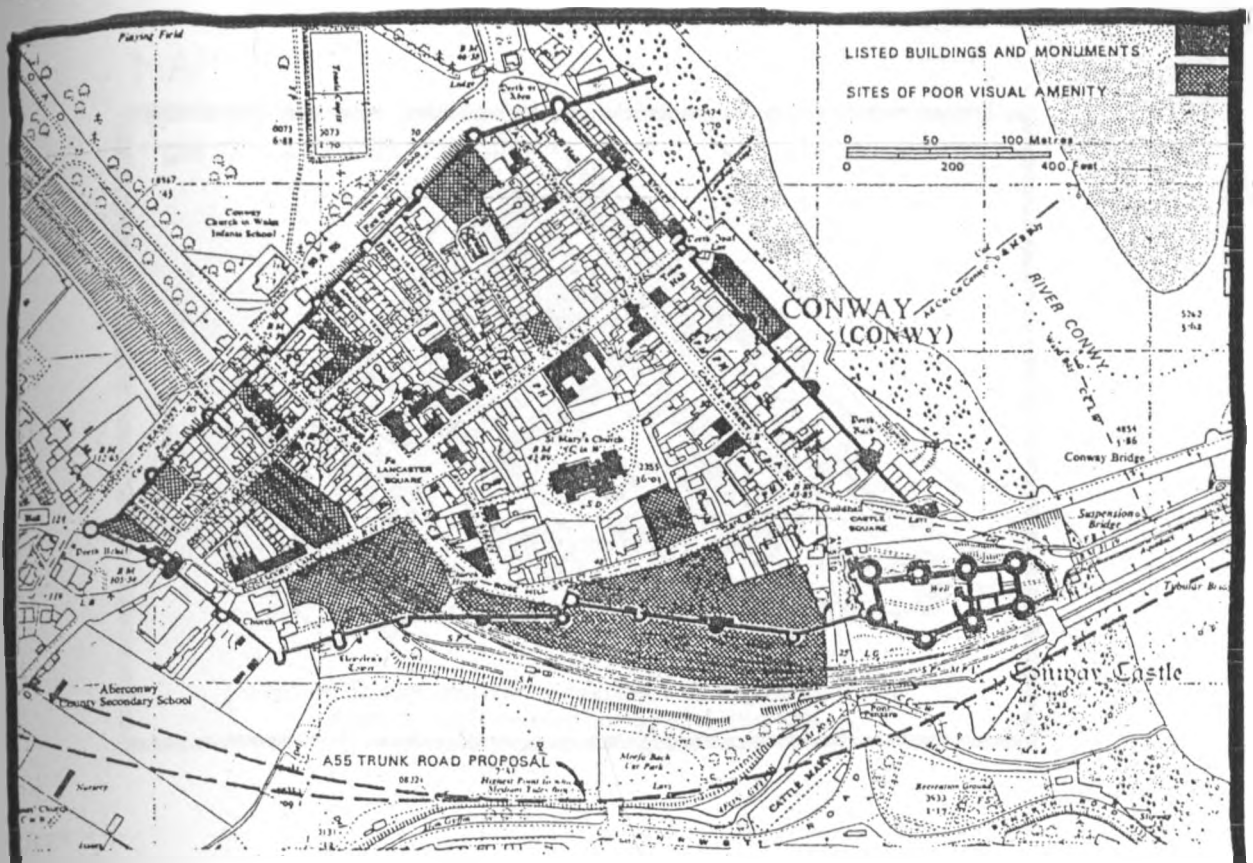
The local people were to accept a compromise, which may have been inconvenient but which could have real if indirect, benefits on the town's atmosphere and environment. The proposed pedestrian system would mentally have reduced the number of car parking spaces within walled town and would increase the pressure on the car park.

Service access was to allow penetration to a maximum of 30 metres from all dwellings (for refuse collection, etc) and had to permit occasional movements by fire engines, ambulances and other such emergency vehicles. The use of carefully sited, removable bollards was to give adequate of access to dwellings without allowing cross-town traffic to penetrate the residential part of the walled town.

Provision for some landscaping was to be included to reduce the usual length of streets and to define of points of activity and communal interest, such as Lancaster Square, High Street, the Churchyard and the Quay. New plantings or redesigned strict paving was to be concentrated in sheltered favoured points. This was deemed better visually and helps in maintenance and in the control of wilful damage. Landscape and environmental works were to be phased in with the house improvements programme and to design them in sympathy with the best elements of the existing fabric and townscape.

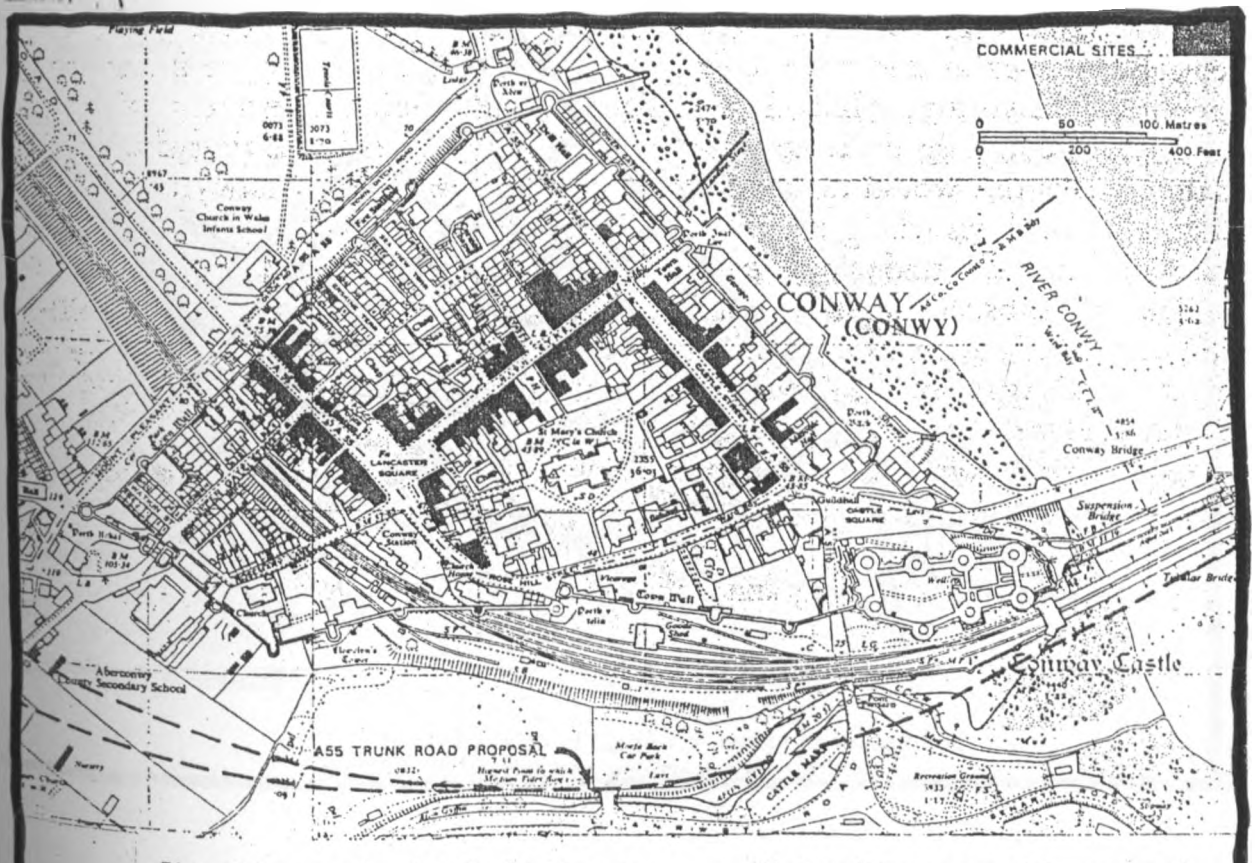
The urban scale, the sense of enclosure and visual unity of a street façade are all in delicate balance. While more intrusions by bad buildings form could be absorbed, Jones (1976) notes that a series of gaps and breaks cannot. To him, this also applies to undue variety in decoration and detailing, notably of shop fronts. It was also deemed essential that the existing building lines be maintained. Regimented uniformity was deemed unnecessary but rather an intelligent and sympathetic use of development control and building regulations. Jones (1976) further notes that the adoption from the outset of a sensitive approach to planning control will ensure the protection of the small-scale quality, which is Conwy's heritage.

MAP 8



Plan of Conwy, showing the location of the A55 trunk road proposal, sites of poor visual amenity and listed buildings (Crown copyright reserved)

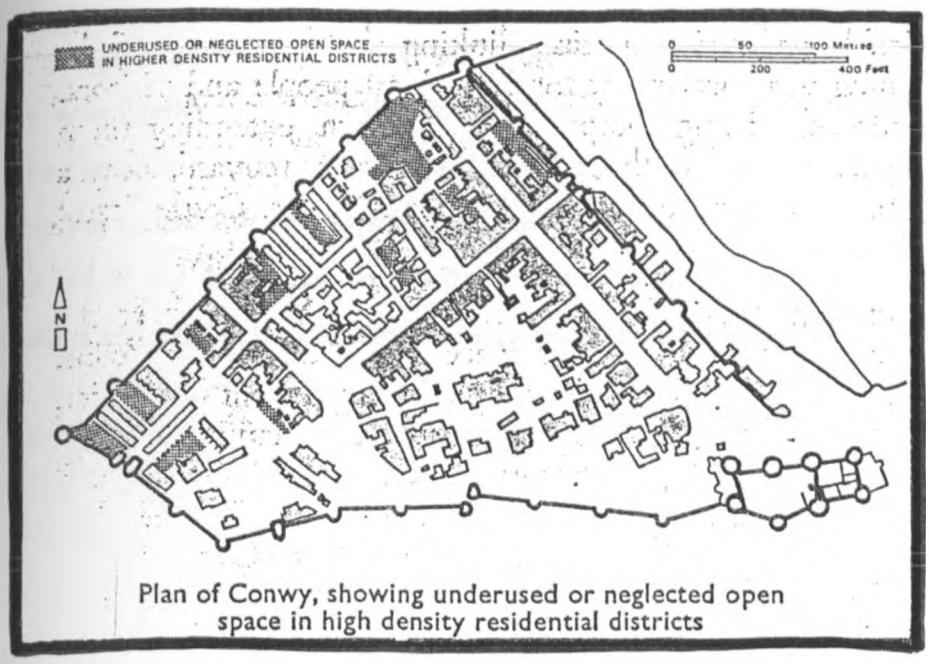
MAP 9



Plan of Conwy, showing the location of commercial sites (Crown copyright reserved)

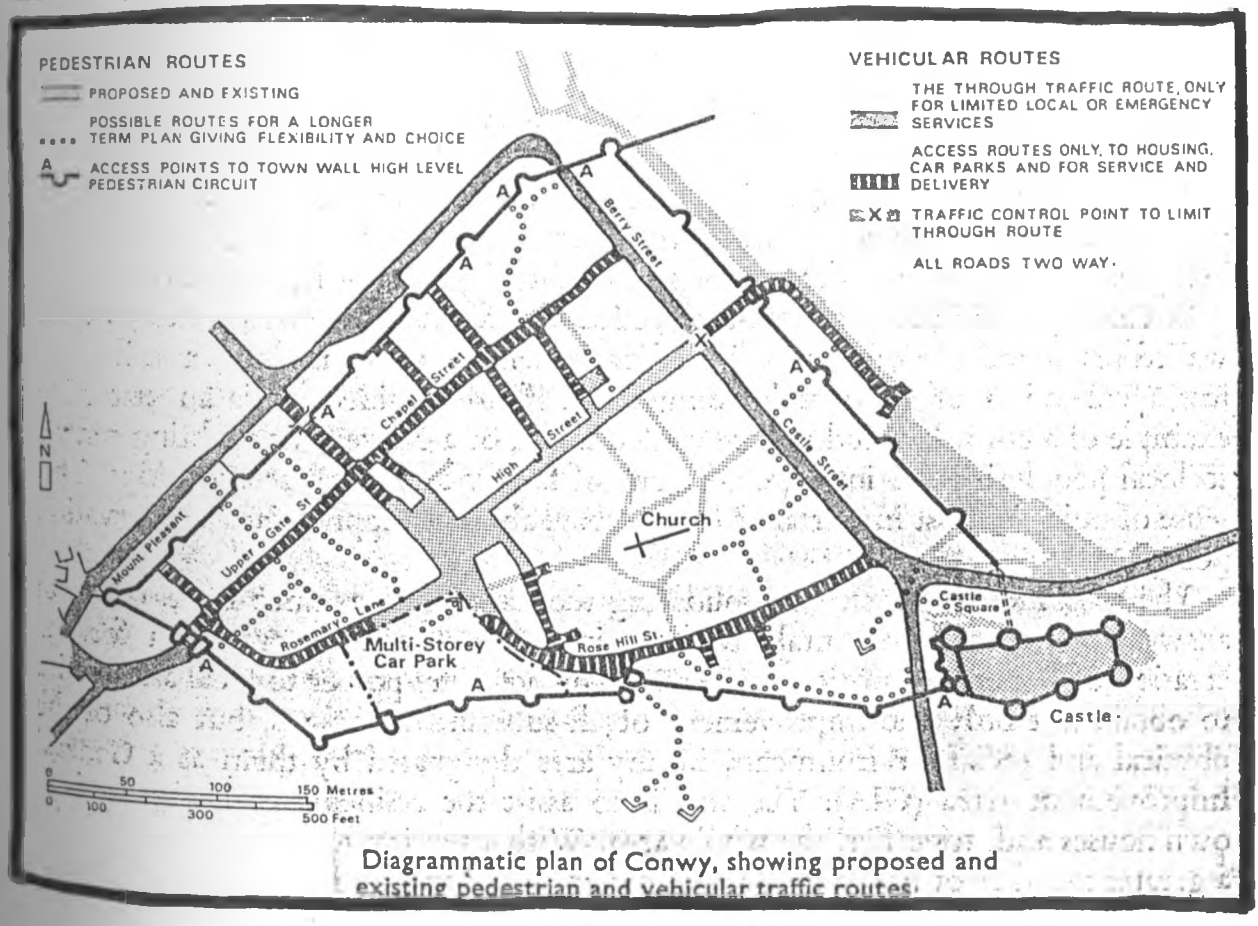
SOURCE: JONES, 1976

MAP 10



Plan of Conwy, showing underused or neglected open space in high density residential districts

MAP 11



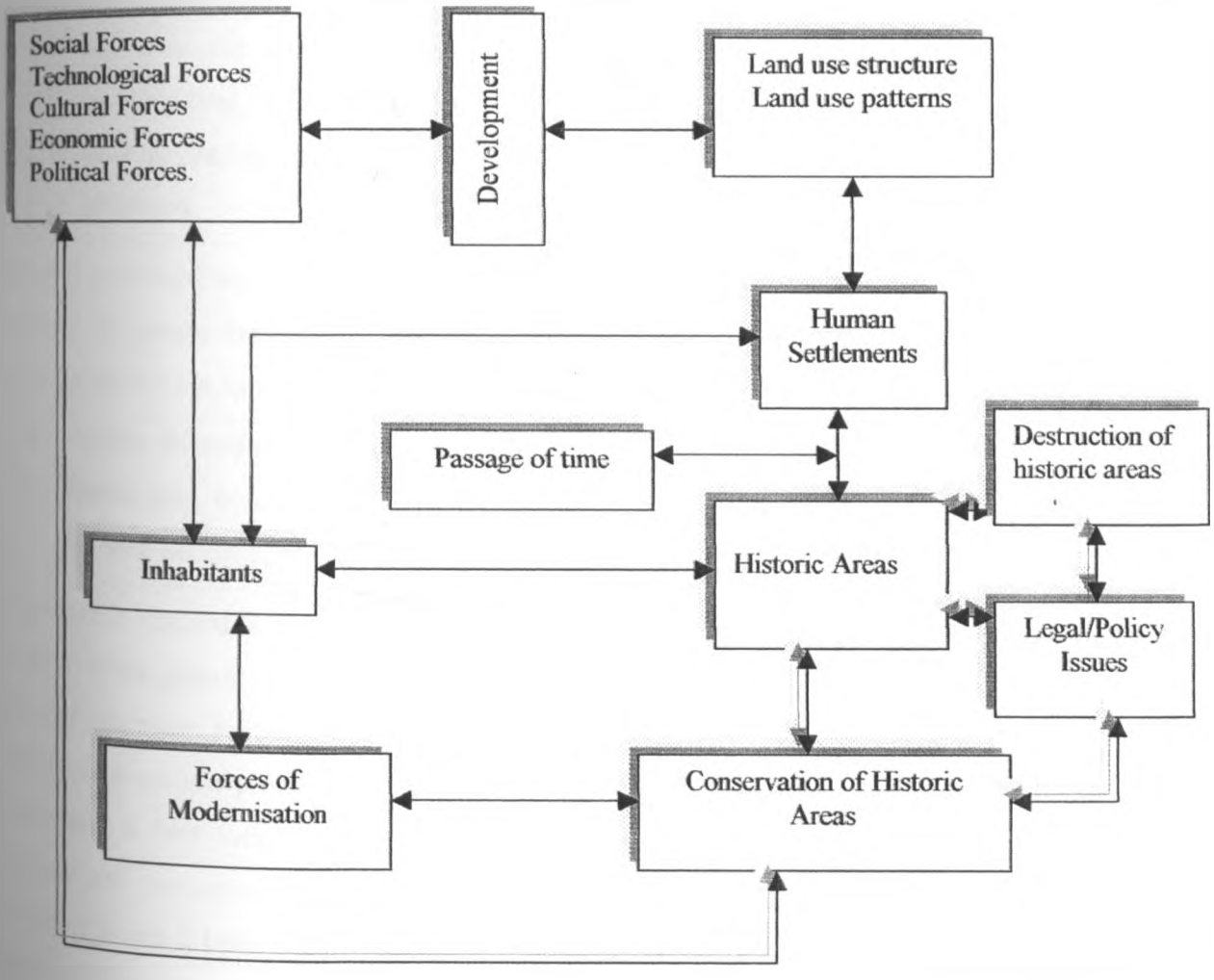
Diagrammatic plan of Conwy, showing proposed and existing pedestrian and vehicular traffic routes

Lessons for Old Town of Mombasa

The conversation policy outlined sets out to reconcile the growth of tourism and other pressures for change in a controlled way. It was a policy oriented towards the needs to the people who live in Conwy and it will depend for its success on their active participation. This active participation was hoped to make Conwy a lived in historic town and not a museum piece. The tourist was also expected to benefit for a town made more pleasant and convenient to live in and it will also be a better and more attractive place to visit. These lessons are salient and used in the conservation approach that is proposed for the Old Town of Mombasa

2.17 Theoretical Framework

The theoretical framework here therefore represents a unique descriptive framework. Although it as derived from existing critical commentary, its actual form bears little or no relation to any one source or even to combination of sources. Rather it is the result of an interactive process of design that involves several re-readings of the source materials, frequent re-evaluations, critical commentary from and a search for comprehensive clarity. Theories of perception in a townscape, cultural heritage ideas on conservation are therefore re-evaluated to arrive at a common concept that will take environmental sustainability in full consideration. The study therefore attempts to provide the rudiments for a framework by drawing these materials together that is pertinent to the issue at hand. This is deemed necessary because despite the fact that numerous studies have been done as noted elsewhere, the thorough analysis of their concepts have not be undertaken. Usually carried out in isolation, they remain of no practical value unless their application is in regard to one another.



Source: Author (2003)

The sets of relationships implied by the above theoretical framework can be summarised as follows:

- The social, technological, cultural, economic and political forces lead to development and this development is spatially evident in land use patterns and structure.
- These spatial patterns and structure are evidences of human settlements.
- With the passage of time, in a continuum, the settlements gain a character and an identity of their own which is distinct from others.
- The government, or state, may declare such a settlement historic due to its rich heritage and therefore becomes a historic area.
- Such historic areas are living tissues with inhabitants and it is therefore necessary to conserve them within an existing legal framework.
- The historic areas are not immune to the forces of modernisation in their greater regions and these forces will act, in most cases to render them obsolete.
- As such the conservation of historic areas must be within relevant social, technological, cultural, economic and political forces that are sympathetic to the existing historic setting so that discordant land use patterns and structure are not produced.

What is presented here shows that a historic area is like a commons and operates within the context of systems theory. It is a commons because it belongs to all of us and therefore we must be careful not to abuse the commons by:

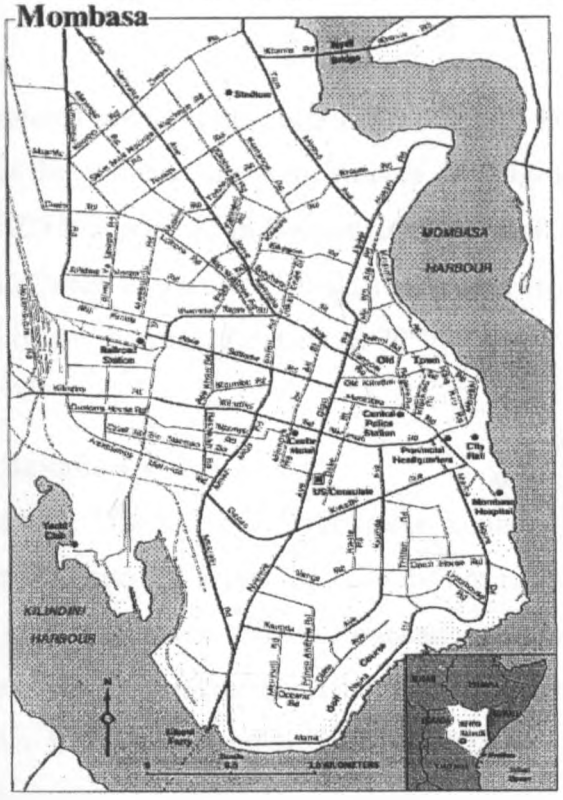
- Adding discordant development into it.
- Subtracting from the historical relics through wanton demolitions of buildings not deemed economically viable.

Therefore a sustainable townscape, historic, as it may, be will have to operate within the context of the greater metropolis, as its subsystem. The process of transformation must be allowed otherwise becomes frozen in time space. Therefore the townscape is redefined in this thesis to mean a process and a product in continuum. This thesis therefore posits that a townscape is best viewed as an organism in the ecological sense and the evolutionally process and succession as known in ecosystems inevitably must apply. The argument therefore is that a balance between the need to conserve the diversity inherent in a historic neighbourhood must go had in had with the capacity to adopt to change.

The idea of natural balance is derived from ecology and is concerned with preserving diversity and the capacity to adapt to change. Old buildings often provide a ladder of opportunity and a kind of balance of ecological niche in which the new enterprises so crucial to an areas, long term sustainability will make a start. Old neighbourhoods should therefore adapt to new uses so that pressing local concerns are taken care of. Conservation should therefore be encouraged so as to minimise wastage since old buildings represent past stored up energy in physical from. If they are left to deteriorate we are wasting our inheritance.

Chapter 3

Municipality of Mombasa and The Old Town



CHAPTER 3: MUNICIPALITY OF MOMBASA AND THE OLD TOWN

3.0 Introduction

This chapter commences by providing a background description of the municipality of Mombasa where the Old Town of Mombasa is located. This is in terms of its location, administrative boundaries and settlement patterns, topography and climate. The chapter then goes to describe Mombasa Island and finally the Old Town of Mombasa along the lines of the research objectives. *Mombasa Municipality shares the same boundary with the administrative district.*

3.1 Mombasa District

Mombasa District is situated in the south-eastern part of Coast Province. It is the smallest of the seven districts in the province, covering an area of 229.6 km^2 excluding 65 km^2 of water mass (Kenya, 2002) It borders Kilifi District to the north, Kwale District to the south and west and the Indian Ocean to the east. The district lies between latitudes 3° 80' and 4° 10' south of the Equator and between Longitudes 39° 60' and 39° 80' east of Greenwich Meridian.

3.1.1 Administrative Boundaries

Administratively, Mombasa District shares the same boundaries with the only Local Authority, the Municipal Council of Mombasa. The district is divided into four divisions, which are sub-divided into 18 locations and 30 sub-locations as shown in Table below. The District has four (4) constituencies and twenty-five (25) municipal wards.

Table 3, Administrative Units and Municipal Electoral Wards by Division

Division	Area in (sq. km.)	Locations	Sub locations	Municipal Wards
Island	14.1	7	7	12
Changamwe	54.5	5	7	6
Likoni	51.3	3	6	3
Kisauni	109.7	3	10	4
Total	**229.6**	**18**	**30**	**25**

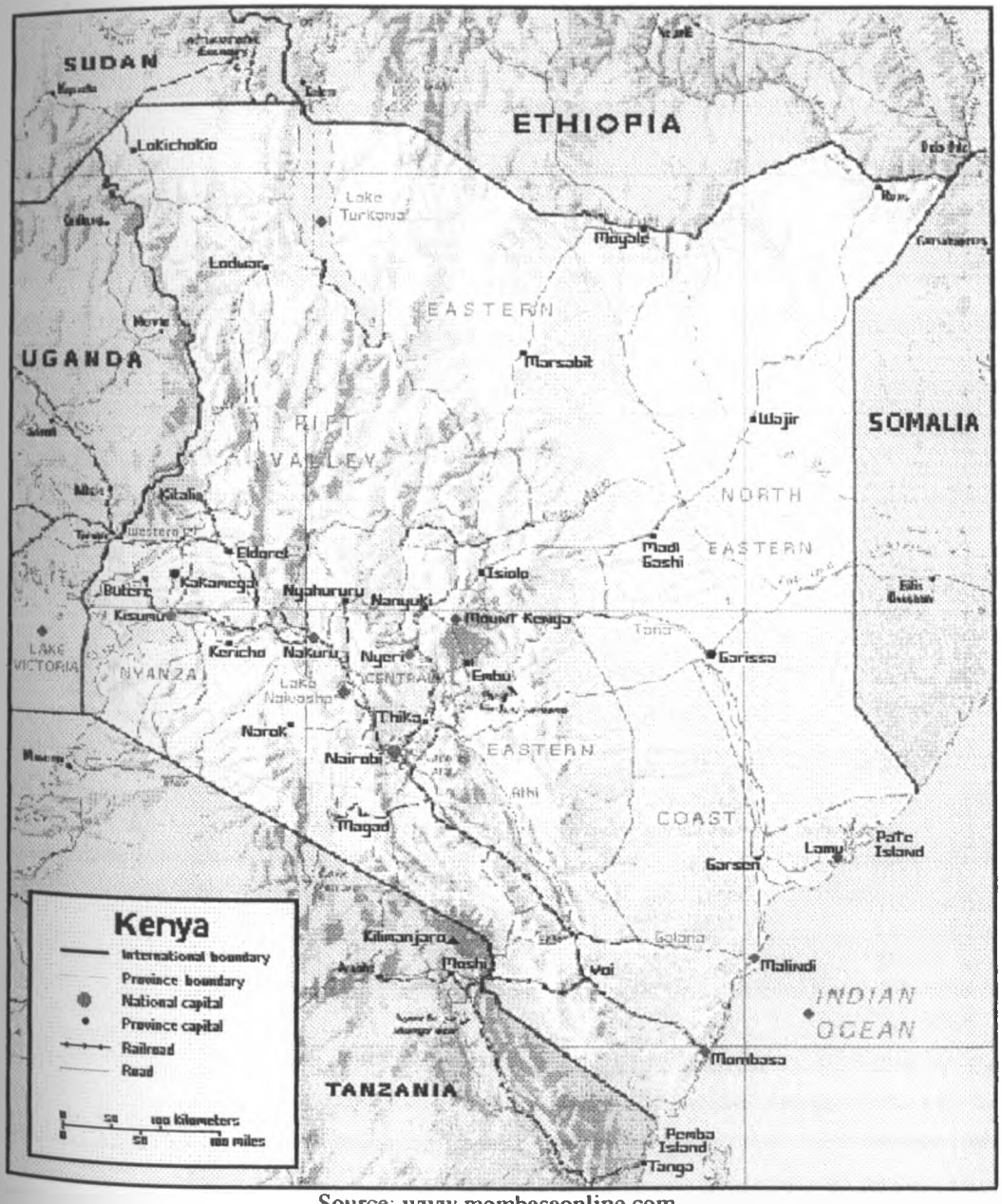
Source: Kenya, 2002

Although administrative divisions and constituencies share similar names (with the exception of Island Division and Mvita constituency), they do not the share same boundaries. The shifting of Tudor, Ganjoni and Old Town locations, to Changamwe, Likoni and Kisauni constituencies respectively has resulted in the three constituencies being larger in area than their respective divisions, but has made Mvita constituency to be smaller in area than Island Division (ibid).

Plate 4, Regional Setting of the Study Area

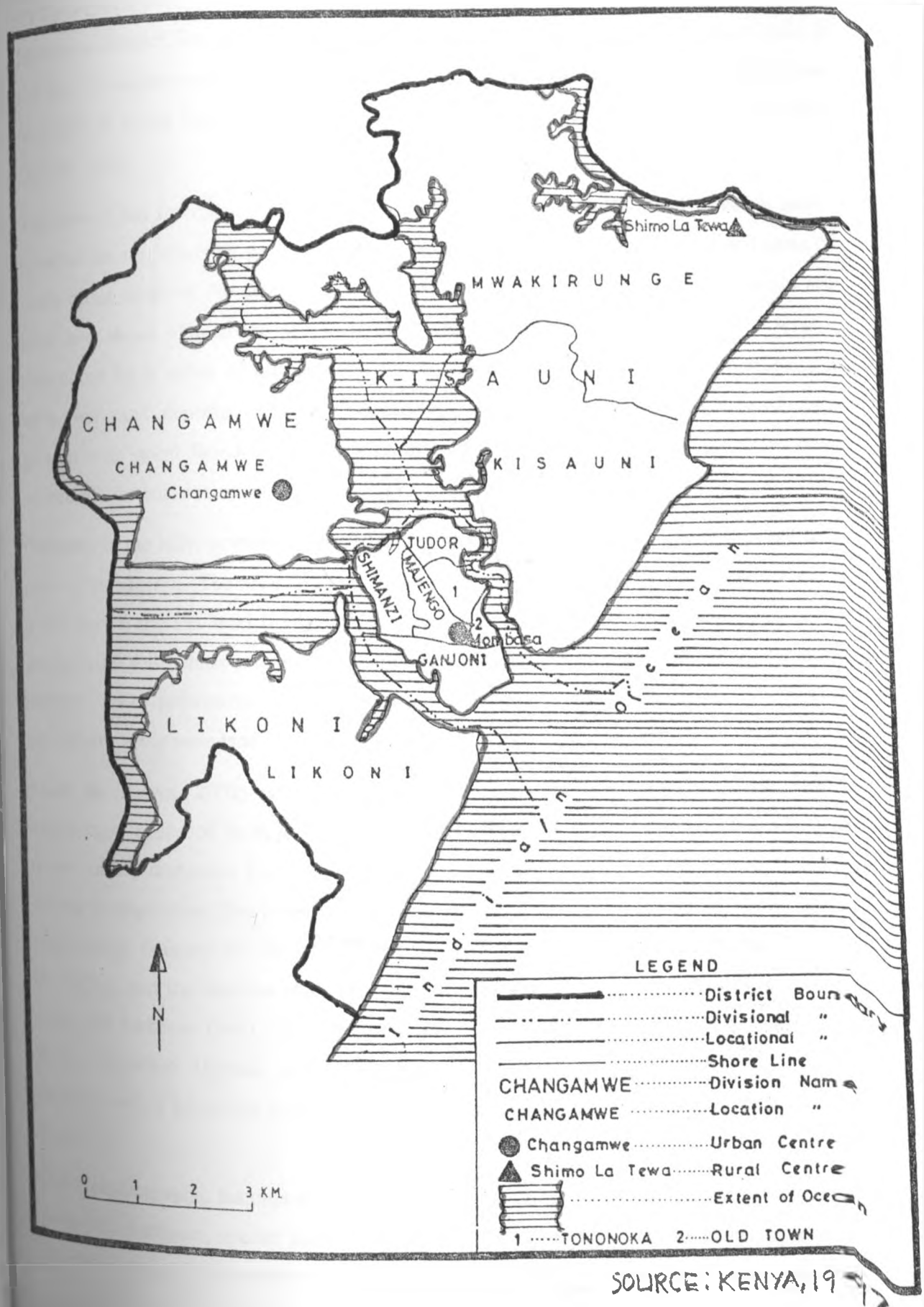
Kenya in Africa

Kenya in East Africa



Source: www.mombasaonline.com

MAP 12, MUNICIPAL COUNCIL OF MOMBASA
(NOTE: THE MUNICIPALITY SHARES THE SAME BOUNDARY AS THE DISTRICT.)



SOURCE: KENYA, 19

3.1.2 Physiographic and Natural Conditions

(i) Topography

Mombasa District lies within the coast lowland, which rises gradually from the sea level in the east to slightly over 76.2m above the sea level in the mainland west. The highest point is found at Nguu Tatu Hills on the mainland North that rises to 122m above sea level (Kenya, 2002).

The district has three distinct physiographic units. First is the coastal plain, which is found close to the sea, covering parts of south coast, the island, parts of Changamwe and parts of north coast areas of the district. The plain is between 4-6kms wide and lies between sea level and about 45m above sea level (ibid). The plain consists of extensive flat terrain dominated by a series of raised beach terraces underlain mainly by Coral limestone and back reef sand deposits. The coral limestone and sand deposits are well drained, firm ground with good foundation conditions with relatively good ground water yields and a source of construction materials.

Secondly is the hilly, severely dissected and eroded terrain that is found within the western part of the district. The area is underlain by shells and rises generally from about 45m to 122m above the sea level (ibid) The shell wither into generally poorly drained and easily eroded clay soil, which contain little or no ground water. This together with rugged terrain attracts little settlement and discourages development of infrastructure. However, agriculture is the main land use activity.

Third as (Kenya, 2002) reports is the Indian Ocean and the shoreline. Geologically, sedimentary rocks of Jurassic to recent age underline the district. During Pleistocene to recent times, numerous fluctuations in the sea level led to the evolution of the present coastal configuration. The lowering of the sea led to severe erosion and down cutting of the river valleys draining into the sea. Subsequent rise in sea level led to the submergence of the valleys and the creation of the Island of Mombasa surrounded by deep natural creeks, ports and harbours (ibid). These include Tudor Creek, Makupa Creek, Port Tudor, Port Reitz, Mombasa Harbour and Kilindini Harbour. Kilindini Harbour has led to the development of Mombasa as one of the most important modern ports on the East African Coast.

Other physiographic features include, the sea, the fringing coral reef and cliffs, the island, ports and harbours, creeks and tidal flats, sandy beaches, the coastal plain and a hilly severely dissected and eroded terrain. These features are as a result of interaction between

the existing geological conditions and natural processes such as, sea level changes, erosion and deposition. The features have greatly affected the development of the district in a number of ways:

- The sea supports maritime trade and fishing industries.
- The fringing coral reef and the creeks and tidal flats with extensive mangrove forests are breeding grounds for fish.
- The shore line with extensive sandy beaches form one of the main attractions for the development of Tourist industry in the district.
- The fringing coral reef in North Coast is an important marine conservation area hosting the Mombasa Marine National Park and Reserve.

(ii) Climate

- **Rainfall**

The district lies within the coastal strip in the hot tropical region where the weather is influenced by monsoon winds. The total annual rainfall varies between 1015-1270 mm, with a mean of 1040 mm (ibid). The rainfall pattern is characterized by two distinct long and short seasons corresponding to changes in the monsoon winds. The long rains occur in March-July and average and 655 mm with a peak of 330 mm in May and correspond to the South Easterly monsoons. The average total annual rainfall during the long rains is about 655 mm, with a reliability of 60 per cent (Kenya, 2002). The short rains start towards the end of October lasting until December, and correspond to the North Easterly monsoons, which are comparatively dry. The short rains average a peak 240 mm with about 100 mm in November (ibid).

- **Temperature**

The annual mean temperature is 26.4^{0}c with a minimum of 21^{0}c and a maximum is 32^{0}c. The hottest month is February with a maximum average of 32^{0}c while the lowest temperature is in July. Average humidity at noon is about 65 per cent (ibid).

3.1.3 Population and Settlement Patterns

- **Population Size**

The size of the population, its structure, growth and distribution in the district are important parameters in the analysis of development efforts and prospects. This section presents population characteristics of Mombasa District, which also doubles up as the Municipality of Mombasa.

The table below shows population distribution and settlement pattern in the district between the two census periods. The Island was the most populated division in 1979 followed by Kisauni and Changamwe but as revealed by the table, the pattern changed by 1999 with Kisauni being the most populous, followed by Changamwe and the Island taking the third position. However, the population density of the Island is still higher than that of other divisions as indicated in table.

Population distribution and settlement pattern in the district are influenced by infrastructure network such as roads, water, electricity, availability and accessibility of areas of gainful employment, available of cheap housing, security and land tenure systems

Table 4, Populations by Division and Density

Division	Population 1989	Population 1999	Pop. Density 1989	Pop. Density 1989
Island	127720	14634.4	6082	10379
Kisauni	153324	249861	1217	2278
Likoni	67240	94883	1051	1850
Changamwe	113469	173930	1598	3191

Source: Kenya, 2002

High population densities are found in Island Division and along the major highways such as Mombasa Lunga-Lunga Road in Likoni Division, Mombasa-Nairobi Road in Changamwe Division and Mombasa-Malindi road in Kisauni Division. These areas are well served by infrastructure services. Sparsely populated areas are found at the outskirts of the district. The areas include: Mwakirunge, Maunguja, Mwangala and Mkupe jetty area. These areas are least developed in terms of infrastructure such as road network, electricity and water supply (Kenya, 2002)..

- **Population Growth**

According to 1999 Population and Housing Census the population of Mombasa District was 665,018. The population growth rate is now 3.6 per cent. The district population is projected to increase to 796,571 and to 920,313 in the years 2004 and 2008 respectively.

The high increase in population implies that the district will require greater provision for services like water, education and health.

The table below shows the population projections for the years 2006 and 2008.

Table 5, Population Projections

	Year						
	1969	1979	1989	1999	2004	2006	2008
Population	247073	341148	461753	665018	796571	856209	920313

Source: Kenya, 2002; Author

3.1.4 Development Challenges in The Municipality of Mombasa

The major development challenges in the district are outlined below:

- **Provision of basic service**

In most cases supply of water and shelter have been inadequate, garbage not collected, and schools standards have been deteriorating. The population as well as the cost of basic needs and services has been on the increase while incomes have been stagnating. Provision of services has been poor due to inefficiency and poor local governance (Kenya, 2002). The challenge therefore is for the Municipal Council of Mombasa and other service providers to improve and provide service delivery at affordable cost by involving the stakeholders.

- **Landlessness**

Land issues in Mombasa District like in the whole of Coast Province are a thorny aspect, which has culminated into landlessness and administrative problems. Land issues have contributed to impoverishment of people in Kisauni, Likoni and Changamwe Divisions (Kenya, 2002). It is therefore a common thing to find indigenous families who do not know of any other homes elsewhere yet they are squatters in areas they presently occupy.

The problem of land administration and human settlement has been due to factors such as lack of updated Land Administration and Management tools. The Mombasa Town Planning Scheme (1926), Mombasa Master Plan (1962), Mombasa Draft Physical Development Plan (1971) and others have not been effective in adequately dealing with the ever-increasing complexities and problems of the town (ibid). With an increasing population, the challenge will therefore be to settle the squatters and allocate land for industrial development and provision of social services like schools health facilities and shelter.

- **Drug Trafficking and abuse**

Kenya, (2002) explains that due to the strategic location of Mombasa as seaport cases of drug abuse and trafficking has been on the increase. This is a major contributing factor to insecurity in the district. The infamous drug baron, Ibrahim Akasha hailed from this area. The youth, who are the most active part of the labour force, are also the most affected. HIV/AIDS has also been associated with drug abuse especially through the use of syringes. The challenge to the government is to stop drug trafficking and abuse in the municipality.

- **Transport**

The road system was designed a long time ago for small traffic to facilitate the movement of vehicles from the mainland to the island, mainly the central business district and the port being the primary destinations (Kenya, 2002). The roads have been in poor state for quite long because of inadequate maintenance and repairs. This has translated into large financial expenditures, which are beyond the Municipal Council and the Ministry of Public works financial resources. The roads also do not have sufficient car parks.

While most roads networks have not been expanded for quite long, the number of motor vehicles, is continually rising, particularly the public transport vehicles and especially the *matatus*. This has resulted in heavy congestion and heavy air pollution, which are posing great threat to economic productivity and human health thus affecting economic growth and contributing towards increasing poverty. Apart from high population growth, land development seems to be unplanned and uncoordinated. Therefore, roads cannot be expanded due to lack of vacant land and occupation of road reserves by structures (Kenya, 2002).

The mobility of urban residents to and from work is thus affected and this has a negative bearing on productivity. The challenge therefore is to improve existing transportation systems and manage urban growth more effectively.

3.1.5 Environmental Management and Conservation

Mombasa is faced with a number of challenging environmental issues, which have negative impact on the economic growth and poverty levels. The major environmental issues include: Resources consumption, land use, water use, energy use, solid waste, wastewater and air pollution.

- **Resource Consumption**

The District, with its large concentration of people and activities consume more resources than it can provide. The district is a net importer of food, fuel and water. The town and its dwellers consume large share of natural resources such as building material, food, fuel wood, mangrove, timber and charcoal (Kenya, 2002). This has resulted in intensive use of resources, which have negatively affected on the environment.

- **Land Use**

Rapid population growth on the sensitive ecosystem along the coastline leads to poor land use. Quarrying, construction along the beach, industrial pollution, inappropriate waste

management are a few of the environmental problems which have led to the degradation of the coastline and loss of important wildlife habitats e g. turtle nesting grounds along the beach, leading to soil and ground water pollution, a good case in point is Kibarani (ibid).

There are four hospitals on the island. There are also smaller clinics and dispensaries throughout the island. There are a number of schools on the island of which comprise primary schools and the rest secondary with various public gardens and playing fields that are located throughout the residential sections of the island.

Much of the west mainland is taken up by commercial and public activities, with an extensive industrial area in this part of the municipality, a large oil refinery, an international airport, housing estate, a hospital and 14 schools. The rest of the land is reserved for agricultural use.

The north mainland is given over a variety of uses residential, a cement company, quarries, beach hotels and restaurants, a prison, a berth for ships to load cement for export, and primary and secondary schools. The south mainland is given over to residential purposes. In addition there are schools, a Navy installation, a National Youth Service with the rest of the land given over to agriculture except for a small portion, which has tourist hotels and cottages (ibid).

- **Water and Sanitation**

The demand for water in the district exceed water supply and is fast growing. This coupled with poor management and pollution of water resources put pressure on both quality and quantities of water resources (ibid). Besides, ground water suffers from faster abstraction than natural replenishment resulting into salt-water intrusion and pollution. Lack of adequate sanitation services is one of the greatest threats to the residents of the district. Poor sanitation has created health and environmental hazards in several ways, including direct exposure of human waste near residential places e.g. in Kiembeni.

- **Air Pollution**

Kenya, 2002 reports that air pollution released from industrial, energy and transportation (vehicular) sources is one of the most noticeable environmental problems in the district. The air quality has been worsening overtime. Air pollution has also contributed to chronic and infectious respiratory diseases.

- **Energy Use**

Urbanization, pollution, industrialisation and other economic development activities have increased demand for fuel. Use of charcoal and fuel wood has contributed to local deforestation, land degradation and loss of biodiversity.

- **Solid Waste**

Solid waste has created environmental problems and a challenge in the district. For instance, in terms of Solid Waste Management, the Municipal Council of Mombasa collects only 30% of the total garbage generated (Kenya, 2002). The remaining is either burned or dumped in uncontrolled dumpsites or left in streets, where it creates health hazards and block drains contributing to urban floods. In addition, household and industrial wastes, including toxic ones are often handled together, leading to soil and ground water pollution when waste is dumped improperly e.g. in Kibarani.

In order to address the environmental issues, the following corrective measures should be put in place:

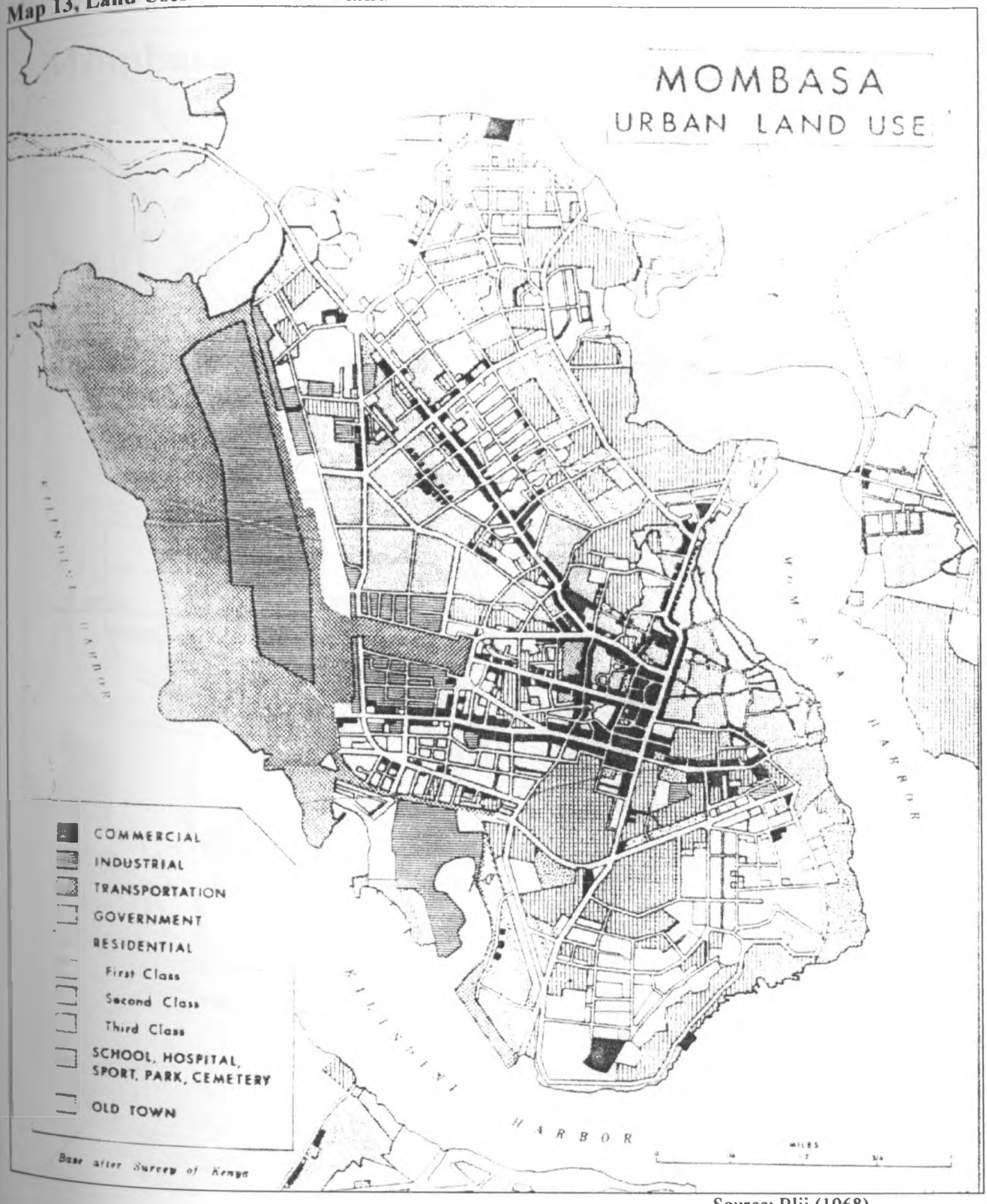
- Introduction of Bacterial Lagoon treatment plants to supplement the already existing two sewerage treatment plants,
- Relocation of Kibarani dumpsite to the other three remaining divisions.
- Introduction of integrated solid waste management system, which include waste reduction and recycling, water use; implement and
- Enforce Environment Management and Coordination Act.

3.2 Mombasa Island

3.2.1 Land Use in Mombasa Island

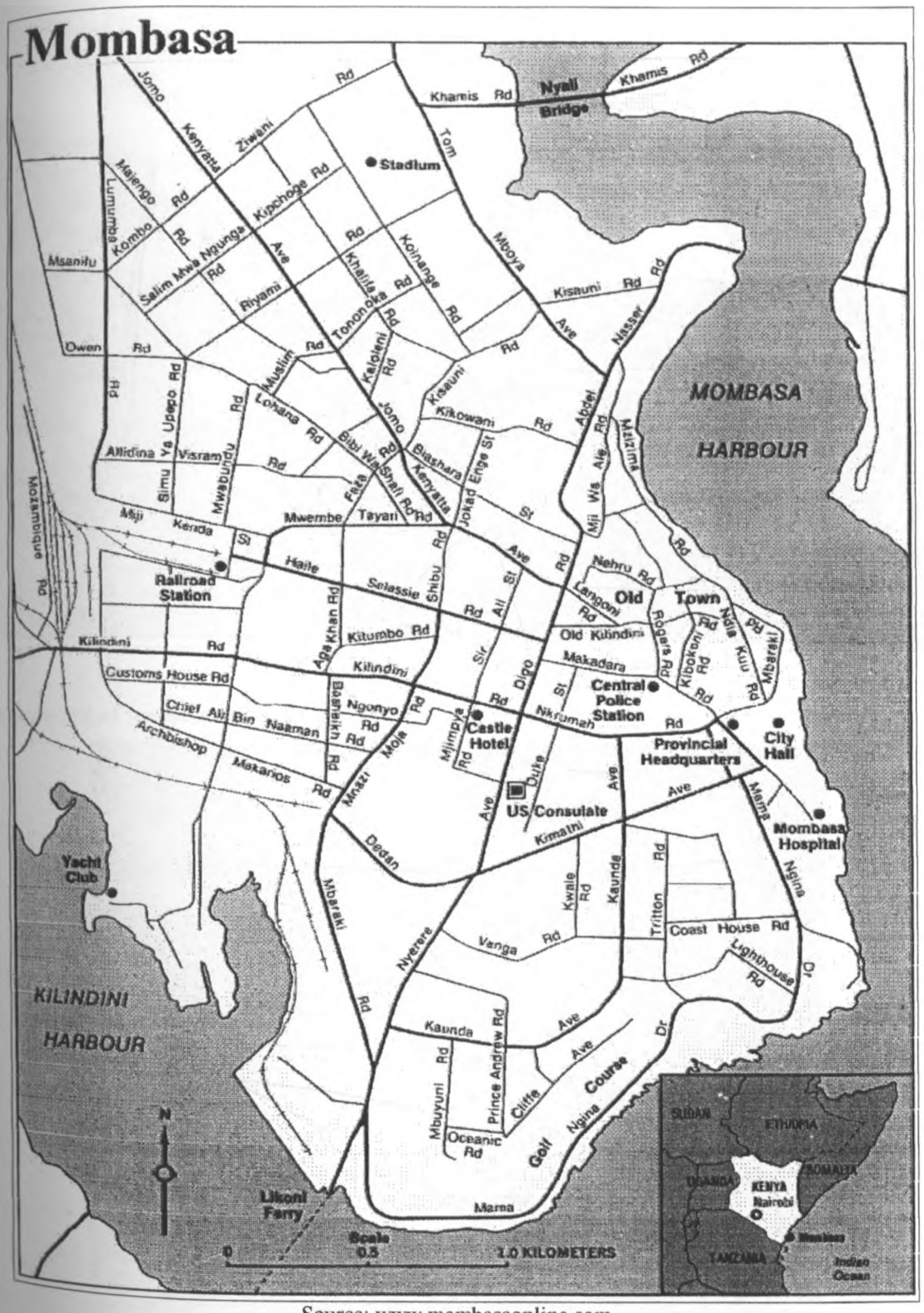
The island of Mombasa is the centre of the municipality. The largest portion of land is given over to mainly residential and commercial areas. Included in this category is the central business district. The northwest area of the island and the area south of Fort Jesus are strictly more residential. The western area is more heavily commercial in character. The largest land use is given over to a port facility at Kilindini, in addition to a fairly large industrial area (Letizia, 1986).

Map 13, Land Uses in Mombasa Island



Source: Blij (1968)

Map 14, Major Transportation Networks on the Island

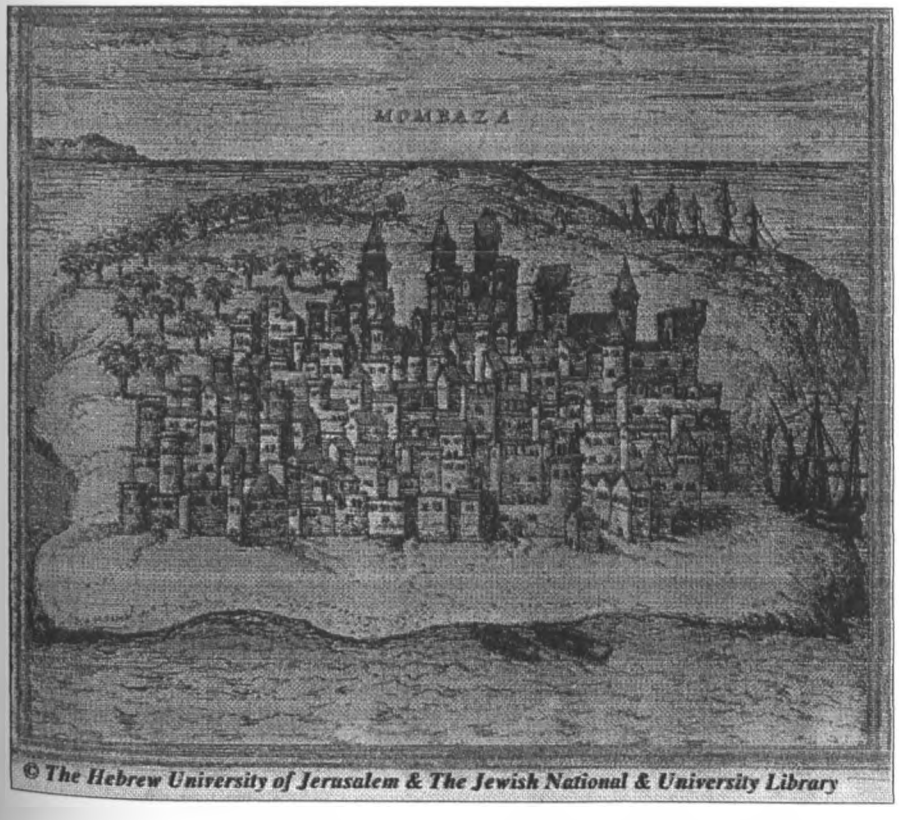


Source: www.mombasaonline.com

Plate 5, Mombasa-Moi Avenue

Source: http://www.kenya-ports.com/pic28.htm

A drawing of historical Mombasa



Source: http://historic-cities.huji.ac.il/kenya/mombasa/mombasa.html#brief_history

3.2.2 Transportation

The island is linked to the west mainland by two causeways, one associated with the port facilities, the other handling vehicular and rail traffic. Two bridges used to connect the island to the northern mainland (one an old pontoon bridge has since been demolished and the other is a modern four-lane one). To the south both vehicular and pedestrian traffic use a ferry

Mombasa is the eastern-most terminus to the Kenya Railways system. It plays a very important role in the transportation of goods to and from Kilindini Port. The railway links the municipality to Nairobi, the administrative capital of Kenya via a Voi town, with a branch that extends to Taveta town, which is located on the Kenya-Tanzania border. An international Airport on the western mainland serves Mombasa, handling both local and international air traffic.

The Port of Mombasa is a major reason behind the continued prosperity of the Municipality, the largest and most important facility is located at Kilindini, currently the largest East African port, serving the hinterland and handling millions of tones of cargo. The port is an important source of employment and is managed by the Kenya Ports Authority.

3.2.3 Economic Activities

Much of the industrial activity is based around the harbour facilities on the west mainland. Many are shipping and import/ export related companies with some devoted to marine engineering and fishing. Other industries include an oil refinery, a cement company, steel mill and various other light industries located mainly on the west mainland, with the largest industry being tourism with over 40 tour companies and travel agents.

In the recent years tourism has lost a leading role as a foreign exchange earner due to tribal clashes at the coast and travel advisories against Kenya; related due to the so-called terrorist threats. There are many hotels and restaurants in the municipality, catering for the tourists drawn to the beaches and attractions that it has to offer, although the occupancy is normally very low. Alongside these there are the natural attractions such as the large array of crocodiles and a Nature Trail, both located on the northern mainland of Mombasa.

3.3 Town Planning In Mombasa

The first comprehensive planning scheme for Mombasa was in 1926, enacted under the Town Planning Ordinance of 1919, covering only the island (specifically the Old Town). It

was felt then that the Old Town had special needs that could not be addressed within the document. The scheme set up the Mombasa Municipal Board, responsible for implementation (Letizia, 1986).

Principal issues dealt with included pooling and redistribution of land into regular shaped plots, establishment of road reserves, basic zoning rules which divided areas into industrial and non-industrial uses and a maximum density rule limiting the number of dwellings to 20 per each acre.

Areas outside the district were then controlled through the Public Health Ordinance of 1928, which allowed certain planning decisions to be made on health related grounds. With the upgrading of the board to a council in 1961, all of the areas within the district came under the authority of the municipality.

In 1962, a Master Plan suggested the upgrading of transportation and roads, improved housing and upgrading several areas of the island. However, this was designed as an advisory plan and had no statutory basis, in addition to some of the proposals which underestimated factors such as population increase, therefore limiting its usefulness to planning officers within the council.

A draft Physical Development Plan, prepared in 1971, provided a mandate for further studies to be carried out on issues affecting the Municipality. The Mombasa Transport Study and the Mombasa Pollution and Waste Disposal Study were completed in 1976. A joint project, the Mombasa Conservation Project, was carried out and completed in July 1990. The players were: the National Museums of Kenya, the Municipal Council of Mombasa, the United Nations Educational, Scientific, and Cultural Organisation. This plan was titled "A conservation Plan for the Old Town of Mombasa, Kenya and has been discussed elsewhere in this study.

3.4 The Old Town of Mombasa

3.4.1 The Historical Background of Mombasa

Mombasa has for centuries been one of the leading trading towns along the East African cost and the gateway to the interior of East Africa. The history of Mombasa goes back to the second century A.D. Nothing much, however, remains of this early and medieval history of the town. By end of the 15th century the town's history is quite well recorded and the major historical events and developments depended on the dominant or ruling group:

- **The Portuguese Period** (1498–1697) The most significant building of this period is Fort Jesus. Vasco da Gama set out in 1497 to explore the Indian ocean and dropped anchor in Mombasa on 7th April 1498 but sailed on to Malindi soon afterwards due to the unfriendly reception given by the people of Mombasa. This encounter was the start of a not very cordial relationship that was to last 200 .years (King, 1990). Fort Jesus construction begun in 1593 and was completed in 1597 and a small garrison stationed there. A small town called Gavana grew up beside the fort to cater to the traders and businessmen that were associated with Portuguese maritime trade. The town was walled to distinguish it from the Swahili town to the north (ibid). The inhabitants were not all Portuguese given the fact that both Mandhry and Basheikh Mosques were founded in the area at about the same time that Fort Jesus was built. This town has since disappeared save the fort and the two mosques. The conservation area's boundaries are assumed to follow the original walls of this town except for some extensions.

- **The Arab Period** (1697–1888) The Oman Arabs controlled the East African coast through locally based governors with the most important being the Mazrui family and the Sultans of Zanzibar. From the 1850s Mombasa under the Arabs became increasingly prosperous and began to take the appearance it has today. Between 1850 and 1897, the population grew from 10,000 to 25,000 inhabitants. (Kiamba, 1995) After 1850, Indian traders mainly from Zanzibar and also from India settled in Mombasa. Many if the houses in the Old Town were built by Indian merchants and are architecturally similar to those in Zanzibar and in parts of India (ibid).

- **The British Period (1888–1963)**. Although the coastal strip remained part of the Sultanate of Zanzibar, the British governed it until 1963, when it became part of Kenya as it is today. During the British colonial in rule East Africa, Mombasa became the major port of entry into the region for settlement and trade. Mombasa was the colonial capital of Kenya until 1906, when colonial administration was moved to the new and more central town of Nairobi (ibid).The Old Town of Mombasa was the starting point of most activities of the Europeans as the new dominant settlers in East Africa. From 1900, the British Administration transferred its headquarters from Fort Jesus to new and more spacious built quarters built around Treasury Square and set up government residences along the sea front

- **Mombasa (1963-to-date)** – Mombasa remains the major port of the East African coast and the second largest town in Kenya with a total population of over 1.2 million. The main port and commercial activities have shifted away from the Old Town. Largely passed over by modern physical development, the Old Town has retained a physical character of the above history of Mombasa.

3.4.2 The Mombasa Old Town Conservation Project

Kiamba (1995) quotes Nuova (1990,) as capturing the conservation efforts as follows:

> *"Mombasa has for centuries been the gateway to the interior of East Africa... The inhabitants of the Old Town are a richly diverse group of communities who have lived here side by side for hundreds of years: Swahilis, Omanis, Hadramins, Bajunis, Athna Asheries, Bohoras, Miji Kendas etc. Their various social patterns, religions, economic activities and building traditions have created a distinct character and culture, which together define the Old Town of Mombasa.*
>
> *The most visible aspect of unique community of Mombasa is a collection of historical buildings dating from the early part of the 19th century and the early part of this century (last century i.e. 20th century) which combine African, Arab, Indian, and European influences. Many of the buildings still have beautifully carved doors as well as elegantly styled balconies attached to the turn-of–the century facades. In recent years, however, there has been a marked deterioration of the Old Town's buildings and streets. Their worsening conditions together with unchecked development of new buildings are threatening to destroy the special character of the historical core of Kenya's second city".*

The above threats called for a need for conservation and this is put tacitly in the Conservation Plan for the Old Town of Mombasa, Kenya as follows: -

> *"Because of the large amount of unplanned development and rapid growth, coupled with the continued deterioration of the infrastructure and building stock, the Conservation Areas has reached a critical point in its history. If conservation measures are not taken in the near future, this important portion of Mombasa will disappear in a few years, and is it place will grow an area devoid of the cultural heritage of its population (King & Procesi 1990).*

This is important today as it was then because despite the past efforts, the townscape is still deteriorating. In arguing for the conservation of this historical town, the Plan saw the Old Town as:

" a microcosm which still retains much of the historical and cultural context of the century town. The small narrows streets and alleyways ... an area in which tradition, and a strong sense of neighbourhood and religion are still important parts of the lives of the residents" (Procesi, 1990).

The Old Town takes up an area of approximately 72 hectares and it bounded on the east by the Mombasa channel, the south by Nkurumah road and Makandara road, and the west by Digo road and Abdul Nasser road, which eventually converges with the seafront at Allidina Visram High School.

The Old Town has three semi-district areas within its boundaries: the first include the area north of the Gavana and Biashara street; the second incorporates the area bound by Samburu road, Makandara road, Digo and Biashara street; and the third roughly correspond to the old walled Portuguese Gavana which become the centre of commerce during the 18th and 19th centuries.

The first area is characterized mostly by Swahili style housing development. The second area, which borders Digo road (the newest of the three) has two types of building: the majority are located along the street fronts and have retained shops and their lower floor and residential spaces on the upper floor and the street turned to be very busy with much commercial and vehicular activity; the second type are the Swahili style houses constructed as infill in the neighbourhoods surrounded by the street front buildings.

3.5 The Conservation Area

The last of the Old Town's three areas is the subject of the Conservation Project. This area has traditionally been the heart of the Old Town and contains many architecturally and culturally significant buildings and spaces. It sits at the Southeast corner of the Old Town and measures approximately 31 hectares in size. It is the area that corresponds to the old walled town built by the Portuguese in the late 16th century. The Portuguese wall is thought to have run along Nkurumah and Madaraka Roads to the south, Samburu Road to the west and Wachangamwe Street (formerly called Wall Street) and Kitui Road to the North. To form the Conservation Area, a small section was added to the north of this border in order to include Piggot Place, and to the south, Treasury Square and Fort Jesus were added.

Map 15, The Mombasa Old Town Conservation Area

GAZETTE NOTICE No. 1779

THE ANTIQUITIES AND MONUMENTS ACT

(*Cap.* 215)

CONFIRMATION

IN EXERCISE of the powers conferred by part II, subsection 4 (3) of the Antiquities and Monuments Act, the Minister for Home Affairs and National Heritage, confirms Gazette Notice No. 2092 of 11th May, 1990, which declared the area of land, the boundary of which is specified in the schedule hereto, to be monuments within the meaning of the aforesaid Act.

SCHEDULE

Name	*Locality*
Historic Old Town	Mombasa Town

All that area of land measuring approximately 13.0 hectares, known as the Old Town including that part of the town known as Mji wa Kale, in Mombasa Town, Mombasa District, Coast Province, the boundaries of which are more particularly delineated red on the boundary plan No. 537/6, which is signed, sealed with the seal of the Survey of Kenya, and deposited at the Survey Records Office, Survey of Kenya, Nairobi, and a copy of which may be inspected at the office of the District Commissioner, Mombasa, Coast Province.

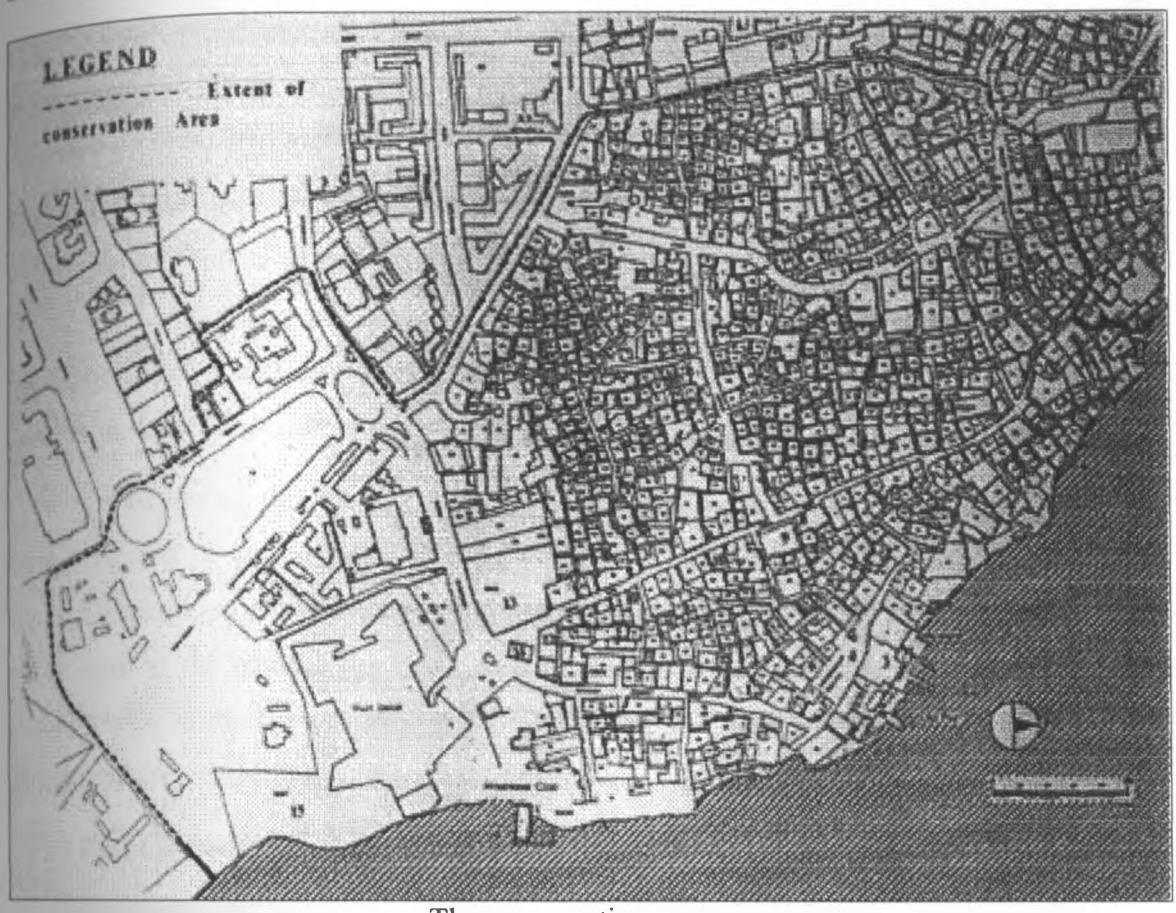
Dated the 1st February, 1991.

D. N. KUGURU,
Minister for Home Affairs and National Heritage.

ADMINISTRATIVE SECTIONS OF THE CONSERVATION AREA

Source: Letizia (1986)

Plate 6, Old Town Conservation Area and Views



The conservation area

Views of the old town from the sea (source: http:archnet.org/library/)

3.5.1 Choice of The Conservation area

The choice of this particular area was made for a variety of reasons (Procesi, 1990). Historically it was the centre of activity for Mombasa between the 16th and 20th centuries. As Explained by Kiamba (1995), successive rulers including the Portuguese, the Mazrui, the al-Bu-Saidi, and finally the British all centred themselves in this section of the Old Town because of its proximity to both the fort and the excellent harbour. Most of the prominent businessmen and civic leaders of Mombasa have also lived in this area, resulting in the best houses and shops being constructed here. Currently it has many of the oldest as well as most architecturally significant buildings and spaces that remain in the Old Town.

The streetscape of this area is largely lined on both sides with two and three storey buildings most of which abut each other and form a solid wall which hides the existence of the neighbourhoods behind them. Entrance to these neighbourhoods from the main streets is by way of the narrow alleyways between some of the buildings. There are four main public places in the Conservation Area: The Treasury Square, Government Square, Piggot Place, and the waterfront.

3.5.2 Past Conservation Efforts

In 1981, the NMK sponsored a pilot study for the conservation of the Old Town of Mombasa (ibid). Four years later, with funding by UNDP and technical assistance provided by UNESCO, the NMK, with the involvement, albeit minimal, of the Municipal Council of Mombasa (because of its responsibility for town planning of Mombasa), initiated a conservation planning study (the Mombasa Old Town Planning Project). This study culminated in 1990 with the Conservation Plan for the Old Town of Mombasa, Kenya. The results of this study, like in Lamu, led to the gazettement, in April 1990, of the "Historic Old Town"

Kiamba further notes that the Conservation Plan was to establish guidelines for and controls on future development, which will encourage growth while preserving the natural environment, important architectural features, and the historical character of the town, which as King and Procesi (1990) had argued "is, first and foremost, a living and growing community". Specifically, the Conservation Plan's objectives are:

- To determine permitted uses of land and buildings which will be compatible with the special character of the Old Town;

- To indicate buildings, architectural features, and other streetscape elements in the Old Town subject to protective measures;
- To regulate with a set of local by-laws building activity in order to encourage orderly development and structurally sound development and limit changes that are unsympathetic to the character of the Old Town;
- To provide the planning framework for more detailed schemes to improve the infrastructure and public spaces in the Old Town

The components of the Conservation Plan constituted the Building Regulations, Plans, a Land Use Map, a Development Plan, and a Traffic and Parking Map for the conservation area, along with a Technical Report. The "Conservation Plan" was in effect a "Part Development Plan" for the Historic Old Town of Mombasa. This is well in accordance with the then Land Planning Act. The Conservation Plan was prepared in compliance with The Antiquities and Monuments Act, Section 4(1)(a) (ibid).

Kiamba (1990) summarises the plan as including policies on land use and a development plan, which specified the various types of growth, and changes that are appropriate for the historical character of the Conservation Area. The policies on land use involved in a codification of the traditional land use pattern to protect it from encroachment by changing land values and other pressures. In order to preserve the currently established patterns, land use and subsequent development was categorized into zones. The development plan made specific proposals governing the development of the buildings and open spaces in the Conservation Area. A strategy was organized by which effective conservation measures can be implemented for the preservation of the townscape and significant elements within that townscape. The plan also recommended the upgrading of various public spaces in the area. In addition, policies aimed at helping to relieve the traffic and parking problems, and suggestions for the improvement of the infrastructure and tourism were included.

Major sets of activities recommended for the improvement of tourism were described as: " involving the creation of more attractions which will draw a wider variety of people to the Conservation Area... and to carry out needed improvements to the tourist infrastructure...." Suggestions on improving public areas, improvements to existing attraction areas, better identification and publicity of these areas, development of tourist-oriented accommodation in the Old Town, and improvement of evening and recreation activities were also made (ibid).

According to the Building Regulations, within the designated Conservation Area, the National Museum of Kenya (NMK) has the responsibility for overseeing the Municipal Planning Office in technical matters relating to the Plan. In this regard, the NMK acts as the "authority" in accordance with both the Antiquities and Monuments Act and the National Museums Act (ibid).

The National Museums of Kenya established a Conservation Office in the Old Town of Mombasa Conservation Area in 1990. Building applications for repairs, alterations and additions to listed buildings and protected streetscape elements and new developments on unimproved land must be submitted to the Municipal Planning Officer for approval. The Municipal Planning Office was to provide technical advice to people undertaking approved repairs alterations and additions.

3.5.3 Failures of Past Conservation Efforts

Past conservation efforts, laudable as they are, have failed to provide a sustainable framework for the conservation of the Old Town of Mombasa. A walk through the Old Town will reveal that ad hoc planning is the order of the day. Unsympathetic alterations to the built fabric are widespread and many new developments do not respect the old. This is because the set guidelines and regulations are not flexible enough to be applied to the various situations that arise in this historic place.

Furthermore there is lack of a comprehensive custodial agency to deal with development matters in the Old Town of Mombasa. A weak philosophical backbone to the conservation approach adopted by the National Museums of Kenya has rendered the historic town a museum piece in itself and is thus not able to pay for its own conservation. It is necessary that the planning framework adopted be from the people themselves as this will necessarily make any conservation efforts welcome. It is the position taken by this thesis that user attitudes should be used as a guide to planning a good habitat. Armchair planning without seeking the opinions of the ultimate user towards their own conservation and preservation will render such efforts nugatory.

The quality of the environment in the Old Town of Mombasa has developed over time and any planning efforts should not freeze the passage of time, as is currently the practice. Therefore conservation efforts should be able to accommodate contemporary needs yet retain the past for the sake of future generations. It is therefore imperative that a

sustainable planning framework is necessary which will ensure that the historic area pays for its own conservation.

Past conservation efforts also failed to isolate the various forces that have lead to the development of the historic town and use them as a starting point for the conservation efforts. They fail to address the historic setting as a living tissue with people who have to fulfil certain functional needs as well as aesthetic needs. For this reason, the Old Town of Mombasa as has been pointed out elsewhere has been rendered a museum piece and the people therefore do not understand why it should be conserved, as there are no direct economic gains to them.

Kiamba (1990) summarises the shortcoming of the institutional setting thus:

> Given that, under the major planning legislations, i.e., the Local Government Act, the Land Planning Act and the Physical Planning Act, the Municipality ought to be the planning and land development control authority, it is possible that conflicts could arise as to the "real" planning and development control authority. Indeed neither the Antiquities and Monuments Act nor the National Museums Act mention or refer to any of these other planning and control legislation; yet they presuppose they are the over-seeing authority even in the technical matters.

Within the Municipality of Mombasa, the Old Town is a microcosm, in which still remains much of the historical and cultural context of the pre-twentieth century town. The small narrow street and alleyways with their *bui-bui* clad women, *hamali* cart operators, roving coffee sellers and mosques make up an area in which tradition and a strong sense of neighbourhood and religion are still an important part of the residents lives (Letizia, 1986).

3.5.4 Population

Table 6, Population Data for Old Town of Mombasa, 1999

	Population Data for Old Town of Mombasa, 1999					
	Male	**Female**	**Total**	**Households**	**Area in Sq. Km**	**Density**
Old Town	11099	10417	21516	3600	0.8	26895
Mji Wa Kale	*5869*	*5518*	*11387*	*1736*	*0.4*	*28468*
Makadara Ward	5230	4899	10129	1864	0.4	25323

Source: Kenya, 2001

The population of the conservation area is currently approximately 11400 people. For all households the average number of residents is 6.6 with the population density being 28468 people per square kilometre.

3.5.5 Commerce and Tourism

Of business premises on the area, many fall under the service related category including auto repair, video library, travel agents and barbers. There are also groceries or other food related facilities, storage and warehousing, others are retail and wholesale shops. Curio shops and other commercial enterprises are also found in the area.

Most of the shops are located on rental premises and tend mostly to be operated by families.

The main tourist attraction in this area is Fort Jesus. Tourist visits to the area are brief and uneconomical with the exception to the many curio shops and kiosks in the environs, which do not do much to benefit the people of Old Town. Part of the situation is inherent in the type of tourism that Mombasa attracts, with many tourists attracted, not particularly interested in cultural benefits and attractions of the town but in the beaches. Possible attractions are not presented in a way that is attractive to tourists and there are no signs or information marking other possible places of interest. Tourist quality restaurants, cafes, small hotels, and guesthouses do not exist to draw people into longer visits. Another serious problem facing tourism in the area is the condition of the streets and alleyways, which are filthy and generally in bad shape.

3.6 Development and Townscape

3.6.1 The Conservation Area

The Conservation Area sits at the south-eastern corner of Old Town and measures approximately 31 hectares in size. The area roughly corresponds the old walled town built by the Portuguese in the late 16th Century. This walled town was known as *Gavana.* This wall is thought to have run along, Nkrumah and Makadara Roads to the South, Samburu road to the west and its north border, along Wachangamwe road and Kitui Road (Procesi, 1990). To form the conservation area, a small section was added to the north of this border in order to include Piggot Place, and to the south, the Treasury Square and Fort Jesus were added.

The choice of the particular area was made for a variety of reasons. Historically it was the centre of activity for Mombasa from the late 16th to the early 20th centuries. Successive rulers including the Portuguese, the Mazrui, the Al-Busaidi, and finally the British all centred themselves in this section of the Old Town because of its proximity to the fort and excellent harbour (Letizia, 1986).

Most of the prominent businessmen and civil leaders of Mombasa have also lived in this area, resulting in exotic houses and shops being constructed here. Currently, it has many of the oldest as well as the most architecturally significant buildings that remain in the Old Town.

The conservation area also creates a very distinctive atmosphere. One can sense the subtle changes that occur as one leaves the conservation Area and walks into the other areas of the Old Town. Continuing along Old Kilindini Road West of Samburu Road, the streets become slightly wider, the plots begin to get bigger and the buildings become more uniformly of mixed commercial and residential use (King, 1990). The streets tend to be more crowded both with vehicles and people, and there are more hawkers selling their wares Leaving the Conservation Area to the north via Ndia Kuu to Mzizima Road, one gets a completely different impression. In this direction, the neighbourhoods begin to become distinctly smaller in scale and are filled almost exclusively with one storey Swahili style housing. The roads get narrower, eventually becoming footpaths and the atmosphere becomes more quite and residential.

Because of the historical, architectural, and urban differences in the three areas, it was decided that the Old Portuguese walled town with the additions mentioned above, would be the best place to begin a conservation effort in the Old Town (ibid).

3.6.2 Development of the Conservation Area

The development of the Conservation Area has, historically, taken place along Ndia Kuu and around the Old Port. From the time of Portuguese, Ndia Kuu existed as a foot path that linked fort Jesus with the Swahili Town north of the Gavana. Over time, it has grown to be the major business and residential axis in the Conservation Area (ibid). The name Ndia Kuu even roughly translated from Swahili means "Main Street". It is not surprising therefore, that much of the important building activity in the town would take place along this road. The same holds true for Mbarak Hinawy Road (formally Vasco da Gama Road) and the Old Port area, which were also very important. Most of the oldest buildings that remain standing in the Conservation Area are found in the section bounded by these roads and the seafront.

The area west of Ndia Kuu was generally less dense than its eastern side. Fewer buildings were sited in this area, and some had more open land around them. There were also more dwellings of a non-permanent variety, made with mud and thatch. It is only within the last

century that the mud and the thatch buildings in this area began to be reconstructed with stone and density began to increase (King, 1990).

As is normal with all traditional Swahili communities, a system of *Mitaa* or neighbourhoods developed along family or clan lines. A *Mtaa* (singular) generally contained a group of houses whose residents were all members of the same extended family system and who depended on this neighbourhood for much of their social and economic development. *Mitaa* (plural) names usually derived from a prominent local building or street near the neighbourhood. In recent years, although the names are still often used, the actual *Mitaa* have become less defined. The reason centres on the fact that more of the extended families are beginning to disburse and other people are moving into the neighbourhoods, blurring some of the distinction (King, 1990).

The early pathways which separated some of the *mitaa* eventually developed into a system of roads, which are roughly on a north-south axis, running in the same direction as the shoreline, and on an east-west axis perpendicular to the water. Because none of the roads is actually straight line, the system creates a series of irregularly shaped areas defined by the crooked street boundaries.

With the coming of the British, the system of land development became formalized. The Land Title Ordinance of 1908 set up a system, which divided the town into administrative sections based on the existing roads, and gave numbers to all of the plots. The British system was adapted and simplified after independence (ibid). The conservation area is currently divided into 11 administrative sections, XXIX through XXXVI in their entirely, and parts of sections XXV, XXVI, XLII and XLIII (ibid).

3.7 The Old Town of Mombasa Townscape

A visitor to the conservation area usually approaches along Nkrumah road from the central business district. The first view of the area would be the large garden and administrative buildings located at Treasury Square. The garden contains a number of old trees, benches and small pavilion, which serve as welcome shade from the strong tropical sun (King, 1990). The surrounding buildings, with their pediments, arches, columns and verandas definitely give a strong air of the administrative function that they contain. Overall, Treasury Square could be defined as the most formal space in the conservation area.

Continuing past Treasury Square and the old Law Courts Buildings with impressive clock tower, the visitor would next arrive at the imposing presence of Fort Jesus. The fort, which

sits on the south side of the road, forms a very strong barrier forcing one's attention to the north. This area, the intersection of Ndia Kuu, Mbarak Hinawy Road and Fort Jesus, forms a true entrance to the Old Town.

3.7.1 Streetscape

Ndia Kuu and Mbarak Hinawy Road range in width from 6 to 10 metres and are lined along both sides with two and three storey buildings. These buildings, most which abut each other, form a solid wall, which hides the existence of the neighbourhoods behind them (Letizia, 1986). Most of the buildings are very simple in their appearance. Decoration may include carved or arched door, or possibly a stringer and the windows almost have wooden shutters. Generally, however, the buildings are somewhat modest. This plain character is punctuated by some buildings, which stand out from their neighbours because of the beautifully carved wooden balconies and fine plasterwork. The varying façade treatments together create an interesting street pattern.

A particular feature that occurs along Mbarak Hinawy road is the very distinctive minaret on the Mandhry mosque. The minaret, a cone shaped tower, becomes the natural focus of the eye as one walks down the street. This form is specific to some Swahili mosques and occurs in one other in the old Town, the Basheikh Mosque on Old Kilindini Road.

Some of the buildings along these streets were originally designed with shops on the bottom storey. The old shop houses can still be discerned today by the Gujarat style carved doors, which usually signified the business entrance. Many of these shops have now been converted into residential space, but there are some that still have their original commercial use. Because there are a few *barazas* (stone benches) located along these streets, people often sit on their front steps in order to carry out the important social interaction that is common to street life in Swahili culture.

The streetscape of Ndia Kuu and Mbarak Hinawy Road is similar in many ways to that of some of the smaller streets such as old Kilindini Road, Kitui Road and Nyeri Street. These roads tend to be somewhat narrow, however, and not as active as the larger ones (King, 1990).

Two roads with different streetscape pattern are Kibokoni and Samburu Roads, which are lined, for most part with a later style of shop house that was constructed between 1930 and 1950. These streets are characterised by an almost continuous line of large commercial type doors used as business entrances. Many contain import/export and wholesale

establishments, and many more are used as storage spaces King (1990). There is little or no residential activity at the street level, especially on Kibokoni Road, because most flats are on the upper storeys. In addition, most of the businesses along these roads are not retail, so they are not busy with shoppers coming in and out. The result is that the streets are used more as link between Makadara Road and other points in the Old Town than as places of social or business interaction. This situation is modified to a certain extent by the sidewalk merchants, mostly selling fruit and vegetables, who line the roads in front of some of the storage entrances. These vendors are located mostly along Kibokoni Road past Nyeri Street. These vendors bring more of a sense of vitality to the area.

3.7.2 Neighbourhoods

Three types of neighbourhoods are found in this area

- The Swahili styled neighbourhood
- The Mombasa styled houses
- The water front area near Fort Jesus

All are located behind the solid walls formed by street front buildings, and entrance to these areas is by way of narrow alleyways between some of the buildings.

The Swahili neighbourhoods are found on the interiors of section XXIX, XXX, XLII and parts of XXXIV. The predominant building type is the Swahili house, a one-storey structure that is rectangular in plan. The pathways, which are all pedestrian, are defined by the facades of the buildings and are often crooked or make sudden turns with the variation of plot sizes and shapes. The buildings are all detached and unless blocked by an owner, there are pathways on all four sides of each building. Many of the houses have *barazas* at their front façade, and much of the social life of the area takes place within these informal meeting spaces created in the alleys (King, 1990). Children are usually found at play here, and the people generally sit on the stone benches to socialize with their neighbours. Laundry is also hung in the pathways, sometimes forming a maze for pedestrians. On the rare occasions where there is an empty plot, it is usually taken over by the local residents for these activities. The overall atmosphere of the Swahili neighbourhood can be characterized as informal and inviting of social interaction (Letizia, 1986).

In contrast to the Swahili areas, the neighbourhoods with the traditional Mombasa houses are much less inviting of public exchange. The buildings are two or three storeys and sit along narrow alleyways that follow the irregular shapes of plots. Due to the heights of

buildings, these areas tend to feel far denser than the Swahili neighbourhoods, and the alleyways are much less conducive to stopping and socializing with neighbours (King, 1990). Instead they tend to push the pedestrian along toward his destination. Where the alleyways do widen, the residents sometimes create informal gathering places. Carved doors, carved wooden balconies or wrought-iron balconies, external staircases and ornate plaster carvings, characterize traditional Mombasa houses. These neighbourhoods are located in sections XXXI, XXXIII, XXXV, XXXVI, and parts of XXXIV.

The third type of neighbourhood is found on the waterfront in section XXXII. The owners of these plots were particularly important and wealthy people in Mombasa such as Sir Ali Bin Salim and Sir Mbarak bin Hinawy, both past *liwali*s (Arab Governors) of Mombasa. The plots in this area are slightly larger than those in other areas, and as King (1990) explains, in the last 20 years, many of the buildings have been radically altered, modernized, or torn down and replaced by new buildings. As a result, there are very few older buildings in this area. The government owns a larger portion of this land and there used to be a small public garden located in the area.

3.7.3 Public Open Spaces

The three main public open spaces in the Conservation Area with the exception of Treasury Square are the Government Square, Piggot Place and the waterfront. All are under-utilized in terms of providing the public with much needed social and recreational areas (King, 1990). The Government Square is given over to loading for the Old Port as the rubbish collection point for the Conservative Area. Piggot Place is used for parking cars and there is an electrical substation, which is located roughly at its centre. The waterfront, although used informally by people as a park, has not been developed in any way to accommodate this use (ibid). Because the density is so high and open space scarce in the Old Town, these public spaces should be more fully developed to meet the needs of the local community.

3.7.4 Religious Buildings

Within the Conservation Area, there are 22 religious buildings, 13 of which are Mosques and the rest support buildings, wells and social halls for these Mosques. This constitutes 3% of the total buildings in the Conservation Area. Mosques types can be grouped into those catering for the Swahili community and those created by the various Swahili sects that settled in Mombasa (Letizia, 1986). Simple plans and facades characterize the Swahili Mosques. Ali mosques started out single storied but with time several have added a storey

to accommodate other functions. There are no decorations on them with the exception of the exterior surface of the curved "Mirhals' and in some cases fine curved doors. Two of the Mosques (the oldest Mosques in Old Town–dated 16th Century), Mandhry and Basheikh also have unusual minarets.

3.7.5 Administrative Buildings

The British constructed the buildings in this category in the period between the last decade of the 19th and the middle of the last Century. There are 12 administrative buildings in the area. The buildings use a mixture of local and European materials as coral blocks, lime, mortar and plaster and clay roofing tiles. Deep-set arcades and verandas to capture the breeze blowing through the island characterize them. Although most of the buildings do not sit in the Old Town, they are very important landmarks in that area and have been included in the Conservation Area to be preserved. Examples of such buildings include; the Old Law courts, the District Commissioners Offices, the Municipal Council Offices among others.

3.7.6 Infrastructure

- **Introduction**

The following sections will discuss the various infrastructures in the Conservation Area. It is important to realize, that the services provided to the Conservation Area must be viewed in the larger context of services in the whole of the Old Town, and to the entire municipality. Many of the issues and deficiencies discussed, not only affect the Conservation Area, but also are citywide problems. Furthermore, they are problems that affect a wide range of Government agencies and parastatals. All of the various groups will need to be involved if solutions are to be found to many of these problems.

- **Water Supply**

Before tapped water was introduced, Mombasa Island was serviced by wells. The first piped water was commissioned in 1916 and was supplied by gravity flow from Mrere springs in the Shimba Hills located south of Mombasa In the 1930's a large main was constructed from Mrere and still in use today. A booster station was added in the 1940's and more wells were also added in Shimba hills to increase output (King, 1990).

In order to cope with the growing demand for water in Mombasa, a pipeline was constructed from Mzima springs in Tsavo West to the Mombasa reservoirs in the 1950's (ibid) The water coming from both from here and Mrere is considered clean, and the only

treatment carried out on it is chlorination. In 1979, a new pipeline was constructed from the Sabaki River north of Malindi, in order to again meet the growing demand. Unlike the other two pipelines, the water coming from the Sabaki needs full treatment (ibid).

Water supply remains a problem in Mombasa. This problem, along with pipe breaks in the system that usually occur at least once or twice a year, sometimes create a serious water crises in the municipality which last for weeks at a time. Some households have installed water tanks to ensure an emergency supply when there are problems.

Once on the island, the water comes to the Conservation Area through a 300 mm pipeline running down Nkrumah Road. From there the pipes gradually decreased in size with the smallest being 19 mm. All but one or two of the houses in the Conservation Area are piped for water (King, 1990). The variety of pipes used includes asbestos cement (a poisonous material), galvanized steel, and ductile steel. Many of the older pipes are in poor condition and need replacement.

One of the serious problems facing the older buildings is leaking pipes that allow water to infiltrate into walls. Homeowners should make sure that there are no leaks and should periodically check water pipes. It should also be pointed out that the system, on its best days, is only designed to supply water pressure up to three stories, thereby limiting the height of a building that does not supply its own pump to carry the water higher.

In addition to the piped water supply, several of the old wells continue to be used in the Conservation Area by mosques or in the case of the Leven steps well, for washing clothes and bathing. This water is definitely not suitable, however, for drinking as most has been contaminated by wastewater.

- **Sewerage**

Traditionally, a system of pit latrines, bucket latrines, and septic tanks and soak pits served the needs of Mombasa Island. The properties of coral are such that they do very good job of drainage for these types of systems. Today, in fact, most of the houses on the Island is still using either pit latrines or septic tanks the former mainly in some of the so-called Swahili neighbourhoods such as Majengo, and the later in more the permanent housing schemes. The municipal council and private firms provide the maintenance services necessary for these systems.

Along with the simpler methods of waste disposal, there are several separate sewage systems in the municipality located at Changamwe, Makupa, Tudor, and also fortunately,

the Old Town (King, 1990). The Old Town was fitted with its sewer system in 1962. It serves 105 hectares including all of the Old Town and certain adjacent areas (Letizia, 1986). It is a partial separation system, meaning that it does not incorporate storm water drainage except in three places, Digo Road and Haile Selassie road, Kaunda Road, and near the General Post Office. The cost at the time of construction was Sterling £525,000. This scheme was originally designed as phase 1 of a plan that was to cover the whole of the island Up this time however, no other part has been constructed (King, 1990).

The system was built to treat 28 million gallons a day and includes sewers, tunnels, four pumping stations, a treatment plant, and an outfall pipe. The sewers come in diameters of 150 mm to 600 mm with some 100 mm rising mains. They are laid at a minimum depth of 1 metre, but can be as deep as 14 metres as found in the running along Nkrumah road (King, 1990). The pumping stations are located at various points along the shoreline of the Old Town, with the first two inside the Conservation Area. These stations are all of similar design and contain emergency outfall pipes for use during electrical failures. Otherwise, the sewage is pumped to a collection point at Digo Road and Haile Selassie Road and from there the waste enters a tunnel that leads 1,800 metres to the treatment centre located at the golf course at Ras Serani (ibid). Here the sewage is separated into its solid and liquid components. The sewage is not treated other than this separation.

The outfall pipe is located off of Ras Serani and runs about 45 metres before discharging the sewage into the sea. The liquid waste is discharged continuously during the day, and the solid material is discharged at high tide when the current is carrying away from the Island. Sometimes, however, the sewage does not make it out to sea and turns up both on the Tudor and Port Reitz sides of the Island (ibid).

The Municipal Engineer's office is responsible for maintenance and carries out inspections several times a year. At the present time, the sewerage system is in relatively good shape, with silting in the pipes being the major concern. The maintenance costs on the sewers are relatively little, and the most expensive component to maintain is the treatment plant at the golf course (ibid).

- **Storm Water Drainage**

The drainage situation in the conservation area is in very serious condition. Rainfall often brings minor flooding and then standing water with it, and wastewater from baths and sinks often sits stagnant in the open drains. Addressing this issue is not easy, however,

because there is little to no information available at the Municipal Council. None of the history of the present system is known nor even is a map available showing the present paths of the drainage channels. The 1974 study on drainage deals very little with the situation in the conservation area, concentrating instead on other areas of the Island (King, 1990).

The current drainage system is based on open and partially covered concrete drainage channels ranging from about 10 cm to 30 cm deep which run along the sides of most of the main streets. The system is designed to accommodate both storm water and wastewater form kitchens and baths. It would appear, that at some point, the system was improved, and some deeper, U-shaped, covered drains were constructed in several places to carry water out into the Mombasa channel (ibid) The water enters these larger drains, both from the open channels, and from some ground grates that have been installed at various points along their lengths. In addition, an outfall channel was constructed next to Fort Jesus in the early 1974, which serves Makadara and Kibokoni as well as areas outside the Conservation Area (ibid).

This system, as it exists in its present form, is far from adequate to address the needs of the area The lack of knowledge of the drainage scheme has led to a lack of maintenance which is virtually crippled the ability of the drains function correctly. Among the problems include:

- Drainage channels that are blocked with trash and rubbish;
- Cement covers over the drainage channels which have caved in;
- Parts of the drainage channels that have totally collapsed;
- Gully grates that are collapsed or blocked;
- Waste water sitting stagnant in channels or flowing down alleyways without the benefit of a drainage channel;
- Drainage channels that are too small to handle all of the storm water,
- Potholes in the roads, which creates standing water that is not able to enter the system.

All of these problems when taken together accounts for the flooding that occur after hard rains. The worst street, by far, is Old Kilindini Road between Kibokoni Road, and Ndia Kuu

The current conditions have very bad consequences for the residents of the conservation area. The most serious are the health aspects involved. The standing water is not only a breeding ground for mosquitoes, which cause deadly malaria, but also breeds other bacteria

and viruses that are harmful (ibid). Children are sometimes seen playing in puddles of rainwater and even worse, in some of the stagnant wastewater in the drains. In addition to the health issues, the situation is also bad for the buildings as water seeps up into the walls and causes deterioration. Other problems are the sheer inconvenience that the standing water and flooding causes to residents, and the negative effects it has on tourism as many visitors to the Old Town give up after trying to navigate between puddles in the streets, and go back to their hotels (ibid).

- **Garbage collection**

Problems in the system begin with the first stages. The containers in which residents put their trash every morning are inadequate both in size and the fact that they are without lids. Cats and rodents are able to scrounge through the cans looking for food, and in the process spilling out the contents of the containers. Once the trash is on the ground, it is generally not collected. Furthermore, sometimes residents will not bother to put the trash out, instead throwing it into an empty plot in small spaces between houses, or in worst cases, directly into the sea. The area near Leven steps and the old Fish market are notorious duping grounds for garbage. Litter is strewn about these paces posing a serious health hazard to those who live in nearby houses as well as polluting the water.

The situation at the collection points is not much better. Often, the trailers are not there to take the trash away or are full. At these times, rubbish gets thrown into piles of up to a metre or more high. It may take as long as a week for these piles to finally be removed. The reason given by the municipality for the delay in trash removal usually revolves around the bad condition and lack of sufficient vehicles to do the job. It should be pointed out that government square is not a very appropriate place for trash collection point as it is a public space used by many people and also a tourist attraction.

As with the drainage situation, the garbage problem causes many concerns. The rotting garbage breeds mosquitoes and harmful microorganisms that cause various diseases. It also provides a fertile breeding ground for such pests as rats and flies.

- **Electricity**

The idea of electric power in Mombasa dates back at least to the first decade of this century. In 1908, the Mombasa Power and Lighting Company Ltd. was formed by several prominent citizens and started importing equipment through Zanzibar. The First World War, unfortunately, interrupted the company's work of installing lines, and it was forced to

fold. In 1916, a new company was formed to take over the work, but it too eventually went bankrupt (King, 1990).

East African Power and Lighting Co. was started in 1922. Until 1967, electricity was supplied from two generating stations, one located at Kipevu in Changamwe, which was steam powered and one on the island at Mbaraki which was diesel powered. Mombasa also imported some of its electricity from Tanzania. With the break-up of East African Community, the company was restructured and changed its name to Kenya Power and Lighting Co. (King, 1990). The parastatal has since broken up into various legal entities.

The Old Town fits into electricity grid in the same manner as any other neighbourhoods in the municipality. The power used is 240 volt, triple phase lines where necessary. The cables used are of aluminium, 50 or 100 square millimetres, depending on the demand of the consumer (King, 1990). Lines are installed along electric poles placed throughout the Old Town, and then terminate at each building with a wall bracket. Although the system is probably laid out as neatly as possible given the circumstances, it is somewhat out of character with historical nature of conservation area. The Piggot place transformer is also a bit of a problem in this respect in that in the middle of what could otherwise be a nice public space.

As there is no industrial demand, electricity in the conservation area is used for domestic consumption, lighting of shops, and for few streetlights that exist. Local demand does not seem to be increasing at this time, and there is sufficient generation for current needs (King, 1990). The most serious problem with the electrical system in the conservation area is the brown and black outs that sometimes occur. The lack of street lighting is also a concern.

- **Telephone Services.**

By 1990, 45% of the households in the conservation area had telephone service (King, 1990). Many people also now have the cell phone and communication is much easier. The condition of the fixed telephone services in Mombasa as a whole has not been very good. Services are interrupted fairly frequently due to the age of the system and lack of maintenance on it. It can sometimes take several weeks or months for services to be restored. In addition, there are special problems associated specifically with the Old Town.

The system has grown haphazardly over time and the tangle wires running along the facades of buildings and crossing some of the alleyways are not only unsightly, but also

dangerous to pedestrians (King, 1990). In some cases, wires hang down to about waist height or lower forming obstacles in the alleyways. Often, when services are cut from a house, the old wires are not removed. Instead, they will be left dangling within the tangle with other wires (King, 1990). This of course adds more confusion to a system, which is already problematic.

- **Roads and Alleyways**

All the major roads in the Conservation Area are paved, as were most of the smaller alleyways. With few exceptions, however, they are in poor condition. Potholes are abundant, and there is usually standing water on the roads after rains, which, in turn, causes more potholes. Attempts to repair the holes have actually made the situation worse. Small pieces of coral mixed with dirt are packed into the holes in order to bring them level with the rest of the street. After it rains, however, the weight of the Cars on this filing actually pushes it up and out of the potholes thereby putting the dirt on the road. A related problem involves the storage of construction materials, especially large mounds of dirt used for making cement. These mounds are not properly contained, and when it rains, the dirt washes onto the street. There are some parts of Ndia Kuu that have actually back to dirt road because of these two practices. Old Kilindini Road is also particularly bad in this respect.

The traffic situation in the conservation area is another cause of concern. The fact must be faced that the roads of the conservation area were just not constructed to accommodate the amount or type of traffic that uses them today. They are too narrow and crooked, and they are also filed with pedestrians who form numerous obstacles to drivers. Certain measures have been enacted to try to cope with this situation. First, all of the roads in the Old Town, with the exception of Mbarak Hinawy Road are one-way. There is also a limit to the size of lorries that are allowed to use the streets of the old Town, although this limit is never enforced.

Problems usually only occur when a lorry is off-loading, when a person has stopped his vehicle on the road while running an errand, or when a vehicle parks in a particularly narrow section of the road. In these cases, traffic will become backed up because the roads are not wide enough to allow for cars to get through the obstruction.

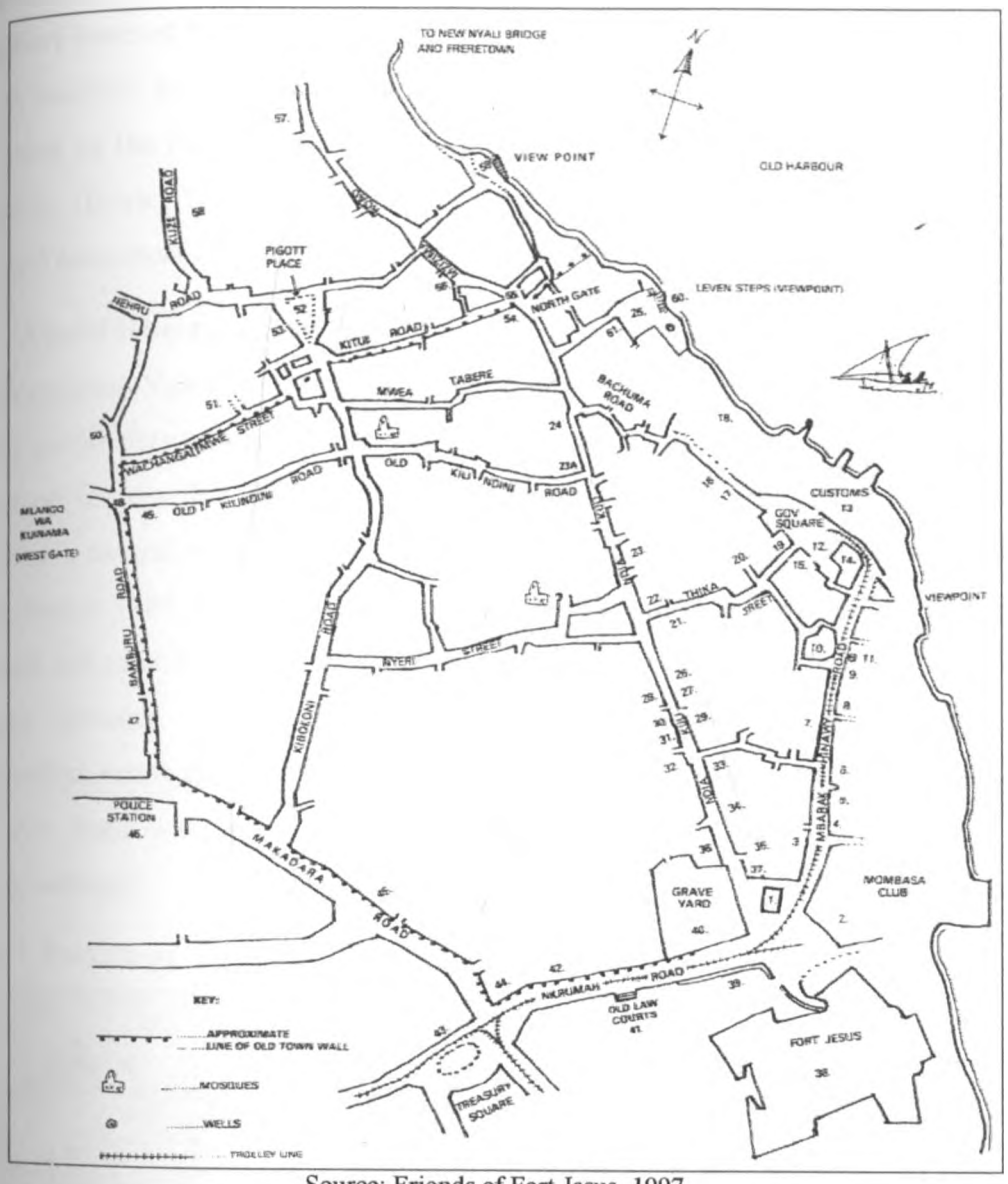
In addition to these general problems, there are also several specific areas that are in need of attention. Lorries will sometimes attempt to turn onto Ndia Kuu from Old Kilindini

Road and will become stuck owing to the narrowness of the latter. Only after much time and manoeuvring will the problem be resolved. Another serious problem is the Mbarak Hinawy Road, which must remain open to vehicles going in both directions, because it is the only entrance to the Old Port. The road, however, is not wide enough to accommodate parked cars and traffic in both directions. It is a common occurrence that vehicles travelling opposite ways will meet in the middle the of street and one will be forced to back up and pull over so that the other vehicle can pass. The situation gets complicated as more vehicles line up behind the two original ones. Another problem, particularly on Mbarak Hinawy Road, is the sizes of the lories. Although there is a weight limit of three tones, it is never enforced. Lorries are often too big for the street both in width, causing a problem in some of the narrower areas, and in height as lorries hit and destroy balconies that overhang the street.

Parking can also be somewhat a problem in the conservation area. Most of the streets are just enough to accommodate a line of parked cars and still leave room for other vehicles to pass. In some cases, however, this fact does not deter some people from trying to park in the narrower areas. This situation, of course, causes many traffic back-ups and delays. Another parking issue revolves around the fact that several of religious communities have many members who live outside the conservation area. On festival days, traffic parking in the conservation area can come to a standstill, especially in the Old Port-Mbarak Hinawy Road area as well as Ndia Kuu and Old Kilindini road.

Despite the growing number of cars on the roads, the Old Town remains mostly a pedestrian community. Most families rely on walking as their primary means of transportation. In regard to this need, the conservation area is somewhat inadequate and the conditions of the alleyways in the neighbourhoods are very bad. At one time, many small pathways were paved, but following the installation of underground pipes, the alleyways have reverted back to dirt paths (King, 1990). Maintenance is also nonexistent causing further erosion. Major problems occur when it rains and puddles and mud form in the narrow paths. Even when dry, however, some of the paths are rocky and filled with debris, making them difficult to use.

Map 16 Significant Townscape Elements



Source: Friends of Fort Jesus, 1997.

Map References

1. Jubilee Hall Mombasa Club
2. Mombasa Club
3. Anils Arcade
4. Arcaf House
5. Alis Curio Shop
6. Dalal House
7. The African Hotel
8. Old Standard Bank
9. Indian Plasterwork
10. Mandhry Mosque
11. Mandhry Well
12. Government Square
13. Customs House
14. Old Post Office
15. Allidina Visram /Sanaa Gallery
16. Scott Emporium
17. Italian Consulate
18. Bohara Mosque
19. The Old Treasury
20. Berkely Place
21. The Club
22. Hansing And Co.
23. Reitz's Grave
24. 1st Library
25. Viewpoint
26. Whitehouse
27. Criterion
28. Swahili Bakery
29. Balcony House
30. Pandya House
31. Bismarck Soccer Club
32. Whiteways
33. Loookmanji
34. Staircases
35. Mosque
36. Old Edward St Rose
37. Ali's Curio Marker
38. Fort Jesus
39. Wavell Memorial
40. Mazrui Grave Yard
41. Old Law Courts
42. Cecil Hotel/ Bank Of India
43. Grand Hotel/ Standard Bank
44. East African Standard Offices
45. Datoo Auction House
46. Central Police Station
47. Samburu Road Houses
48. Mlango Wa Kuinama
49. Badri Mosque
50. Badala Mosque
51. Memon Mosque
52. Pigggot Place
53. Glen's Building
54. Ithna Asheri Mosque
55. North Gate
56. Kitovuni- Pillar House
57. Mkanyagenyi Mosque
58. Jamat Khana
59. Old Fish Market
60. Leven Steps
61. Leven House

3.8 Reading Mombasa's Townscape

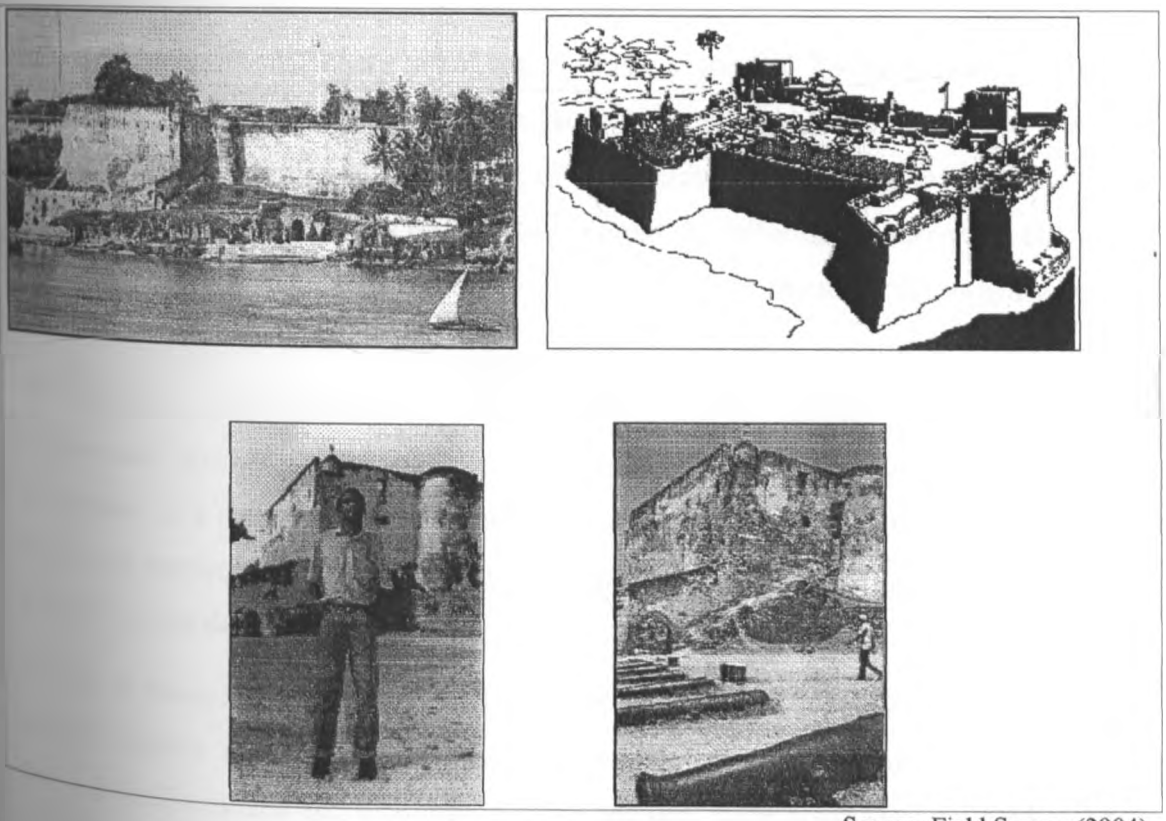
3.8.1 Fort Jesus of Mombasa

At the southern end of the Old Town's urban waterfront zone stands Fort Jesus first completed by the Portuguese in 1596 – *a monument to Portugal's brief age of imperial splendour* (Hoyle (2002) quoting Hall (1996). Today it is without doubt the principal historical monument not only of Mombasa, but also of Kenya as a whole.

- **A brief History of Fort Jesus**

The Portuguese Vasco da Gama first came to Mombasa in 1498, but his relations with the town's people deteriorated rapidly. After just one week, the Portuguese thought it prudent to sail on to friendly Malindi where they established their first East African base. But Mombasa's natural harbour soon attracted foreign attention and a Turkish expedition built a fort there in 1589. Fearing for the security of their route back to Portugal, the Portuguese attacked and took Mombasa in 1593, and began at once to build a large fort to guard the harbour entrance. The Portuguese regarded themselves as the representatives of Christendom rather than of Portugal, and this reason they sailed under the flag of the Order of Christ. Jesus was therefore an obvious name for the new fort (National Museums of Kenya, undated).

Plate 7, Fort Jesus



Source: Field Survey (2004)

- **Architecture of the Fort**

The fort stands on a site that must have been very carefully chosen by its original architect, Jose Batista Cairato, who arrived in 1593 with his Master of Works Gasper Rodrigues under the command of Mateus Mendes de Vasconcelos. Cairato was an Italian military engineer who worked on state-of-the-art fortifications in Malta, and was employed by the Portuguese to design various Indian Ocean forts among which Fort Jesus was his last and greatest achievement (Hoyle, 2002).

Fort Jesus has preserved the same basic shape as when it was built nearly 400 years ago, its angular form dictated by the rules of military defence. Such long clear vistas into the past are rare; and if you leave Mombasa without visiting this major landmark in the history of East Africa, you may find it a cause for regret.

The central part of the fort occupies a coral ridge around which stone bastions and ramparts are constructed; on the harbour side, mid-channel rocks and shoals caused vessels to sail close to the fort, while sandy coves to the north and south provided fortified access. Given the considerable height of the fort above sea level, a flooded moat was impractical, but on the landward side great ditches were excavated in the rock to create a dry moat designed to render uninvited access extremely difficult (ibid)

- **The Fort as a Landmark and Node**

From the standpoint of modern urban conservation in the Old Town, Hoyle explains that the importance of Fort Jesus rests on the fact that it cannot be ignored by any one with slightest interest in the history if Mombasa or in the cultures of the East African coast. The sheer physical bulk of the fort is enormously impressive, and it is not surprising that a visit to the fort is a standard item on the itinerary of a large number of tourists who visit Mombasa.

The immediate environs of the fort, however, would benefit from environmental improvement including vegetation control, renovation of the watergate and the introduction of a carefully designed and located landing stage so that visitors arriving by water could appreciate more easily the remarkable site of the building as seen from the sea, as well as the details of the interior.

The fort is increasingly well marketed towards this clientele by well-qualified staff who carefully balance the interests of conservation and those of revenue-earning activities; there is a good museum and a bookshop inside the fort; there are dramatic sound-and-light

performances re-creating the history of the buildings sometimes followed by candle-lit dinners amid the ruins, with waiters costumed as Portuguese warriors (ibid).

Tourist visits to the fort by dhow should be initiated, to arrive at the water gate from the Old Port; and some tourism-related renewal facilities in the Old Port might one day be undertaken. There is also a flourishing Fort Jesus society, the Friends of Fort Jesus, which promote continuing interest in cultural activities associated with the fort and with the wider context of Mombasa as a port city.

3.8.2 Paths in The Old Town of Mombasa

The old town is divided into *Mitaa*, areas that tend to house related people (Friends of Fort Jesus, 1997). Some areas also have names indicating the origins of the people living there. Other names have been known to refer to features or events in the area at the time. The population is more transitory than in the past. *Langoni* for instance marks the place of the west door or gate in the town (no longer existing). The narrow side streets were never intended for use by motorcars. They are usually referred to as *kitoto* or k*itotoni* (meaning the place of the small children).

Side streets are said to be wide enough for camels with panniers to pass as they are for donkeys. Today the common non-motorised transport other than walking is in the form of handcarts or *mkokoteni*, also sometimes called *hamali* carts. The wares they carry are *viazi* (potatoes), *machungwa* (oranges), or *chupa* (bottles) among many other merchandise.

- **Mbarak Hinawy Road**

Mbarak Hinawy road runs between the Mombasa Club and Jubilee Hall and takes you into old town past the Mandhry mosque to Government Square. This road takes its name from sir Mbarak bin Ali Hinawy who was the *liwali* (i.e. representative of the sultan of Zanzibar, the former ruler of the coastal strip) from 1931 to 1959. This road was previously known as Vasco da Gama Street, although the famous Portuguese sailor never actually set foot in Mombasa, being deterred by the warlike attitude of the inhabitants as he sailed by in 1498 en route to India (ibid).

Between Fort Jesus and Government Square a variety of buildings occupy the zone between the Old Harbour and Mbarak Hinawy Road and most are oriented towards the road rather than the harbour. Most are residential, wholly or partly and some are in multiple occupancy. Many are in poor condition but others are well maintained and some have been radically altered in recent years. The building now occupied by the Conservation

Office was given to Mombasa as a social services clinic in the 1930s and was partially reconstructed in 1983 (Hoyle, 2002).

Mbarak Hinawy Road is a convenient landside boundary of the urban waterfront zone Mombasa Club built in 1897 s a good example of a building located long this road. It served the expatriate community throughout the British colonial period and continues beyond its centenary to flourish as a multiracial, international social venue, occupying a prime site overlooking Fort Jesus and the entrance to the Old Harbour from the Indian Ocean.

Several buildings along the Mbarak Hinawy Road are of interest for their connections with the early development of Mombasa as a European trading settlement, and their modern role in the developing tourism economy of the Old Town. Many tourists who visit Fort Jesus also make a brief detour into the Old Town along Mbarak Hinawy Road or Ndia Kuu where numerous shops sell artefacts and souvenirs of varying style and quality. Arcaf House is a modern construction on site of a fine two-storey building occupied in the 1890s by William Oswald & Company. In contrast, a neighbouring building on the east side of the road remains largely unaltered since the time when it was occupied from 1903 by Thomas Hulton & Sons, general merchants and safari agents (ibid).

- **Ndia Kuu**

This street's name means main road and has existed since the Portuguese times when it was known as *La Rapozeira* (the fox hole). The houses along these street were build by the Indian businessmen who came to Mombasa during the second half of the 19th Century, and rented them to organisations such as the Church Missionary Society and the Imperial British East Africa Co. The street contains many a fine collection of carved doors and plasterwork.

3.8.3 The Government Square as A Node

Government Square, strongly associated with European administrators and Asian entrepreneurs in the late 19th and early 20th centuries (Seidenberg, 1996 as quoted by Hoyle, 2002), provides access to Mombasa Old Port which now managed by the Kenya Ports Authority. The port complex includes the customs building commercial warehouses and a fish market which give rise daily to considerable vehicular and pedestrian traffic and to substantial quantities of garbage piled high in the open square. On the south side of the

square are several buildings that formed part of the early British colonial government/trading complex in the 1890s.

The curio/carpet shop now known as the Lamu Gallery occupies the site of Mombasa's first Post Office, which later became a temporary immigration office during the First World War. The dominant building on the south-western side of the square is the Sanaa Gallery which from 1899 was the house and main office of Allidina Visram (1851-1916) who, as his memorial in Treasury Square, Mombasa, indicates, was *a leading Indian merchant and planter... one of the pioneers who helped to open up the country to trade and civilization (ibid).*

He established his business in 1899 and developed a network of trading offices in Kenya and Uganda, employing 500 Indian clerks, carpenters and masons. He provided and provisioned a labour force for the railway building, and owned several factories in Mombasa processing cotton, soda ash, timber buildings and furniture manufacture. This building also housed at different times around the turn of the century the East Africa and Uganda transport offices, a parcel post office and the National Bank of India (Playne, 1909 as quoted by Hoyle 2002, King and Procesi, 1991)

Government Square received special emphasis in the 1991 Conservation Plan; some improvements including repaving have been achieved, with financial support from the Kenya Ports Authority and the local Bohara Community, despite opposition from some port users. To the north of the square, the Bohara Mosque is an important modern building occupying a commanding position overlooking the Old Harbour. Standing on the site of an earlier mosque built in 1901 by the Jeevanjee family, the present mosque was constructed in the early 1980s as a replica of a mosque in Sanaa, Yemen. Those brave enough to ascend the narrow minaret are rewarded with a fine a panorama of the Old Town and Harbour (Hoyle, 2002).

Most of the waterfront buildings north of the Bohara Mosque are residential in character, but at the northern limit of the Conservation Area there is an old Fish Marker with warehouses and the remains of a steep flight of stone steps to the beach Until relatively recently these facilities, which have now fallen into disuse, provided the basis for an important dhow-based trade in dried salted fish (Aldrick *et al* 1985.

FIGURE 2, OLD TOWN OF MOMBASA STREET ELEVATIONS.

NDIA KUU ROAD - EAST ELEVATION 1:200

SIR MBARAK HINAWY ROAD - EAST ELEVATION

SIR MBARAK HINAWY ROAD - WEST ELEVATION

3.8.4 The Water Front As an Edge and a District

Access to the urban waterfront in Old Town of Mombasa is not clear-cut. Hoyle (2002) explains that;

> *...Unlike Lamu and, for that matter, Zanzibar and Dar-es-Salaam in Tanzania, where the urban core zone faces directly onto the water and provides an area of constant and varied interaction between urban and maritime activities, the Old Town at Mombasa is mostly oriented inwards towards itself and towards the central business district of the modern town, and so to large extent turns its back on the Old Harbour and the sea.*

This is because raised coral reefs dating from the Pleistocene period are much in evidence; much of Mombasa Island including the area occupied by the Old Town is composed of coral reef and coral breccias which provided a somewhat uneven plateau surface along the Old Town waterfront by steep, often almost vertical cliffs between 7 and 10m high (ibid).

The waterfront has no causeway, not even a footpath, along most of the maritime perimeter of the urban Conservation Area and public access to the water front is available only at certain points such as Fort Jesus and the Leven Steps. Although certain functional access points such as the Old Port obviously provide clear exceptions to this general lack of water-oriented activity, many properties, public and private, appear to turn their backs to the water and also, regrettably, to use the sea cliff and the foreshore as a garbage dump (ibid).

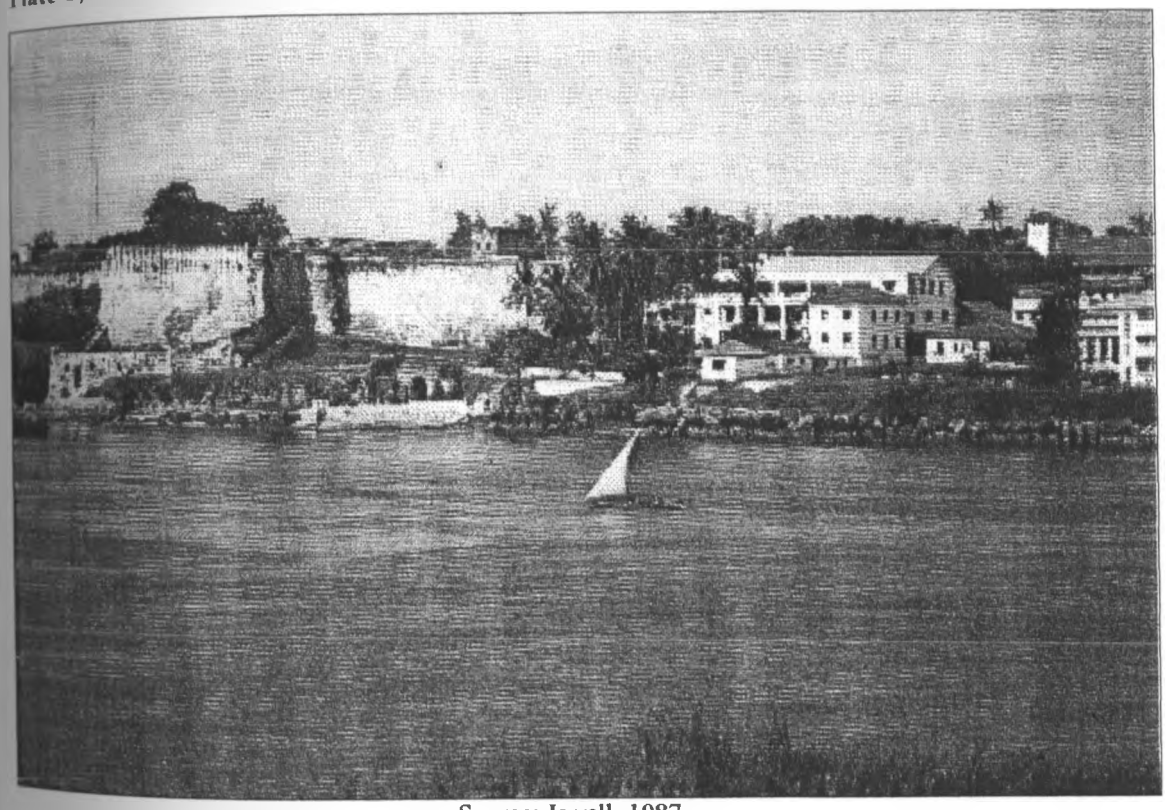
In Lamu and Zanzibar, the waterfront remains a principal thoroughfare and focus of commercial and social maritime related urban activity. Hoyle (2002) explains that this is also still the case at Dar-es-Salaam, despite signs that alternative non-port urban areas are acquiring supremacy.

At Mombasa, however, where the essential focus of modern port activity began to move away from the Old Harbour to the new developments at Kilindini on the other side of the island in the 1880s, the growing town had effectively turned away from its medieval core and gateway by the beginning of the 20th century. Old Mombasa's maritime façade, the towns original door to the world of the Indian Ocean and its trade networks, became during that century a back door through which the garbage is put out (ibid).

After a hundred years of relative neglect Hoyle explains that the conservation of what remains of the Old Town is a challenge not only in terms of practical planning at the local

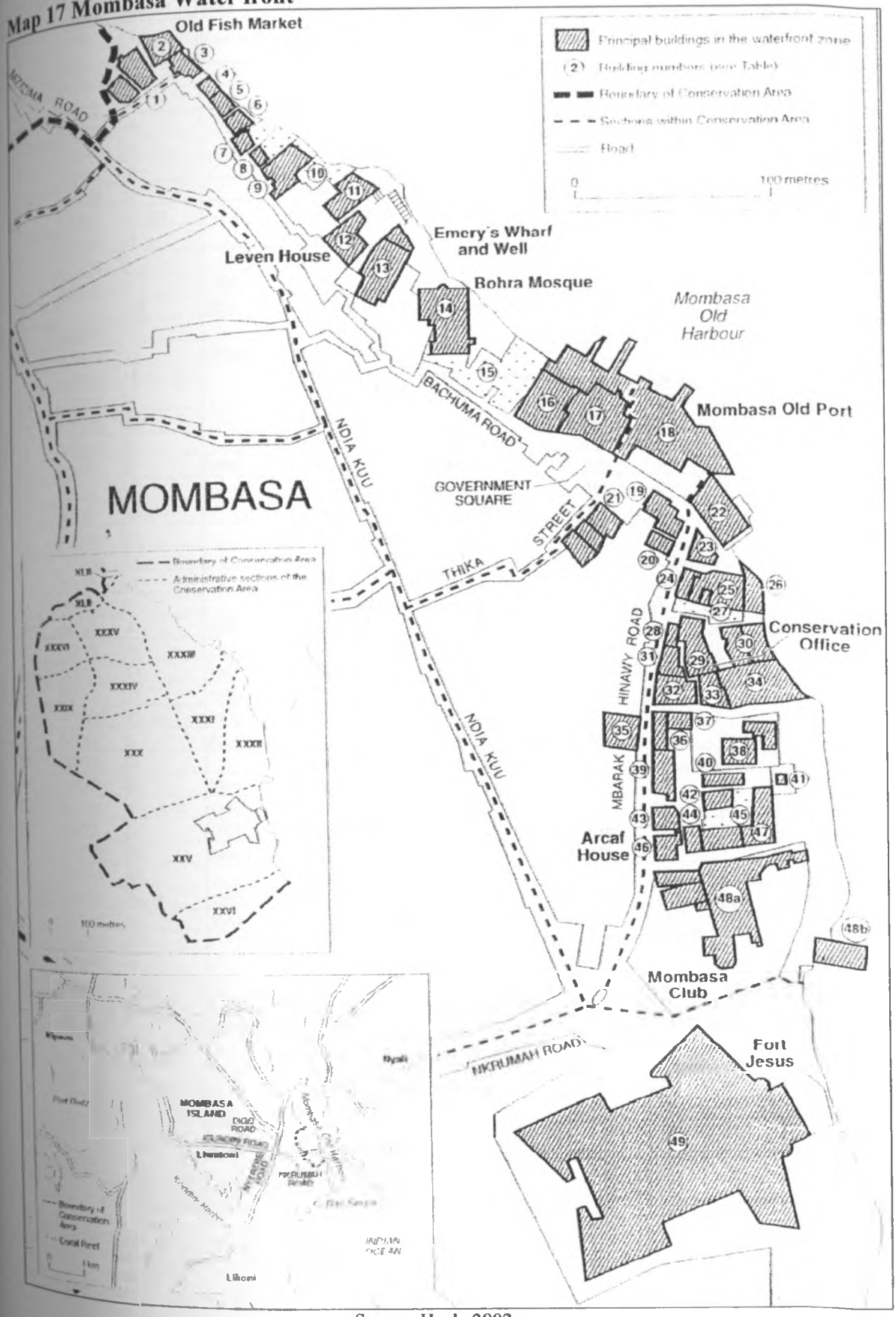
level, and as a test of the extent to which at the national level, modern Kenya values and its long and complex history and can ultimately reconcile the continuing dichotomies of its political geography. The core/periphery contrasts so well represented in Kenya's modern national geopolitical structure, in which the coastlands are part of a functional and cultural periphery despite their seminal role in the country's history and development, are reflected in microcosm in the urban geography of Mombasa (Blij, 1968), where the activities and orientations of the deep water port and the modern town centre largely ignore the cultural and historic roots of the entire city port complex, symbolized by the 16th century gateway to and from the sea beside the monumental Fort Jesus (Kenya, 1997).

Plate 8, Mombasa Waterfront



Source: Jewell, 1987

Map 17 Mombasa Water front



Source: Hoyle 2002

Table 7, The Mombasa Water Front: Building Characteristics.

No	Section	Plot	Date	Building/ function	R	S	B	C
1	XLIII	72-3		Fish warehouses	Mb	1		A
2	XLIII	16		Old fish market and steps to beach	Mb	1		P
3	XXXIII	16		Private residential	Mb	3		P
4	XXXIII	17		Pumping station	Mb	1	B	A
5	XXXIII	18		Private residential	Mb	3	B	A
6	XXXIII	19		Private residential	Mb	3	B	A
7	XXXIII	20		Private residential	Mb	3	B	A
8	XXXIII	21		Private residential	F	3	B	A
9	XXXIII	24, 103		Private residential	F	3	B	A
10	XXXIII	25		Open space				
11	XXXIII	6		Private residential	Mb	2	B	A
12*	XXXIII	33	1906	Leven house	Mb	3	B	P
*		102	1825	Emery's wharf, well, tunnel and steps				P
13	XXXIII	5		Private residential	Mb	2/3		
14*	XXXIII	5	1983-4	Bohara mosque	F	1	B	G
15	XXXIII	59-64, 100		Open space associated with Bohara mosque				G
16*	XXXIII	3		Fish market	Mb	1		A
17*	XXXIII	101		Old port customs building	Mb	2		A
18	XXXIII	73		Mombasa old port: KPA ware houses	Mb	1		A
19*	XXXI	8	1899	Lamu gallery (old post office)	Mb	2	B	A
20*	XXXI	9		Curio shop/ private residential	Mb	2	B	A
21*	XXXI	10		Sanaa gallery (Allidina Visram's house)	Mb	2	B	A
22	XXXII	14		Private commercial warehouse	Mb	1		P
23	XXXII	15		?				
24	XXXI	12		Residential				
25	XXXII	7		Private residential/ storage	Mb	2		P
26	XXXII	4	1989	Private residential	T	4	B	G
27	XXXII	16		Private drive way to plot 19				
28*	XXXII	17	1901	Mandhry mosque well				A
29	XXXII	18	1930s	Conservation office	F	2		G
30	XXXII	12, 19	1970s	Private residential block of flats	F	2		G
31*	XXXII	6	Pre-1914	Traditional residential houses	Mb		B	P
32*	XXXII	23		Private residential/storage, Nansherd & co.			B	P
33	XXXII	22	1990	Modern private house	F	3	B	G
34	XXXII	13, 20, 21	1880s	Private residential	F	4	B	G
35*	XXXI	5	1904	Private residential, former Africa hotel	Mb	3	B	P
36	XXXII	25	After 1909	Private residential	F	3		P
37	XXXII	24		Private residential	F	4		A
38*	XXXII	9a, 9b	1980s	Private residential, multiple occupancy	Mb	2		A
39	XXXII	26	1951	Private residential	Mb	2	B	P
40	XXXII	27		Private residential, older buildings altered	Mb	3	B	G
41	XXXII	8		Sewerage station	F	1		A
42	XXXII	28		Private storage/ commercial	Mb	2		A
43*	XXXII	34	1900	Residential/commercial, curio shop	Mb	2	B	P
44	XXXII	33		Private residential, multiple occupancy	Mb	3	B	G
45	XXXII	29, 31-32		Private open land				
46	XXXII	35	1978	Acraf House: residential/ offices/ curio shop	F	4		G
47	XXXII	30		Private residential	F	3	B	P
48a*	XXXII	1	1897	Mombasa club	T	3	B	G
48b		36		Swimming pool				G
49*	XXV	80	1596	Fort Jesus	F/T	3	B	R

No — Number of plot or buildings as shown on the map
Section — Old Town planning zone
Plot — Plot number
Date — Year of first construction/ opening, where known
R — Roof: Mb=Mabati (Corrugated iron); T=tiles; F=flat
S — Number of storeys
B — Balcony or veranda on one or more levels, sometimes enclosed
C — Condition: R=Restored (with completion year); Good=good; A=adequate; P=poor; D=derelict; C=construction/renovation in progress

* Listed buildings of architectural significance (Source: Hoyle 2002)

3.11.5 The Leven House as a Landmark

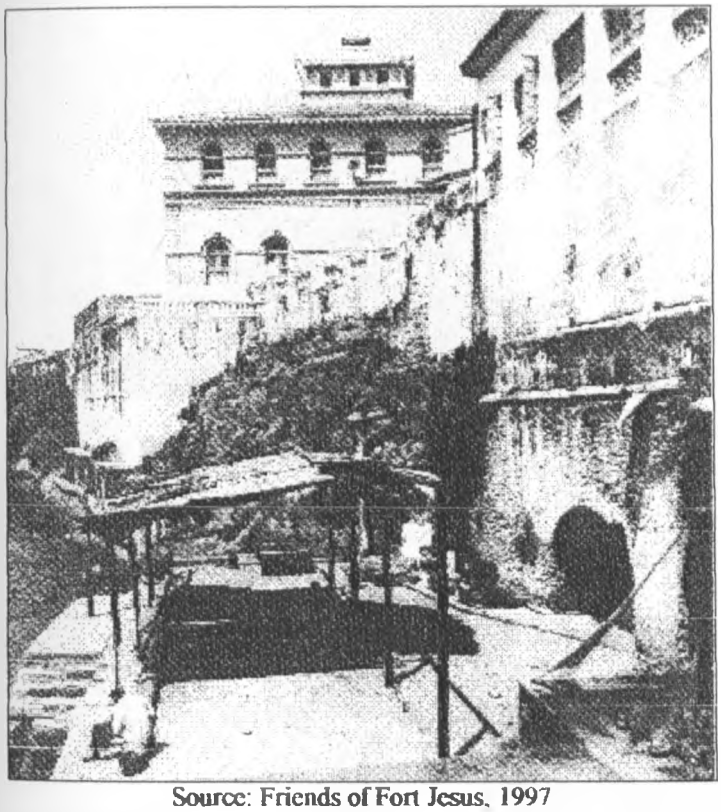
The building presently called Leven House is a reconstruction and revival of the original building, which was owned by the Mazrui family, an Arab ruling family. The site named after HMS Leven, one of the two British naval survey ships, which alighted there in 1824. Leven House is unique in Mombasa in that it has a history that can be documented back over 170 years. It has housed many of the nineteenth century explorers, missioners and early administrators who passed through administered Mombasa (Moriset, 2003). Currently rescue works are going on and it is proposed to have a commercial floor, conservation offices and a Swahili cultural museum after the restoration. Other site improvement works on the open space in front of the house and rehabilitation of the Leven Steps and jetty are also to be undertaken.

Chronology of The History of The Leven House and Steps

Prior 1824:	Leven House Built
1824 – 1826:	British Naval Officers receive an order from Captain Owen to administer Mombasa as a British Protectorate. They rent Leven House and use it as an anti-slaving base.
July 1825:	Lt. Emery, one of the young British Naval Officers who administered Mombasa during its short history as a British Protectorate cuts a tunnel with steps down to the jetty below, where he kept his small patrol boat. The construction of steps, well and tunnel starts in the same year.
1837:	Sayyid Said appropriates Leven House from Mazrui
May 1844:	Ludwig Krapf, a Germany Missionary, occupies Leven House with permission from Sayyid Said, Sultan of Zanzibar. He established the first Anglican Mission at Rabai and later worked on a Swahili dictionary, which he published in 1882. His wife and daughter died in Leven House in 1844.
1846 – 1884:	Various missionaries (e.g. Rebman) explorers, (notably Richard Burton and Speke) and administrators (British Consul in Mombasa) stay at Leven House at different times.
1884:	Salim Bin Hamisi el Mazrui, Liwali of Takaungu, reasserts his claim over Leven House and sells it to CMS.
1887/8:	Dr. Ardagh of CMS does medical work from Leven House.
1888:	Sir Fredrick Jackson stays in Leven House on his way to Uganda. Gedge stays in Leven House.

1888	Mr. G. S. Mackenzie, administrator of Imperial British East African Company rents Leven House and later buys it in 1891.
1894	Leven House used briefly as a school on the Island to teach English to Swahili and Hindu boys under Miss Bazett.
1895:	Leven House passed on to Colonial government.
1906/8	A large new building constructed on the site belonging to William Oswald and Co. The only part that belonged to the original building was the warehousing section on the ground floor.
1908 – 1928:	Building renovated and used as German Consulate.
1928	House sold at auction to Valji Bhanji an Indian Ivory Trader.
1936:	Pujara family buys Leven House.
1991:	Leven House gazetted as a national monument
1997:	National Museums of Kenya acquires Leven House (Morisct, 2003).

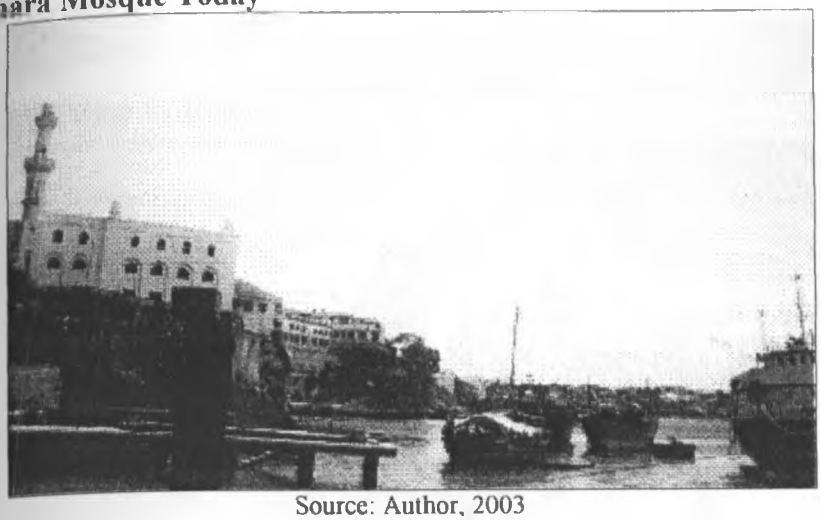
Plate 9, Landing Place at the foot of the Leven Steps



Source: Friends of Fort Jesus, 1997

The old Bohara mosque standing on the cliff was demolished in 1982. To the right is the entrance to the underground well dug by Emery in 1825.

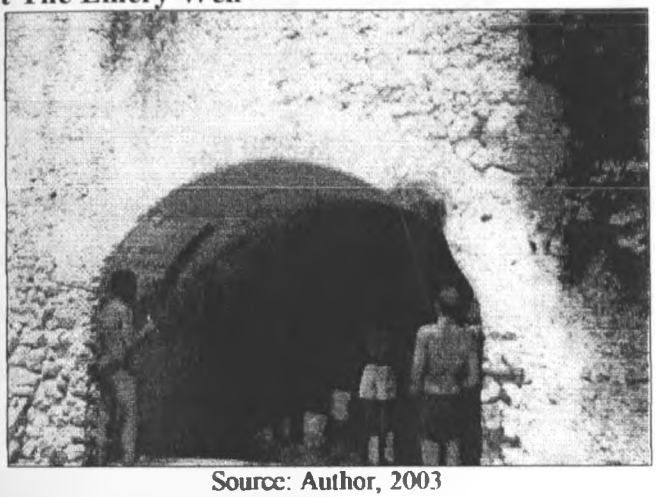
Plate 10, Bohara Mosque Today



Source: Author, 2003

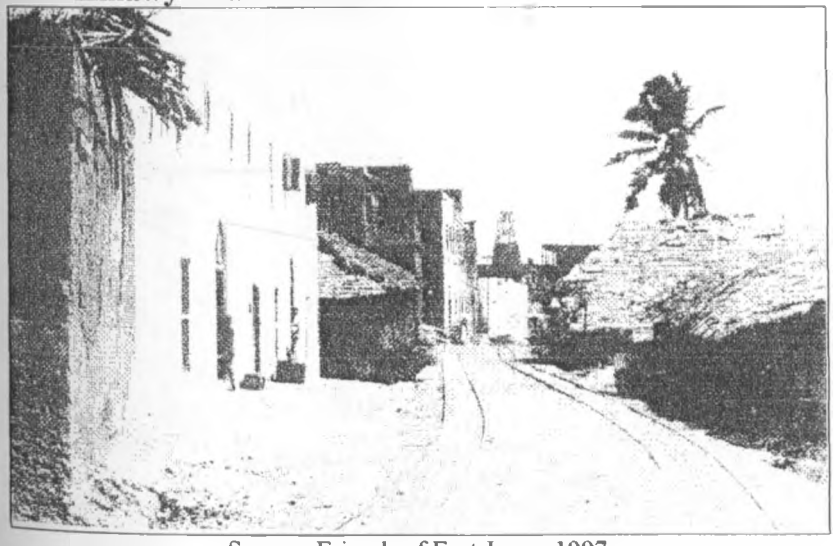
Notice the well, which is still in use as shown below.

Plate 11, Bathing at The Emery Well



Source: Author, 2003

Plate 12, Mbarak Hinawy Road in 1898



Source: Friends of Fort Jesus, 1997

The Mandhry mosque can be seen beyond the trolley lines. The makuti roofing and a village atmosphere pervaded with only an occasional stone building.

Plate 13, Mbarak Hinawy Road in 1910

Source: Friends of Fort Jesus, 1997

Notice the black window of the Mandhry mosque. Here the street has changed dramatically. Colonial officials can be seen in white suits. There is a trolley waiting for its passengers and the buildings are newly built with fancy woodwork. This is the very picture of an up-and-coming town.

Plate 14, Mbarak Hinawy Road in 2003

Source: Author, 2003

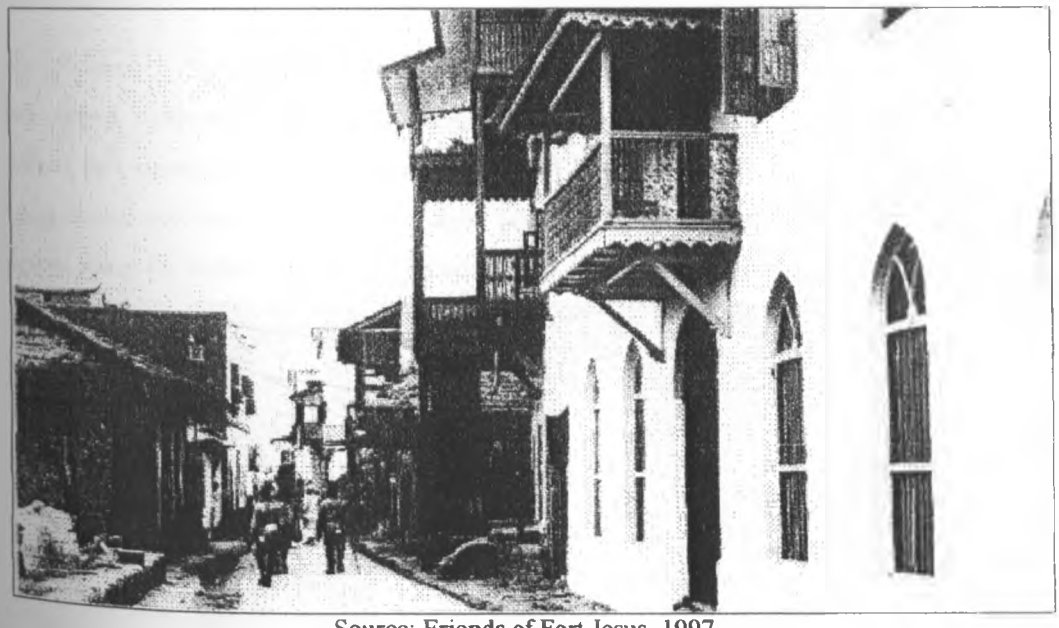
The trolley line has since disappeared and has been replaced by tarmac road. Imitative new architecture has also created a discordant streetscape.

Plate 15, View of Ndia Kuu in 1895

Source: NMK, 2001

This view down the main street was taken before any colonial development had taken place. Notice the palm trees that dominate the skyline. The trolley lines are just beginning to be laid. It is suggested that the shed in the foreground was probably used as a store for building materials.

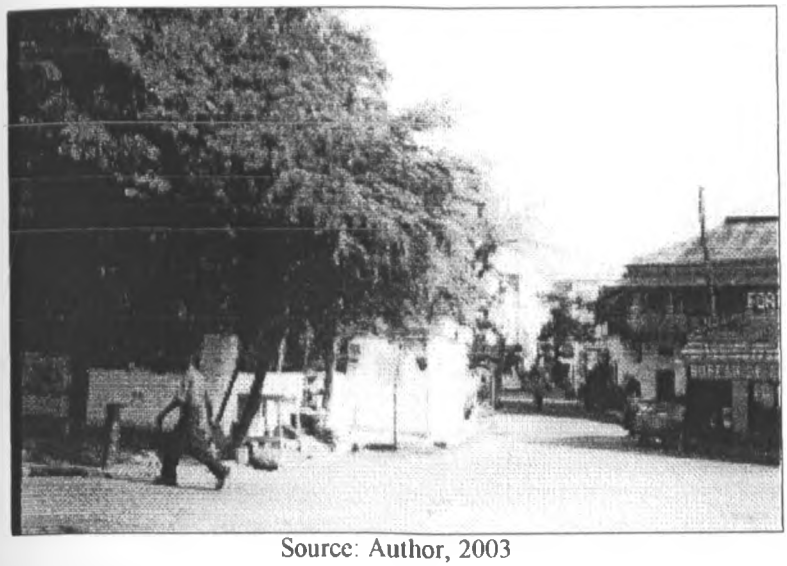
Plate 16, View of Ndia Kuu in 1910



Source: Friends of Fort Jesus, 1997

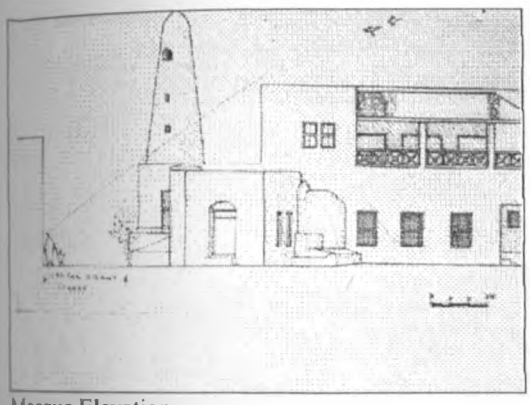
The town has now rapidly developed once railway project begun and overseas investment began to flow into the town. Indian policemen can be seen on patrol. The external staircase is still in existence today. However on the nearer building, it has been sadly modernised.

Plate 17, View of Ndia Kuu in 2003

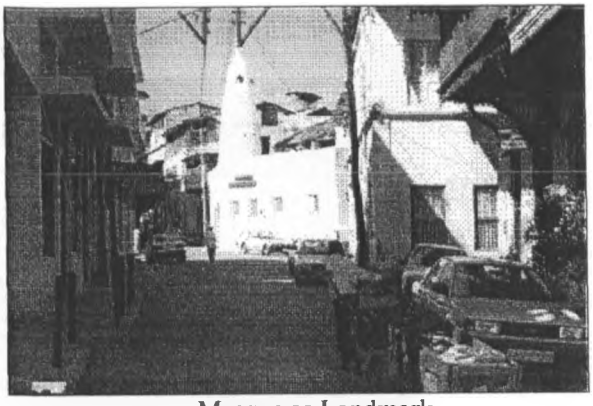


Source: Author, 2003

Plate 18, Mandhry Mosque

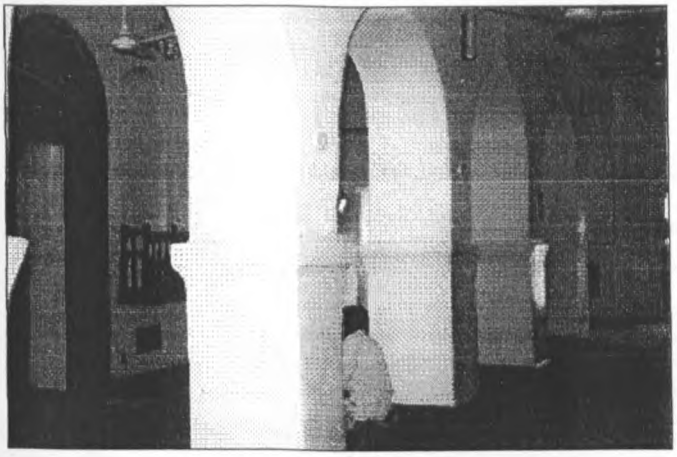


Mosque Elevation



Mosque as Landmark

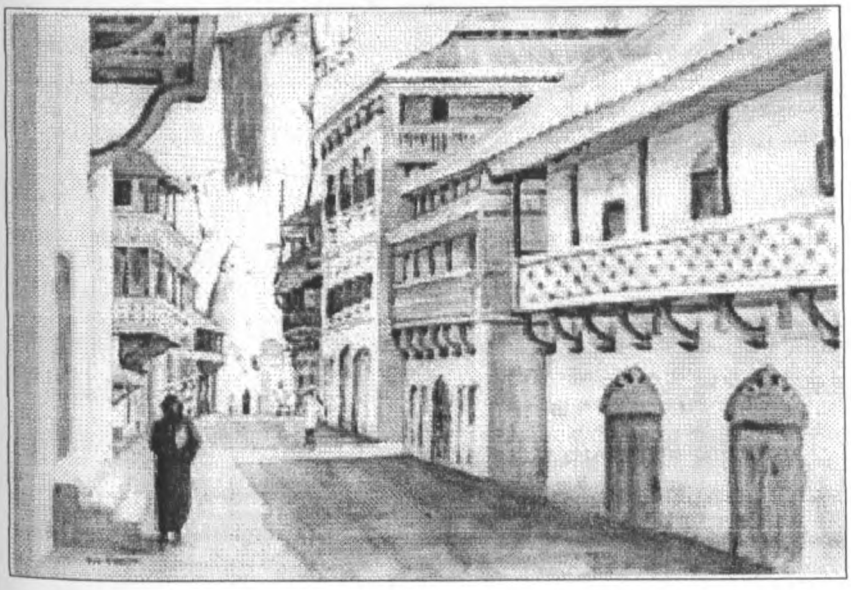
A 16th century mosque reputed to be the oldest mosque in use in the old town area. It is a well maintained two-storey building constructed in coral rubble finished with lime plaster. Originally, the mosque was only one level, pressure from population growth and the need to have a madrasa" and prayer space for ladies necessitated an additional storey in 1988 and again in 1992.



Mosque Interior

Chapter 4

Perception and Challenges in Planning and Management of Old Town of Mombasa



CHAPTER 4: PERCEPTION AND CHALLENGES IN THE PLANNING AND MANAGEMENT IN THE OLD TOWN OF MOMBASA

4.0 Introduction

This chapter expounds on the attitudes the residents of the Old town of Mombasa hold about their historic neighbourhood. It further explores on their opinions about modern developments taking place there. Further, the inherent problems and challenges in the planning and management of the historic area are explored and explain with a view to evolving sustainable interventions. The chapter further enumerates on the residents perceptions of their problems, causes and possible solutions. The chapter concludes by looking at the changes that have been taking place in the historic townscape.

4.1 The Perception of Neighbourhood Quality

To establish the perception of the townscape quality of the Old Town of Mombasa, seventeen characteristics were categorized into four quality concepts; namely

- Beauty
- Convenience
- Health
- Accessibility

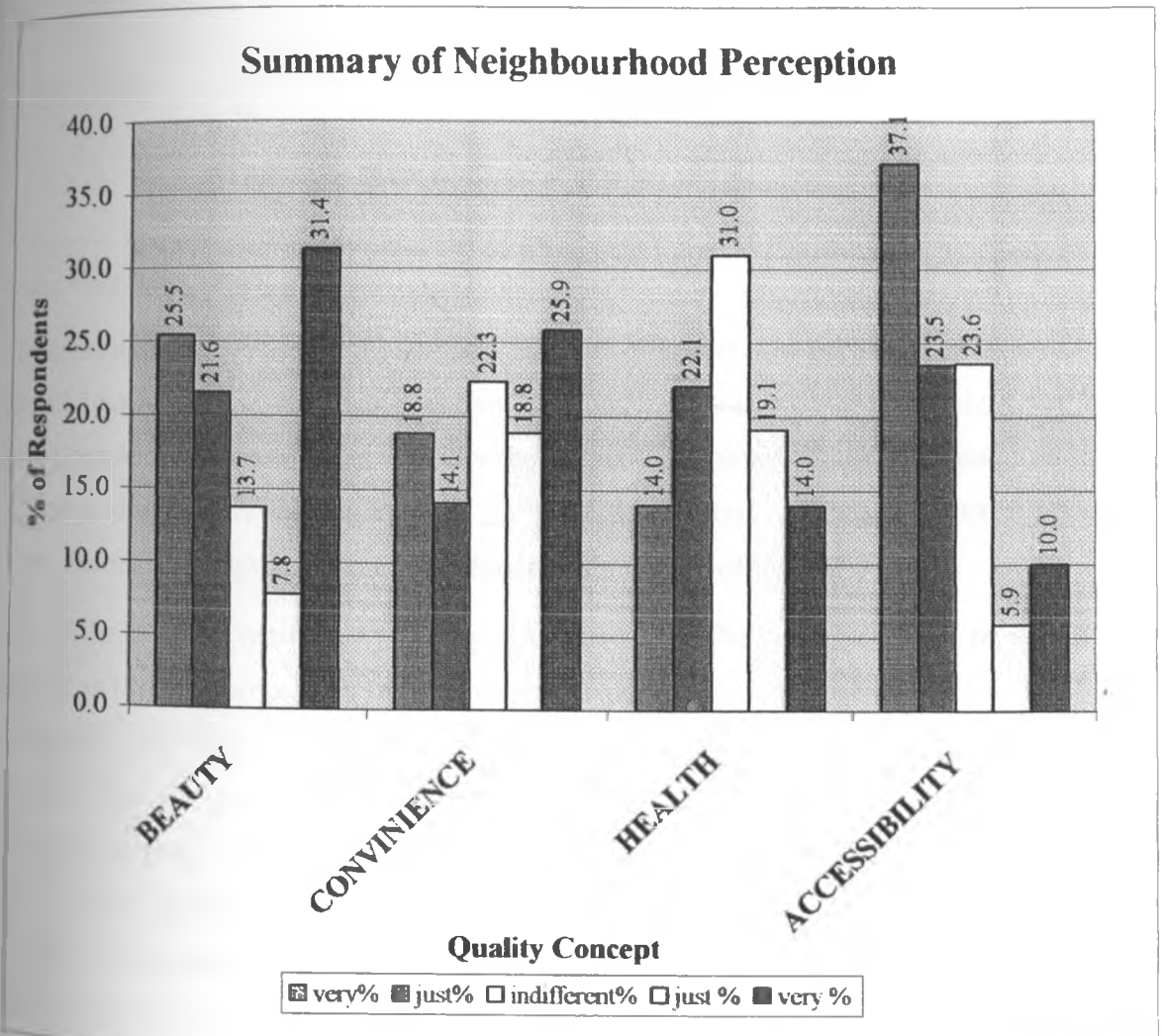
The residents were asked to mark any of the five spaces between the pair of words, which best-described how they perceived the historic neighbourhood in terms of the characteristics below. The spaces, from left to right represented very, just, indifferent, just and very.

1. BEAUTY		
	Aesthetic	Unique ____ ____ ____ ____ ____ Common
	Ornate	Decorated ____ ____ ____ ____ ____ Plain
	Age of Buildings	New ____ ____ ____ ____ ____ Old
2. CONVENIENCE		
	Quietness	Calm ____ ____ ____ ____ ____ Noisy
	Friendliness	Friendly ____ ____ ____ ____ ____ Hostile
	Facilities	Adequate ____ ____ ____ ____ ____ Inadequate
	Space	Spacious ____ ____ ____ ____ ____ Crowded
	Burglary/Safety	Safe ____ ____ ____ ____ ____ Unsafe
3. HEALTH		
	Disease	Healthy ____ ____ ____ ____ ____ Unhealthy
	Sanitation	Clean ____ ____ ____ ____ ____ Dirty

	Waste Disposal	Effective ____ ____ ____ ____ ____ Ineffective
	Air Quality	Fresh ____ ____ ____ ____ ____ Stingy
4. ACCESSIBILITY		
	To Work	Close ____ ____ ____ ____ ____ Far
	To Market	Close ____ ____ ____ ____ ____ Far
	To Hospital	Close ____ ____ ____ ____ ____ Far
	To School	Close ____ ____ ____ ____ ____ Far
	To Open Space/ Park	Close ____ ____ ____ ____ ____ Far

The summary of the neighbourhood perception is shown in the graph below.

Figure 3, Summary of Neighbourhood Environmental Perception

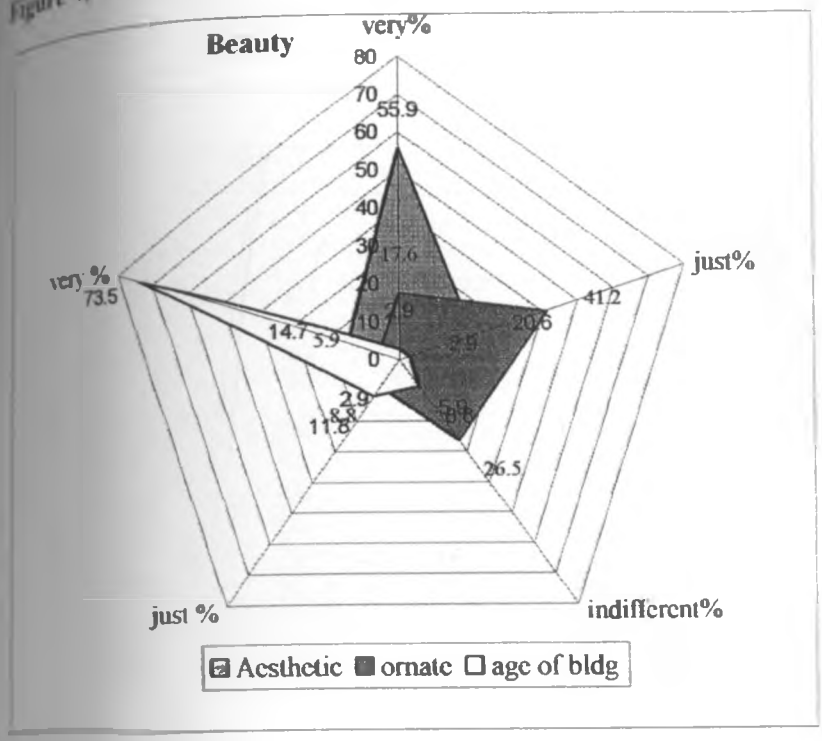


Source Field Survey, 2003

The empirical data shows that the residents' perception of their neighbourhood character is extremely varied on the above concepts. The concepts are discussed below.

4.1.1 Beauty

Figure 4. The Concept of Beauty



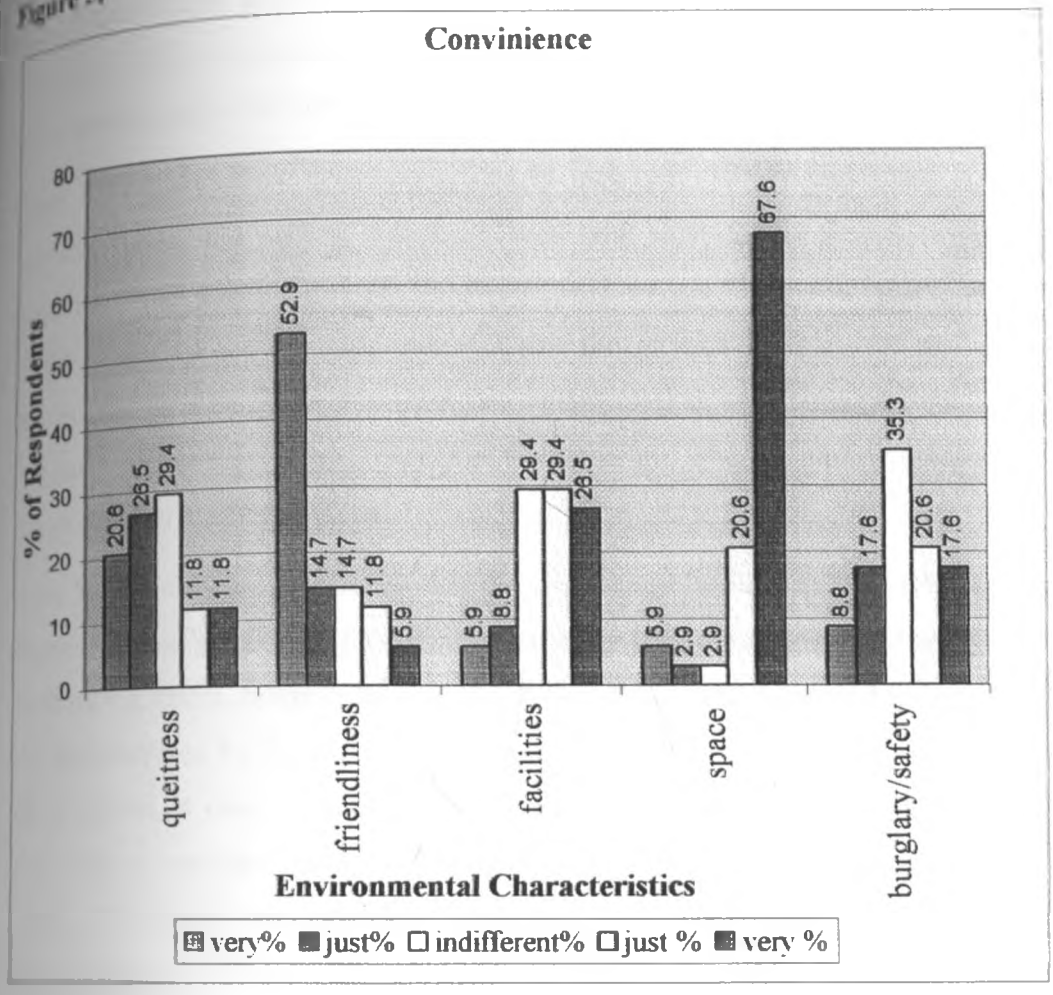
Source: Field Survey, 2003

The general quality of the neighbourhood in terms of beauty was perceived by over 46% as beautiful while 13.7% were indifferent and just under 40% perceived it as ugly. Over 75% of the respondents consider the neighbourhood unique in terms of aesthetics and just about 17% considered it very common while 5.9% were indifferent. This shows that a majority of the residents recognize the unique architectural heritage of the Old Town.

Age of the building represents the only characteristic in the beauty concept to attract the highest and lowest proportion of positive and negative responses; having 73.5% and 2.9%, respectively. Probably, because the old neighbourhood is considered to be old by most people, very few people would admit that they live in a relatively modern environment. The characteristic of ornate attracted the highest responses of indifferent, standing at 26.5%. This concept implies self-criticism in verbalising whether one lives in a decorated or plain environment, and therefore few inhabitants were ready to undertake self-criticism. There could also be lack of will to criticise or lack of competence to do so.

4.1.2 Convenience

Figure 5, The Concept of Convenience



Source: Field Survey, 2003

Convenience is an important element of any neighbourhood quality. The characteristics examined under this concept were:

- Quietness (calm or noisy)
- Friendliness (friendly or hostile)
- Facilities (adequate or inadequate)
- Space (spacious or crowded)
- Burglary/safety (safe or unsafe)

18.8% of the respondents perceived their neighbourhood as very convenient while 14.1% considered it just convenient. 22.3% were indifferent, 18.8% and 25.9% taking ' just ' and 'very' negative on the situation respectively. Therefore more people felt that the neighbourhood was more inconvenient than convenient.

Noise was not considered a major environmental issue with only 11.8% claiming to live in a very noisy environment. Usually noise is a predominant issue in any urban environment despite its invisibility. The study supports the view that the people may have adapted to the situation. There is actually a lot of noise from horn blowing cars, human being conversing or quarrelling and even from electronic entertainment gadgetry e.g. radios and televisions.

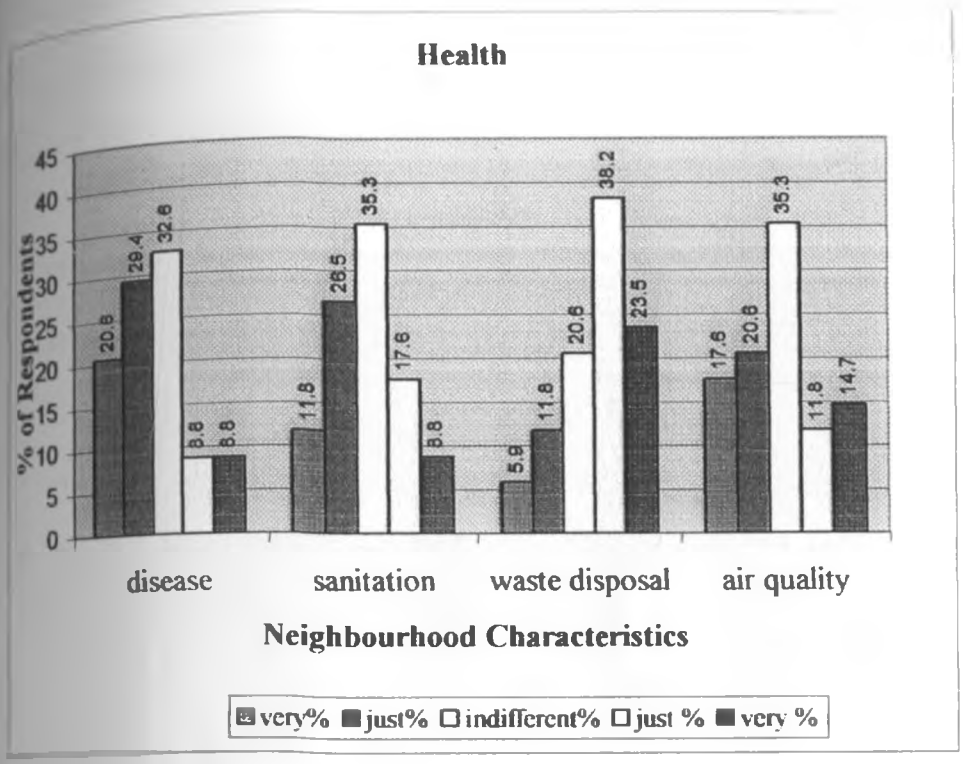
Over 65% found their neighbours friendly and only 17% found them hostile. This is understandable, in a society unified by Islam and close family ties. A majority (67.8%), considered the environment very crowded, and only 5.9% considered it spacious. This could be due to the fact that they consider the physical presence of many people as a burden and as a derogatory in their assessment of their environmental quality. The area has had an influx of refugees, mainly of Somali origin who are putting pressure on the Old Town physical and social fabric.

Over 50% of the respondents felt that the area lacked facilities and 29.4% were indifferent. However, from physical observation, it was clear that the condition of the physical public facilities e.g. roads, refuse collection and storm water drainage needed to be upgraded.

As demonstrated by the highest percentage of indifferent responses (35.3%) in the safety characteristic, it emerges that people are not sure whether the area is safe or unsafe. This goes against common national perception, where Old Town has been branded a terrorist haven. This result could be explained by the fact that the data was collected just after several residents, suspected of terrorism had been arrested. People generally do not tell on their neighbours and this could possibly explain this result. This is a good case of how the culture of a people colours the perceptual process.

4.1.3 Health

Figure 6, The Concept of Health



Source Field Survey, 2003

Health is another important element in the neighbourhood quality. The characteristics that account for this quality concept includes: disease, sanitation, waste disposal and air quality. The empirical findings as regards this concept are interesting, in that equal percentages of respondents felt that they lived in very healthy and very unhealthy environments (14.0%). More interestingly is the observation that this quality concept had the highest average of indifferent responses (31.0%) among all other quality concepts.

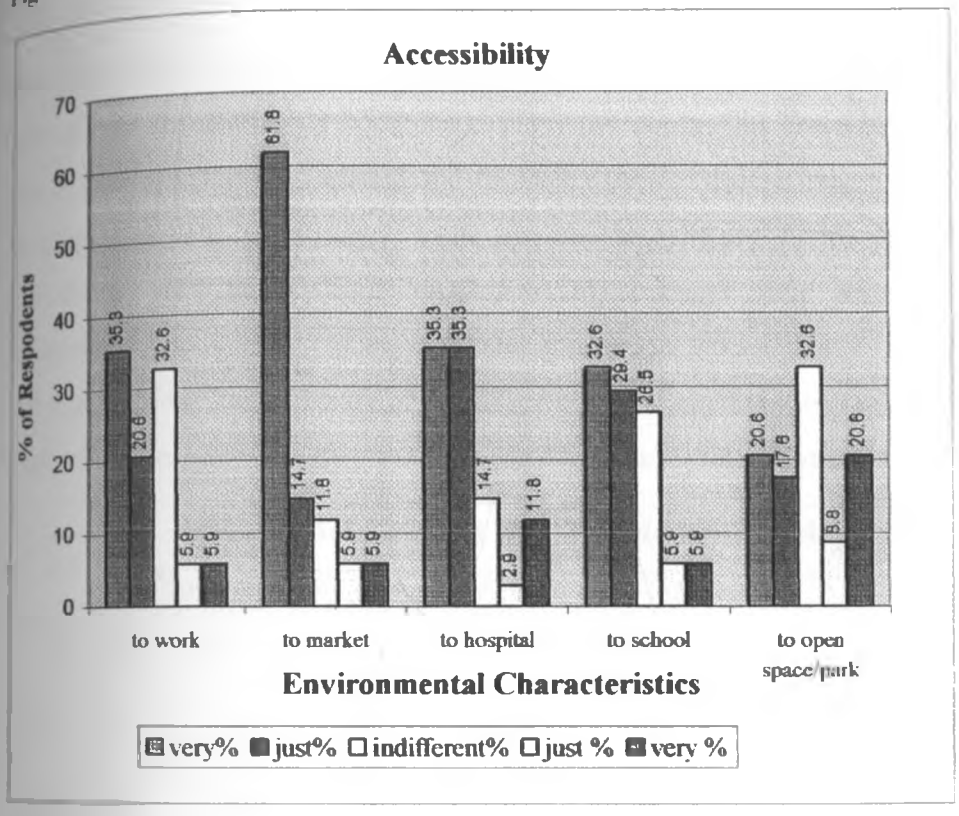
However, given the high incidence of mosquitoes, flies and general unsanitary conditions in most parts of the study area, these findings seem to reflect the high degree of adaptation by most people to the actual conditions in which they find themselves. In practical policy terms, they are the people to be educated into appreciating the importance and convenience of some modern amenities like sewer lines over pit latrines and the bucket system of soil waste disposal.

Solid waste disposal attracted the highest (23.5%) proportion of negative responses in this category. The implication is that most people have not adapted to the nuisances arising from heaps of stingy solid wastes that are a common feature. Over 38% of the respondents considered their air quality fresh and just under 27% of them felt that air pollution

constituted a threat to their health. As such, the relative awareness about the importance of air quality is high notwithstanding the 35.3% who were indifferent on this aspect. Continued community sensitisation is therefore necessary.

4.1.4 Accessibility

Figure 7, The Concept of Accessibility



Source: Field Survey, 2003

The concept of accessibility sought to elicit perceptions about five significant locations: the place of work, the market, the hospital, the school and relative nearness of open parks or spaces for recreation. This concept had the highest proportion of responses in the very positive category (37.1%). The plausible explanation for this perception is that most of the facilities under investigation are within walking distance of the residents. Only 10% considered themselves to be living very far from their location.

20.6% of the respondents however felt that they do not have access to parks and open spaces. However, the beach is close and the people generally interact on the streets. An inspection of the beach showed that it was largely polluted and the only clean area was at the Fort Jesus sea front and the Mombasa Club riparian reserves. Therefore other factors than mere physical distance are clearly at play and could easily have influenced the attitudes. Dirty beaches, occupation of the streets by rubbish or cars, ineffective transport

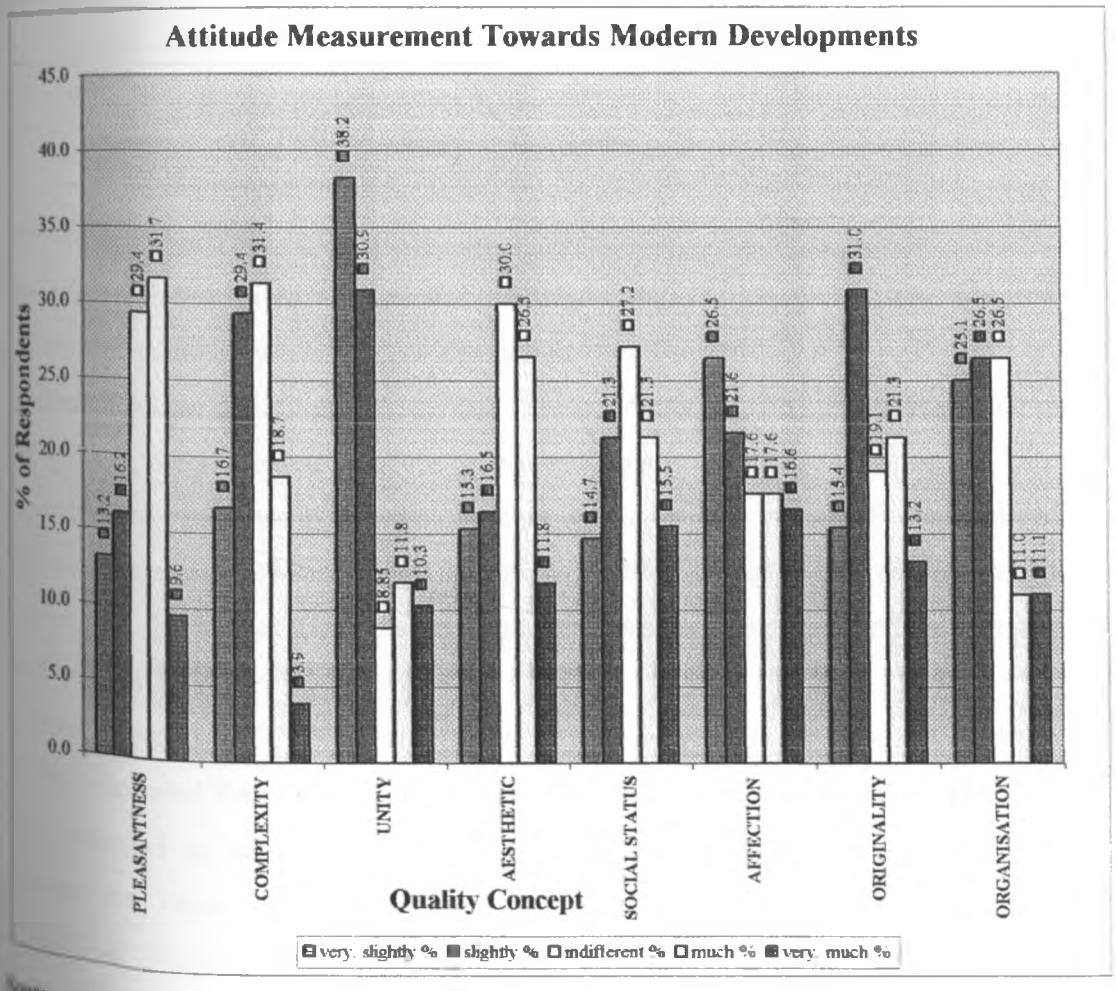
system could easily add (psychologically) some mental kilometres to the distance between the respondents' homes and the location of alternative open areas. Sometimes, the physical distance is a reality, as some have to go to the beaches outside the island, in the north and south coasts.

4.2 Attitudes Towards Modern Developments in the Old Town of Mombasa

4.2.1 Introduction

The inhabitants were requested to give their opinion concerning the modern developments and/ or built forms that are being increasingly put up the Old Town of Mombasa. They did this by placing a mark on a scale of 1 to 5 after the word describing a certain aspect of the developments. The scale ranged from very slightly, slightly, indifferent/ undecided, much and finally very much. Eight environmental concepts were investigated. They are: pleasantness, complexity, unity, aesthetic dimension, social status, affection, originality and organisation. The summary of the attitudes is presented in the graph below.

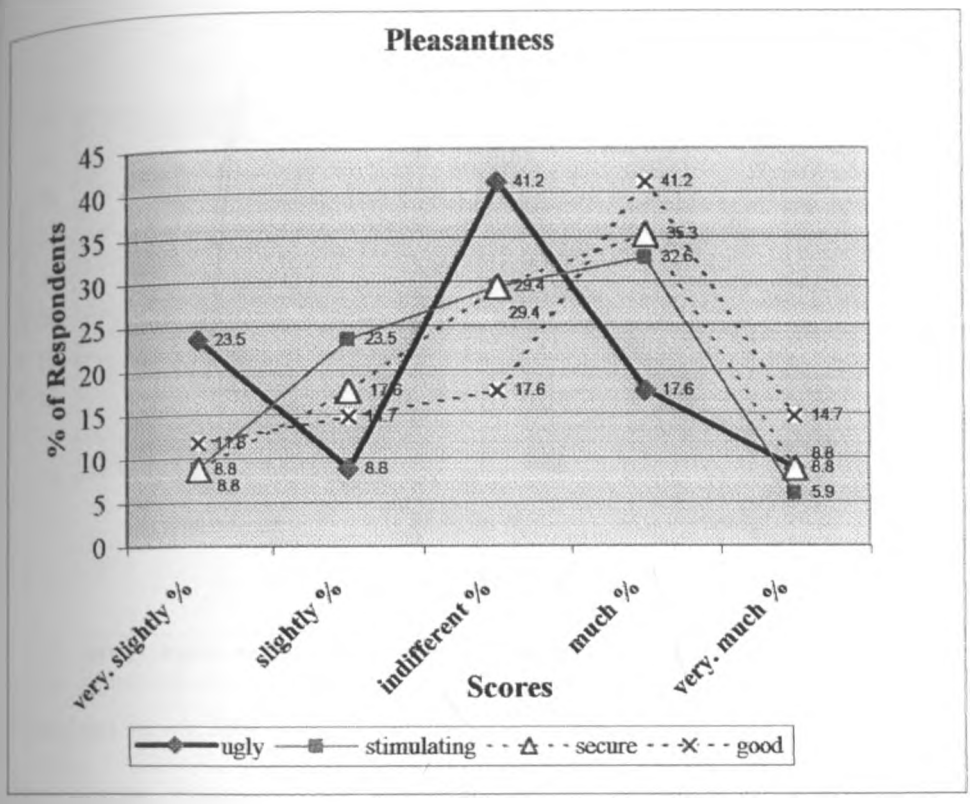
Figure 8, Summary of Attitudes towards Modern Developments



Source: Field Survey, 2003

4.2.2 Pleasantness

Figure 9, The Concept of Pleasantness



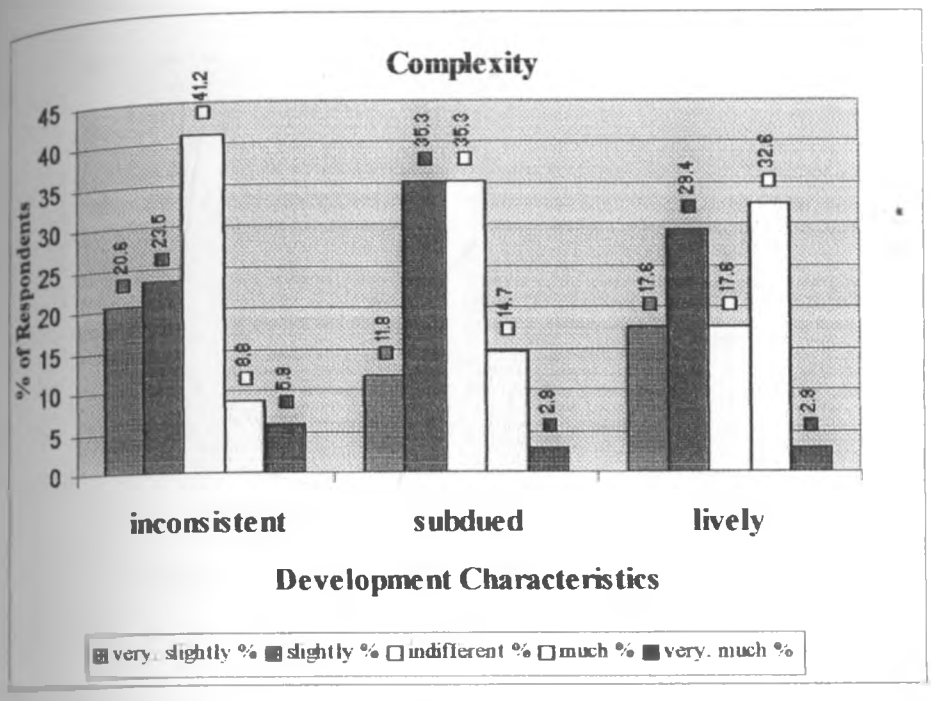
Source: Field Survey, 2003

This concept investigated the amount of delight, satisfaction or security one felt in an environment created by the modern developments. The attributes investigated were ugly, stimulating, secure and good. A majority of respondents (31.7%) felt it was much pleasant and 9.6% of them stressed that the new development were very pleasant. 41.2% of the responds were indifferent on the concept of ugly and over 40% considered such environments secure. The explanation may lie in the fact that much burglar proofing was evident and the use of concrete as a modern building material certainly ensures that developments are secure and stronger.

A higher percentage (41.2%) rated these new developments as good compared to only 14.7%) who rated them as very good. This shows that new developments are increasingly being accepted as part and parcel of the Old Town of Mombasa irrespective of the problems they cause. The future of old town therefore is jeopardised unless the populace is educated on the need to conserve. More current accommodation must also be provided because this is what the modern developments offer.

4.2.3 Complexity

Figure 10, The Concept of Complexity



Source: Filed Survey, 2003

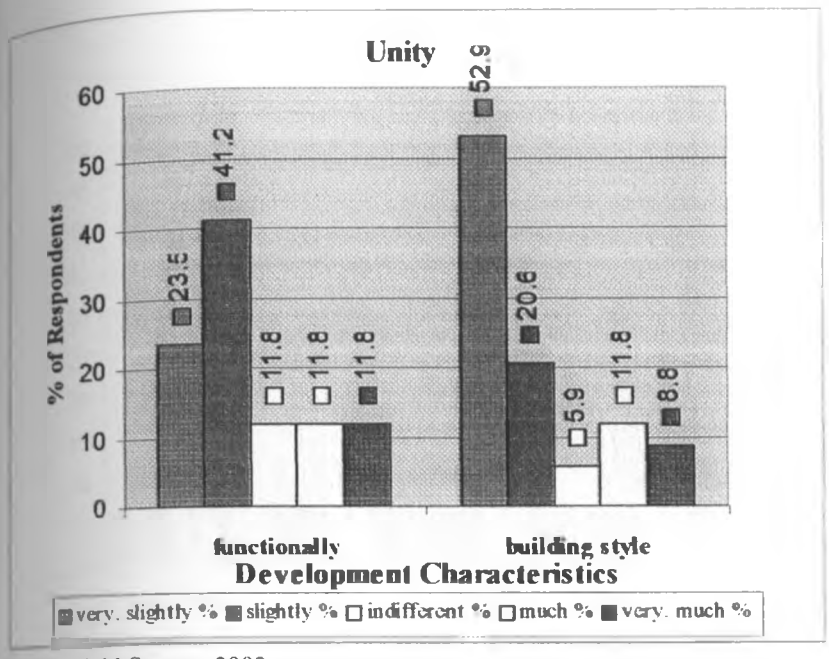
This concept measured the liveliness or simplicity or even difficulties in the new developments. Only about 20% of the respondents considered the new development complex and over 45% considered them as not complex. This may be explained by the fact that the residents are mobile and are likely to have been exposed to such developments elsewhere in the greater Mombasa and have thus become acclimatized to them.

The attitudes towards inconsistence produced a high percentage of indifference (41.2%). Only 59% considered the developments very much inconsistent compared to 20.6% who considered them very slightly inconsistent. The 59% probably represents those already sensitive enough to the dangers of un-contextual developments. These developments stand out, screaming and dominating the neighbourhood. They overcome the other developments in terms of height and colour.

Only 2.9% of the respondents rated the new developments as very lively compared to over 45% who rated them as below average. The response could come from elder generations who want to live in familiar surroundings.

4.2.4 Unity

Figure 11. The Concept of Unity



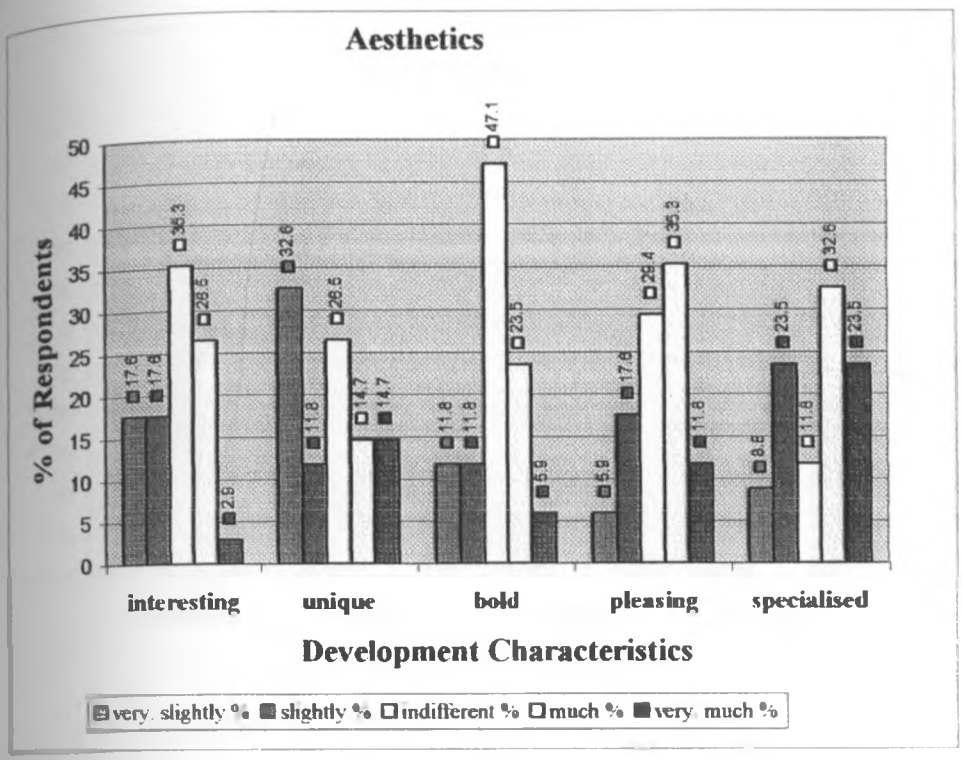
Source: Field Survey, 2003

This concept sought to measure how modern developments fit into an environment. Over 68% rated these developments as being below average with only about 22% rating them above average.

Functionally, the percentage rating them very good was only 11.8% while 41.2% rated them as slightly good. An observation of the physical environment reveals that these new developments are not environmentally friendly. They are usually uncomfortably hot and air conditioners have to be introduced to combat the high temperatures. The attitude towards building style reveals an already preconceived notion of style. Over 50% considered the new developments out of place and only 8.8% considered them to be of pure style. This is reinforced by what was observed, as the modern developments tend to be out of style with the historic neighbourhood.

4.2.5 Aesthetic Dimension

Figure 12, The Concept of Aesthetics



Source: Field Survey, 2003

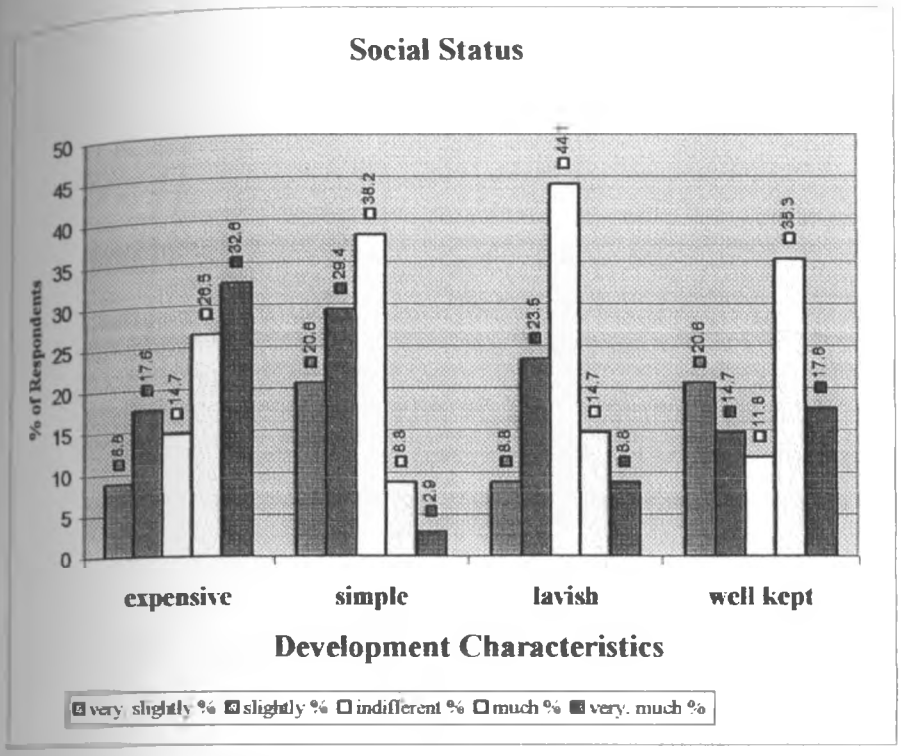
This dimension was used to evaluate the powerfulness of the environment in evoking visual pleasantness. In this concept, it is important to note that 30% were indifferent and this is probably because the concept implied self-criticism. 15.3% considered the developments very slightly aesthetic and 11.8% as very much aesthetic. Only 2.9% considered the development very interesting while 17.6 considered them very slightly interesting. The 2.9% arguably represent those who want to live in these new developments.

The attitude towards uniqueness produced 32.6% of the respondents considering them very slightly unique. It is clear that people do not see the new developments as unique, and maybe see them more as intrusions.

The question on specialized function revealed that over 25% of the responds consider the modern developments specialized. This is because the new developments are normally offering only one function e.g. banking or office space. Those that offer mixed uses are also very specialised for the various uses and do not adapt well to new ones.

4.2.6 Social Status

Figure 13. The Concept of Social Status



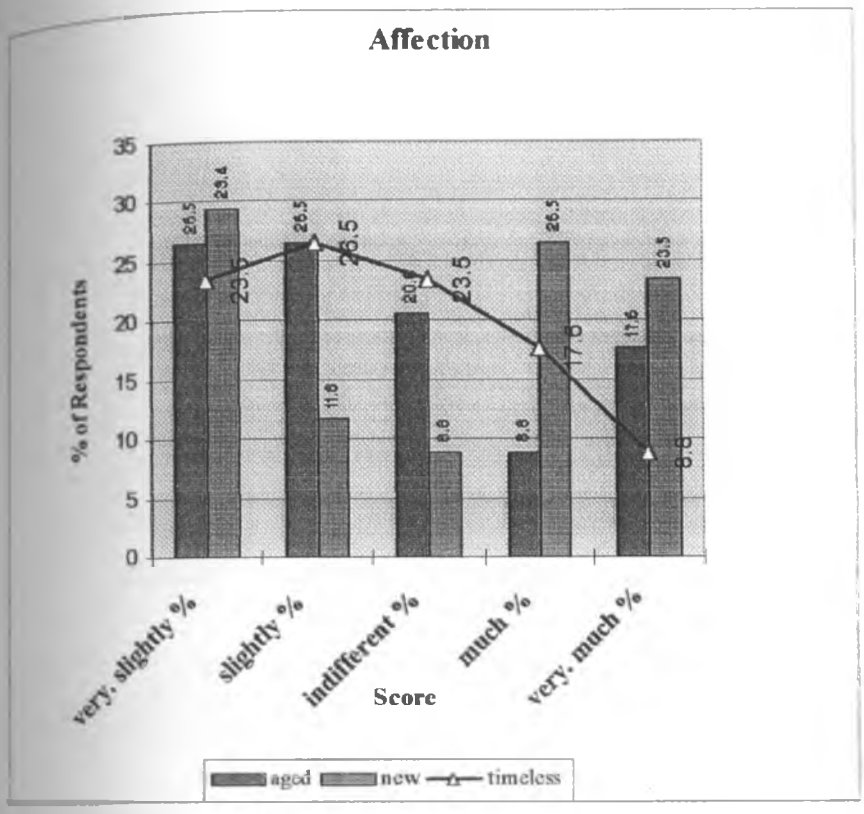
Source: Field Survey, 2003

The question whether new developments promote or demote social status produced data that was balanced about indifferent. 27.2% of the respondents were indifferent while 36 8% were above average. However on the attribute of expensive, 32.6% considered them very much expensive and only 8.8% considered them to be very slightly expensive. Only 2.9% considered them very much simple and a hefty 20.6% as very slightly simple. 44.1% were indifferent on the attribute of lavish.

The data generally illustrates the fact that most people felt that modern developments enhance their social status and a person living in a modern house is thought of as being trendy. The residents therefore should be educated on the detrimental implication of such attitude towards a neighbourhood *in toto* because it is such attitudes that cause historic neighbourhoods to become derelict. The approach should be on aesthetic education.

4.2.7 Affection

Figure 14. The Concept of Affection



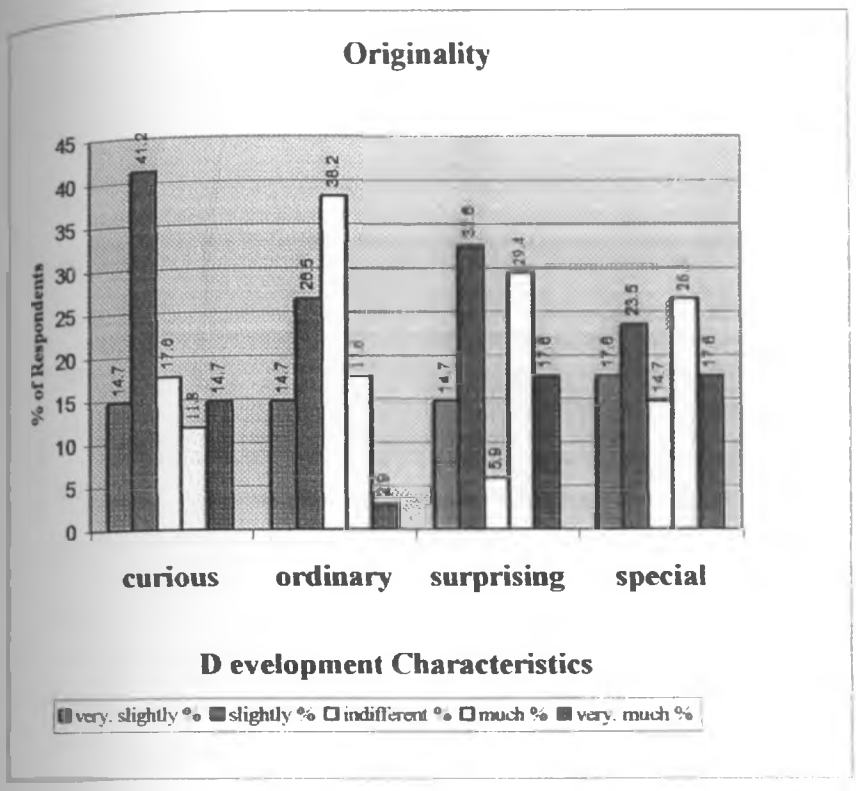
Source: Field Survey, 2003

The concept elicited attitudes towards the age of the environment created by these new developments. It also sought to investigate a feeling for the old and genuine. The characteristics investigated were timeless, aged and new.

Over 48% felt very little affection for this environment with about 34% feeling affection for it. 17.6% were indifferent. 50% of the respondents felt that the new developments are not timeless and this is reinforced by 53% who felt that the new developments are not aged at all The results indicate that people generally felt that the new developments are an intrusion in their old environment but the attitude towards this truism can only be comprehensively judged from an analysis of other concepts.

4.2.8 Originality

Figure 15, The Concept of Originality



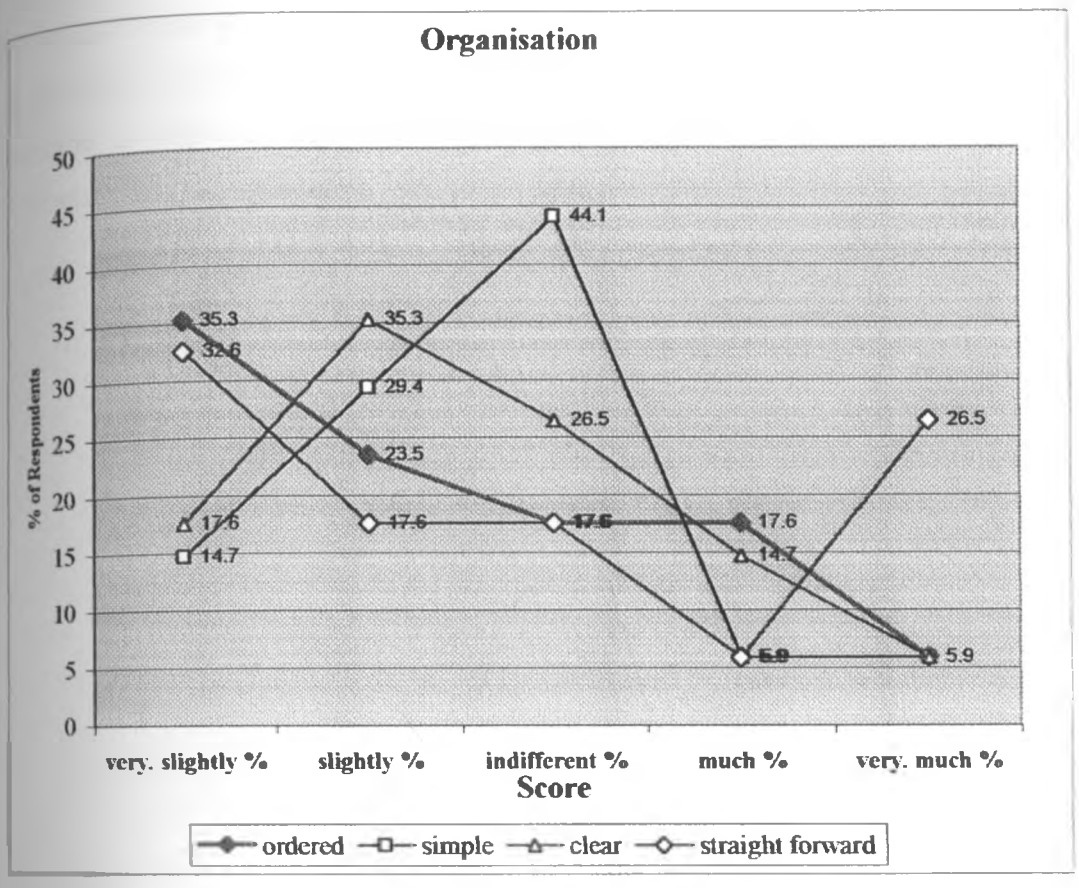
Source: Field Survey, 2003

This concept sought to assess the unusual and surprising in an environment. Over 45% rated the modern developments below average in originality. 19.1% were indifferent and 34.5% rated the modern developments above average. Only 5.9% considered them very much ordered while 35.5% considered them very slightly ordered. 2.9% considered these developments very much ordinary while 14.7% considered them very slightly ordinary.

An equal number of respondents 17.6%, considered the developments both very slightly special and very much special. The data shows that modern developments are quite unusual, but are increasingly being used or put up. This is confirmed by the over 47% of the respondents of the respondents who are not surprised by these developments. In this category much individual variation is observed. This could be explained, probably by the fact that younger people may prefer exotic typologies while the old preferred much more familiar building typologies.

4.2.9 Organisation

Figure 16. The Concept of Organisation



Source: Field Survey, 2003

The concept of organization measured the connection and coordination of the modern developments to enhance vital processes and functions in the enhancement of a total environmental coherence. In summary, the concept of organization was heavily negatively biased. 51.6% rated the new developments below average, 26.5% were indifferent,' and 22.1% as above average.

Attitudes on order as an attribute of organisation produced 35.3% of respondents considering the developments as very slightly orderly. Only 5.9% of the respondents considered them very orderly. The former could be the conservative type and the later could cover the vibrant people likely to be the younger generation and possibly working outside the Old Town.

Attitudes towards simple and clear generally produced higher percentages of negative responses. 14.7% of the respondents felt very slightly simple and 5.9% felt very much

simple This confirms the notion that people are getting used to these developments but consider them complex to their understanding of the environment.

A high percentage, 35.3%, considers them slightly clear with 26.5% of the respondents rating indifferent. It is therefore clear that these new developments do not promote visual order in the historic environment. This is further confirmed by the 50.2% who rate the attribute as below average and only 32.6% as above average on the straightforward attribute.

4.3 Challenges In Planning and Management of Old Town of Mombasa

4.3.0 Introduction

In order to institute planning interventions for a sustainable historic townscape, it is necessary to delve into the main challenges and problems experienced in the conservation and management in the Old Town of Mombasa.

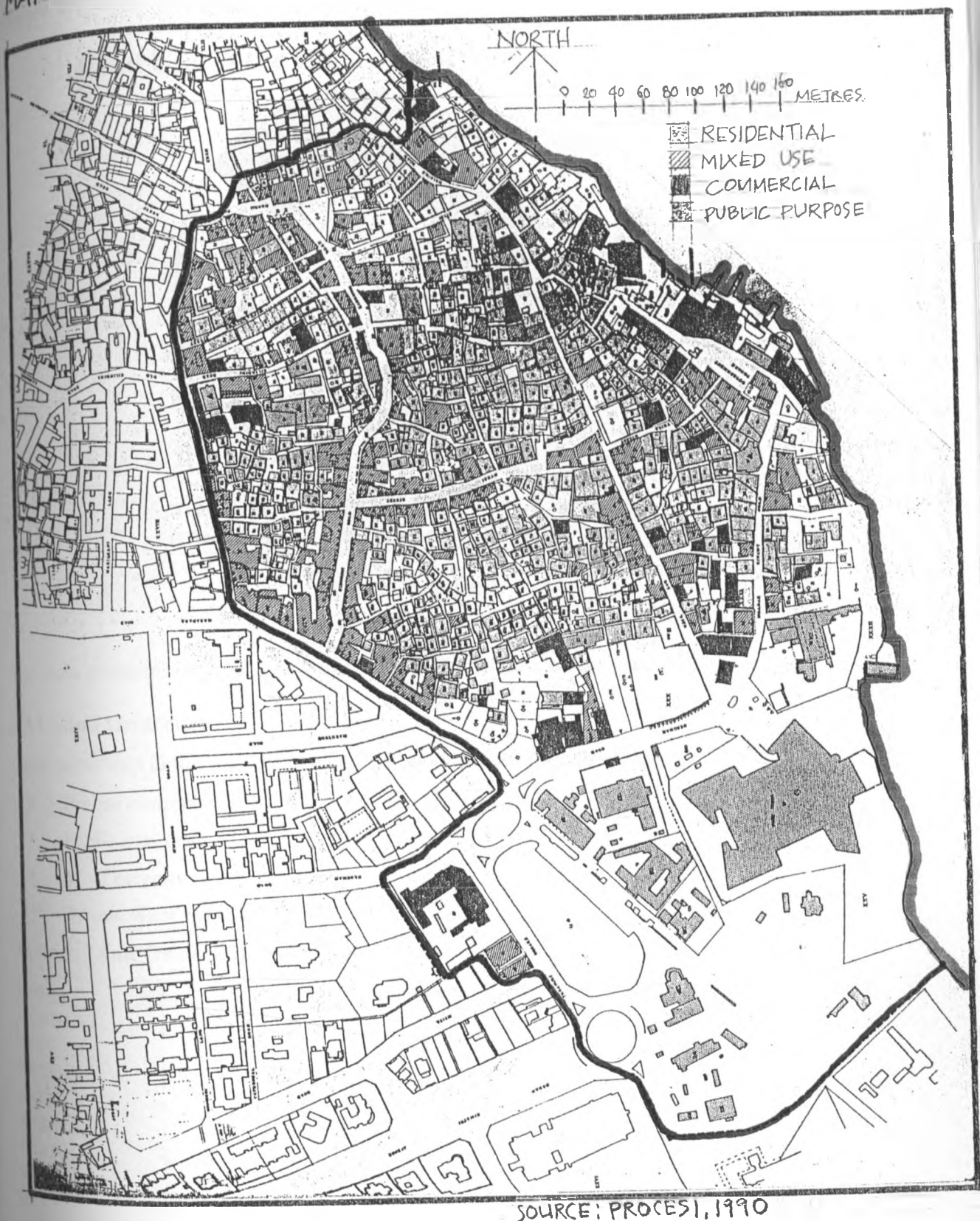
The conservation area covers approximately 31 hectares and contains a total of 774 plots divided into 12 sections (Procesi, 1990). This information, although over a decade old, is the latest available as at 2004, even at the conservation office. The average size of these plots inside the Old Town proper, that is sections XXIX through XXXVI and section XLII and XLIII is 236.2 square metres (ibid). For those plots in the Treasury Square area, the sizes are much larger.

Table 8, Land Use in Square metres by Section

Section	Residential	Mixed Use	Commercial	Public Purpose	Public Garden	Open Spaces
XXV/XXVI	0	534	5131	77792	25632	0
XXIX	8410	10090	388	3949	0	506
XXXI	31828	11935	1319	4255	0	5886
XXXII	7338	5236	1710	823	0	226
XXXIII	3951	1688	886	6354	0	4298
XXXIV	8869	3920	2178	4184	0	6757
XXXV	9664	5887	93	379	0	539
XXXVI	4992	5413	999	3063	0	506
XXXVII	5801	5114	495	1109	0	146
XLII	2192	1421	0	364	0	0
XLIII	0	0	477	0	0	243
TOTAL	**83045**	**51238**	**13676**	**102272**	**25632**	**19107**

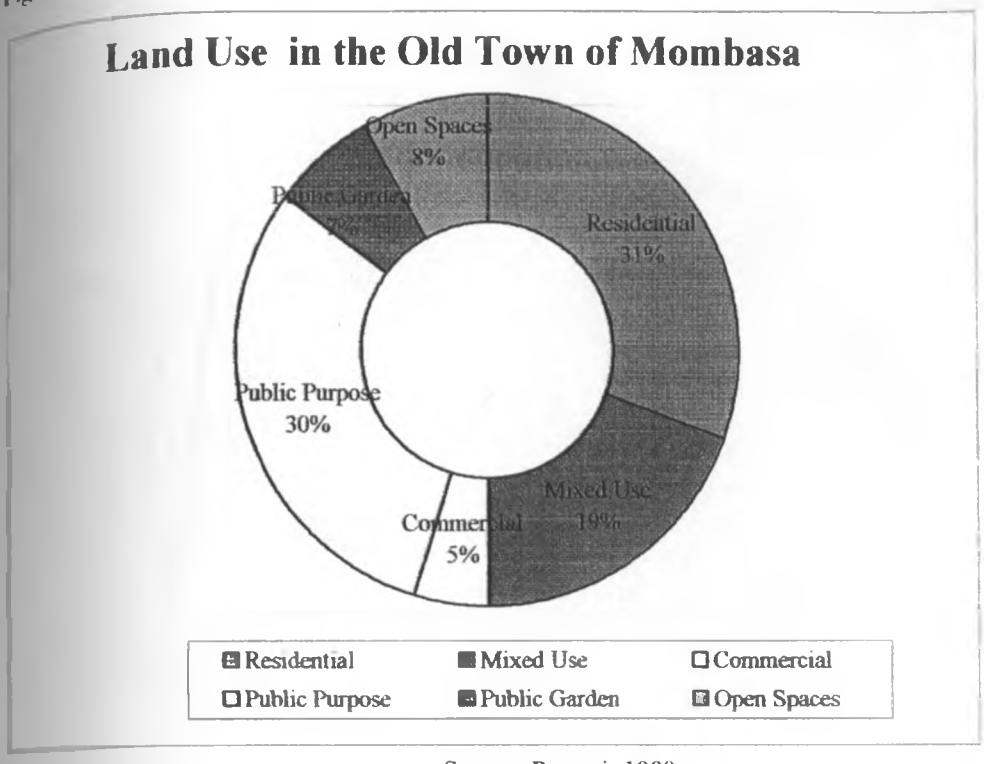
Source: Procesi, 1990

MAP 18 EXISTING LAND USE IN OLD TOWN OF MOMBASA



SOURCE: PROCESI, 1990

Figure 17, Land Use in the Old Town of Mombasa



Source: Procesi, 1990

The main problems in the planning of this neighbourhood are discussed below.

4.3.1 Land Ownership

Land ownership in this zone can be categorised into four groups namely: -

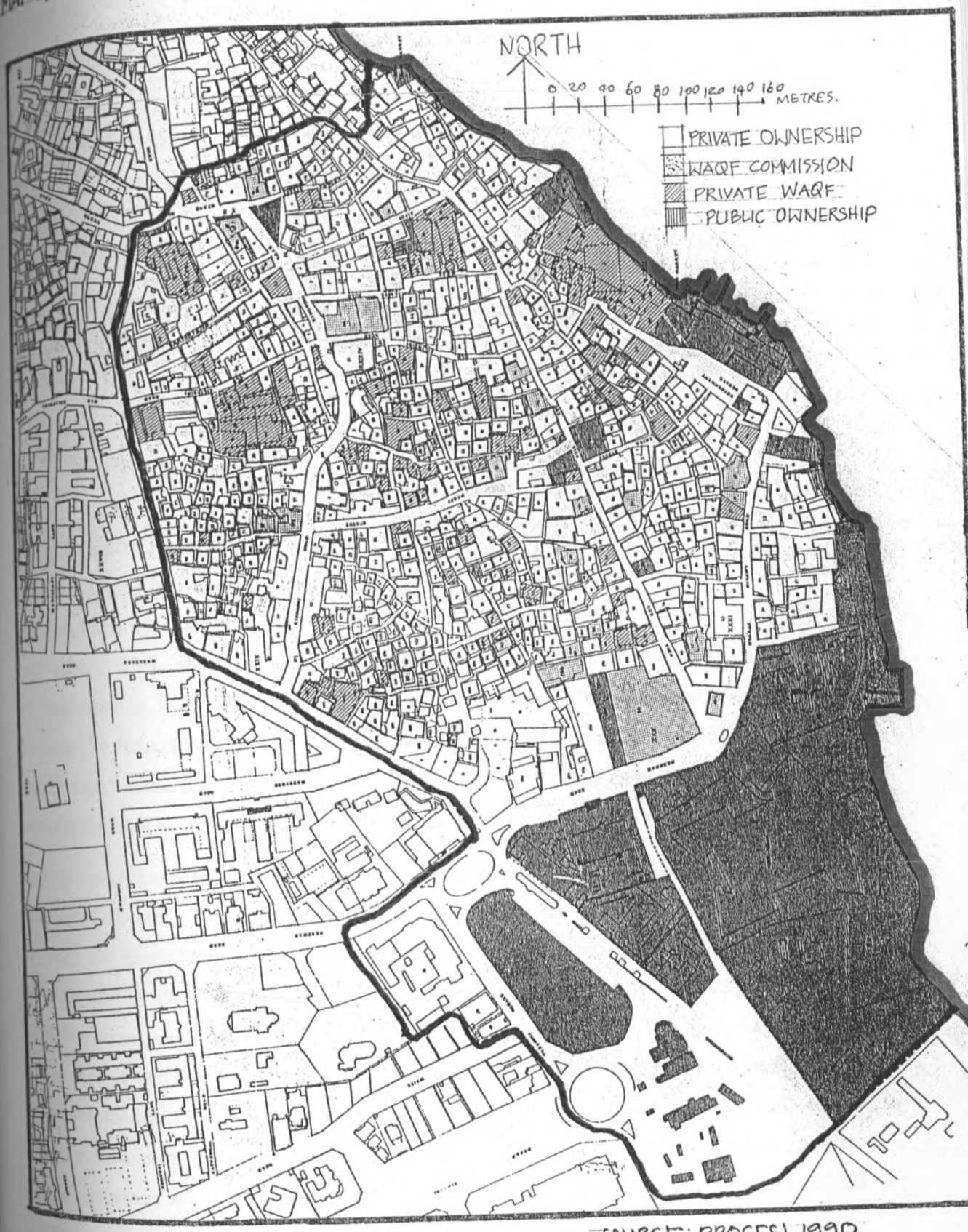
- Private ownership
- Public ownership
- Waqf property
- Private Waqf property

Table 9, Land Ownership by Section

Section	Private	Public	Waqf Commission	Private Waqf
XXV/XXVI	3	13	0	0
XXIX	85	2	4	14
XXXI	159	6	10	18
XXXII	60	4	7	2
XXXIII	23	11	1	0
XXXIV	69	8	1	24
XXXV	71	8	6	19
XXXVI	49	2	4	7
XXXVII	41	4	3	9
XLII	21	0	1	2
XLIII	2	1	0	0
Total	**583**	**59**	**37**	**95**

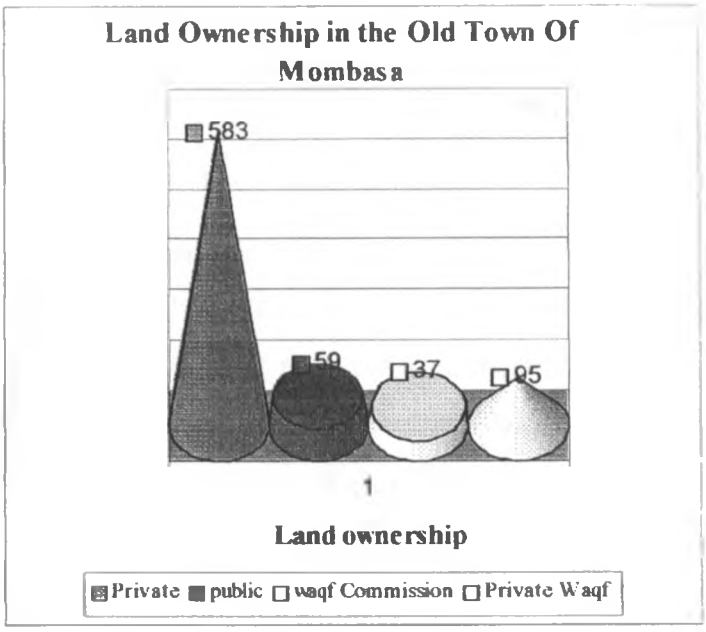
Source: Procesi, 1990

MAP 19: LAND OWNERSHIP IN THE OLD TOWN OF MOMBASA



SOURCE: PROCESI, 1990

Figure 18, Land Ownership in the Conservation Zone



Source: Procesi. 1990

- **Private Ownership**

The land under free hold accounts for 75% of all plots. Originally, Islamic Law or *Sharia* governed the acquisition of land in Mombasa. A person who had worked on the land or had others work on it for him could claim ownership. This tradition was interrupted irredeemably in 1887 when the Sultan of Zanzibar in agreement with what was to later become the British East Africa Company, declared that all land other than private land was to be vested in the company. This was later amended in 1895, as King (1990) points out, to transfer the land directly to the British government.

A major problem that arose was that land previously claimed as private and was no longer cultivated reverted to the government, if it had been idle for 12 years. This happened through the Declaration of Limitation of Claims by the Sultan. The land Titles Ordinance was enacted in 1908 to facilitate claims and protect private property. By 1920s, as Procesi (1990) further points out, most of the claims had been settled. After Independence the Land Titles Act of 1963 replaced this ordinance. Under Sharia, the law of succession allows land to be subdivided among heirs, or each can hold an undivided share of the plot (ibid). In the conservation area, many relatives own undivided shares in a plot. This system of multiple owners is obviously problematic because when one wants to make changes to a parcel, all owners must first agree. It is especially difficult to get consent when one owner has moved away. This makes maintenance to be put off until such agreement is obtained.

There is a tendency at the moment to use the plots for speculation given the increasing price of land. This is especially so with the large plots. The new owners are thus under pressure to demolish the buildings and put up more current accommodation, hoping to house as many households as possible. This is more so because the new construction circumnavigates the existing rent laws, which invariably do not apply to new buildings.

King (1990) reports that original rent control law passed in 1966 froze all rents at the rate that existed as of 1st January 1966. This law was updated in 1981, and the rents in force from January 1981 are the prevailing rates today. This is only for those premises whose rent was below Kshs. 2500 at the time. The conservation office laments over this issue, because in case an owner renovates a building, this is the rate that will be in force, unless the landlord proves that he has spent a substantial amount to warrant an increase. This law is certainly outdated and archaic and it clearly hinders maintenance. As such many structures have fallen into disuse. It is very hard to obtain a reassessment of this rent at the moment

Evictions of tenants can be accomplished through a court process upon sufficient proof that the property in question is necessary for the housing of ones family. This is hard to prove especially if the landlord owns more than one property. There is however no rent controls for commercial property like in the residential sector, but evictions can occur only after 3 months of rent non-payment. A court order is not necessary for evictions and rents can be increased every 2 years.

- **Public Ownership**

Public land accounts for 8% of the plots. This land is generally located in the Treasury Square and includes administrative buildings and Fort Jesus. In the Old Town proper, it includes the Old Port, Mombasa Club and several plots leased to private individuals (Procesi, 1990). The government also owns the Piggot place, Leven Steps site, the waterfront and the Old Fish Market. The rest of the land is scattered in the conservation area. Such land is currently in the form of very small plots used as sidewalks or open spaces. This land has generally attracted land grabbers. It is serves as garbage dump sites that are eyesores and potential health hazard in the conservation area. Planning on such land is not difficult as long as the public interest is taken into account because there are no wrangles in ownership.

- **Waqf Property**

Sharia law allows a person to leave land in Waqf or trust for a religious purpose. This is usually in perpetuity and cannot be transferred into secular use. This clearly hinders the optimal use of a plot. For optimal use of Waqf property, this study occupies the position that Waqf may be broken in the public interest. The conservation office shares the same sentiments.

Waqf land can be categorised into two types: those plots under the Waqf commission and these under a private trustee. The Waqf commission is a part of the Attorney Generals' Office It is mandated to take care of the properties under it and to use any money accrued from the property as specifically stated in the Waqf. In this zone there were as at 1990, 37 Waqf Commission plots. Of these 7 were mosques, one a cemetery, 2 were mosque wells and the rest were leased to private persons or were open spaces (Procesi, 1990). It was not possible to get the exact number of such properties as at 2004.

- **Private Waqf Land**

This land is for religious purposes but a private individual or a group of people are the trustees. Their role is to ensure that the original Waqf is respected. The trustee cannot order sale or effect a change of use without a court order. Procesi (1990) points out that 12% of the plots fall into this category, most of which are residential or mixed-use. However several mosques also fall into this category.

In summing up the land ownership question a clear distinction must be made between the owner of a plot and the building sitting on it. A tenant developing a plot owns the building absolutely and can modify it or sell it. If sold, the tenancy of the plot is transferred to the purchaser. If a lease lapses and the owner wants his plot cleared, the owner of the building would be allowed to carry his materials upon vacating it (ibid). If however a landlord owns the building along with the plot, alterations to that building must be cleared with the owner.

4.3.2 Political Interference

Conservation, like planning is a very political process especially where allocation of resources are called into question. The question of redevelopment and social upliftment attracts all sorts of opinion shapers and figureheads. Sometimes the battles are taken to parliament. For example, The Daily Nation of Friday, November 19, 1999 reported that parliament passed a motion calling for the establishment of a body to conserve the Old Town. The original motion had however proposed a separate authority, from the National

Museums of Kenya, to be established to conserve the Old Town. This was opposed despite the fact that such an authorities have reputable antecedents. As an illustration such an authority exists and is very effective in Zanzibar, which is very similar to the Old Town of Mombasa in terms of cultural heritage.

It is instrumental to note that two members of parliament, both hailing from conservation areas, Lamu and Mombasa opposed the motion. The nominated Member of Parliament from Mombasa accused the local authorities in Lamu and Mombasa of failing to grasp what conservation is and argued that the current building owners should not be prevented from improving them in the name of conservation. The Member of Parliament did not however define what he meant by improvement and was merely being rhetoric. Sadly, the same Member of Parliament bought a listed building, Manor Hotel, and demolished it in record time before a court injunction could be served.

Another Member of Parliament, from Lamu, at the time is reported to have argued that he saw the 'hand of Christianity in the European Union's funding of the conservation efforts at the Old Town of Mombasa, because according to him the residents are 95% Muslims yet Europe was doing nothing as Christians massacred Muslims in Bosnia, Croatia and Kosovo. He further argued on the dynamism of culture and the impossibility of legislating it.

The polemics and politics about cultural invasion come at a time when the Old Town is at crossroads. There is influx of refugees, the politics of terrorism and the general rural-urban migration in Mombasa. A cultural war is precipitating since the new immigrants and tourists destabilise the established cultural matrix. This study occupies the position that the inherent chaos should not be politicised and should be seen as part of cultural evolution. After all, the Old Town is historical amalgamation of many cultures over centuries and should not be frozen in a spatial-temporal frame. The puritanical streak to islamise the Old Town is in total dissonance with the historical development of the town itself. Those arguing for a freeze of development in this zone should be loudly reminded that if development were frozen two hundred years ago, there would not be much to talk about.

4.3.3 Poverty

People lack those resources, goods, activities and services that allow the individual to participate in the general standard of living of the community to which he belongs. According to the Conservation Officer, it is difficult to convince people on the need for conservation if it does not mean that they will experience some economic upliftment.

Poverty is rampant in Old Town and has led to drug abuse and insecurity in the historic town.

A conservation programme must as a given not be romantic in nature and based on nostalgia for the past. It must address the economic dimension as well. However it must also be remembered that some buildings and sites could be so valuable that the cost benefit criteria may not apply. This is the paradox of conservation. The economic analysis should therefore be supplemented by financial analysis of the specific impacts of the proposed conservation efforts on the particular groups. Emphasis as a priority must hinge on delivering the residents form poverty.

The populace feel marginalized. The continued viability and importance of the Old Town will require many mutually reinforcing activities that can help stimulate economic growth, alleviate poverty and improve the urban environment. Poverty is also generally associated with ignorance. Much more needs to be done in terms of educating the populace on the necessity for conservation of their neighbourhood. Such people by and large live in wretched conditions and it is important to ensure that any proposed interventions, do not at the very least aggravate their plight. A balance must be struck between the needs of all groups so as to rejuvenate the economic base of this historic area and ensure continued protection of their unique heritage.

4.3.4 Lack of Basic Facilities

There are various land uses in the conservation area as described earlier and these include residential buildings, mixed use, commercial, religious and public purpose. The Old Town has served as the centre of business and administrative life of Mombasa due to its location near the Old Port and Fort Jesus. Despite this, the Old Town lacks a facility as basic as a fire station. There is no mechanism for fire fighting at the Old Town. This oversight is both treacherous and the recent fires in the Lamu (a Swahili stone town) should have serve as an astringent example of how not to a manage heritage zone. The state of roads and alleys in this zone is also appalling and garbage collection is poor. Mechanisms to address these myriads of problems must be sought.

It must be emphasised that the lack of basic amenities is a nationwide problem and it needs to be integrated in the country's blue print for provision of basic services. Historical areas must be liveable. Certain buildings can be adapted for these functions that are lacking in the Old Town of Mombasa. The adaptive reuse of historic structures and the active

participation of the private sector and local community groups in conservation of their own neighbourhoods are important components of any broad based approach.

4.3.5 Lack of funds

The conservation efforts in Mombasa do not have a sound source of funds that is sustainable. Past conservation efforts have benefited from the kind donations of European Economic Community who offer training, acquisition and restoration of historic buildings; the Norad (Norwegian Royal Aid Agency); Africa 2009, an agglomeration of Ford Foundation, DANIDA and SIDER. The efforts of the above organizations, through piecemeal are noticeable, and several buildings have been restored. The Leven House is currently under restoration.

The government should undertake to plough back into the area the monies raised from tourism in this region. This way, the people will feel they 'own' the conservation efforts. The possibility of creating a revolving fund should be investigated. The government, as discussed elsewhere, should also set a separate financially independent body, from the National Museums of Kenya, to be in charge of all historical areas in the Republic.

Such a body constituted under law, will have the powers to source for funds and use them in conservation efforts. The Mombasa Old Town Conservation Office, which is in charge of the Old Town of Mombasa, is part of the National Museums of Kenya and has no powers to raise funds its own funds. The bureaucracy should be cut down and an independent body constitute set up to manage heritage areas.

In the meantime, a low cost and regular maintenance program should be instituted so that they very common and basic maintenance problems can be solved. Major areas to start with would be the roofs because they generally leak leading to structural instability through rainwater infiltration. In the absence of traditional building materials and diminishing traditional crafts, a language of design that builds on traditional construction should be recreated. This will be critical in that it will ensure continuity of a common design language in a modern context. Training of workers and craftsman, research into local building materials and a wide range of demonstrations will be useful.

4.3.6 The Problem of Continuity and Change

The development of the Old Town of Mombasa has been organic in nature. Indeed it can be traced back to 900 AD. The town has grown incrementally, at one time acquiring a town wall, which is now extinct. Such a town therefore cannot be cast into a modern mould by

the application of contentious terms like land use zoning. The new town planning techniques and principles are therefore to a large extent in this area irrelevant. For example, most of the commercial area, in the form of mixed urban development is along the roads boxing in residential areas and the two coexist harmoniously. In other words paradigm shift in planning of historical areas is necessary so as to accommodate the 'promiscuity' of land use that is inherent in this area. Such promiscuity is actually desirable and expresses a character of its own.

This is clearly a city-state and the conservation officers are under pressure to spoil it by the introduction of discordant uses e.g. shopping malls in his residential areas. There is a conflict between the traditional roles and modern pressures. This is because buildings were constructed when the urban contemporary problems and needs could not be foreseen.

Walking in the streets of Old Town of Mombasa, it is clear that the historic area is experiencing added pressures. Parking space is inadequate and traffic has increased. The accompanying congestion and unacceptable level of pollution can harm not only the residents but also the very built physical heritage. Stalls have been erected in the alleys, constricting movement. Vending stalls and kiosks along the roads, which are not wide enough to accommodate increased traffic and commercial activities, further clog the arteries. This is made worse by huge tourist vehicles, which sometimes damage the building walls and balconies.

Since most of these pressures ultimately are linked to the greater Mombasa system, the planning of the Old Town should be incorporated in the planning of the city. Merely zoning the Old Town of Mombasa as a residential area, and running away from all other planning responsibility will not be adequate.

4.3.7 Development of other Regional Towns

Mombasa is a primate city and as such it is the focus of rural to urban migration hence hindering the development of other towns. Its growth overshadows the other towns through attracting more resources and government attention to the disadvantage of other towns in the coastal region. The Old Town of Mombasa is not left out in this intricate web. It absorbs this migrant population, which inevitably put a strain on its resources. The fact that the whole region acts as a system it is important to strengthen the smaller urban centres in the region in order to reduce the rural-urban gap (Obudho & Aduwo, 1990).

4.3.8 Land Use Conflicts

The total area of the city is 260 Km^2. The only approved development plan is of the 1960s Though a largely industrial zone is seen to the west, commercial at the island and residential in the remaining portion, zoning for land uses is not well established.

There is definitely a conflict among the existing land uses. There is no organised or controlled growth of housing developments and residences are seen to be mushrooming all over the place, especially because most of the land as freehold. Development control, it was established, has been minimum over the years and thus causing the users. The Muslim culture does not segregate the user and this has lead to promiscuity in functional use. It is not uncommon to find residential-commercial–mosque/ *madrasa* put together. The study occupies the position that this is not intrinsically dangerous especially in the old town because of the gains in economies of scale. However, the greater city must be planned on a different paradigm to solve the various conflicting users.

4.3.9 Planning in Mombasa City

From the field study, it merged that planning comes after development i.e. planning follows development. It thus becomes a case for regularising what is usually an unplanned development. Planning is difficult, if not impossible to implement, in that it mostly means demolition and translocations. This becomes a very political question and creates tension and animosity.

The relevant authorities do not have capacity to plan. The municipal council of Mombasa has only one planner, who, incidentally is under the Council Engineer. Thus planning is not given the primacy it deserves in city of Mombasa's stature. This is more so in the conservation area where the Municipal Planner is not qualified in conservation planning. .

In theory, the physical planning office is supposed to plan, for the short-term and long-term development of the city. This role is however reduced to mere development control through the approval or disapproval of applications. Even this limited role is reduced to an arbitrary one, as there is no concrete plan to guide development. The planning office also plays an advisory role on the city planning matters. It also plays a quasi-judicial role to any aggrieved parties.

The Physical Planning Act has had limited impact in the city since its enactment in 1996. This is because the Local Authority with the mandate to enforce and implement planning

decisions is not effective. However, liaison committees do exist and they try to bolster the capacity and encourage some degree of cooperation with other authorities.

The major concerns or challenges in the planning of Mombasa city also emerge in a certain degree of apathy of the people towards planning standards, rules and regulations. It is clear that the community needs a sensitisation campaign. The land registration legacy and the politicisation of the land question at the coast is also another hindrance. This creates a case for absentee landlords. The implementing authorities were also found to be ineffective and lacking in the appropriate personnel.

The local authority should uphold planning principles and encourage participation of the local people in the planning process as a given. Partnerships from the local level to the international level should also be sought.

4.3.10 Physical Planning and Conservation in Mombasa

Being the enforcement and planning office, the physical planning department, under the Ministry of Lands and Settlement has a role in policing to ensure that any developments within the conservation zone are approved. This department, as based in Mombasa has no conservation expert, and it is unclear on what basis they approve/ disapprove development.

However, the department has members in the city conservation and environmental conservation committees. It also claims to plan with liaison with "relevant authorities", which emerged to be the Municipal Council planner. What is patently clear is that the department advises the municipal council on development applications but cannot enforce its decisions despite being the legally mandated planning authority. There is clearly lack of capacity to do so.

The Physical Planning Department must however be congratulated for disapproving the installation of a diesel tank at the Old Port of Mombasa. This port is a significant node as well as landmark in Mombasa and it is located in the conservation zone, forming one of the boundaries of Government Square. The application to install the diesel tank was by a former senior politician in the previous KANU government and was made in the year 2002. Clearly, the diesel tank, meant to provide fuel for the boats, was hazardous to the safety of the inhabitants of this zone. However, it is probably more prudent to think of ways providing an appropriate way of fuelling the boats probably on another location along the wharf.

From the scanty records at the Physical Planning Department, the following applications for developments were made.

Table 10. Development Applications for the Conservation Zone

Nature of Application	Date	Location /Zone
Change of User	-	-
Extension of Lease	April-02	XXXIV/68
	Nov-00	XXXIII/2
Subdivision/ Consolidation	April-02	XXXVII/76
	April-02	XXXV/17
	April-03	XXLIII/71
New Development	Mar-02	Old Port

Source: Compiled from available records at the Physical Planning Department, Mombasa, 2003

Clearly, the above record cannot establish a trend on the nature of developments. The earliest available records date 2002, and it is unlikely that applications for development were not made prior to 2002; it is more likely that the department did not keep records. This is because most of the discordant developments in the old town of Mombasa are prior the year 2002.

A glance at the data however, shows that not much is taking place in terms of development applications. However, the majority of leases were found to have come of age and the physical planning department did claim that their extensions are on the increase. This however is not evident from the scanty records and therefore has to be taken with scepticism.

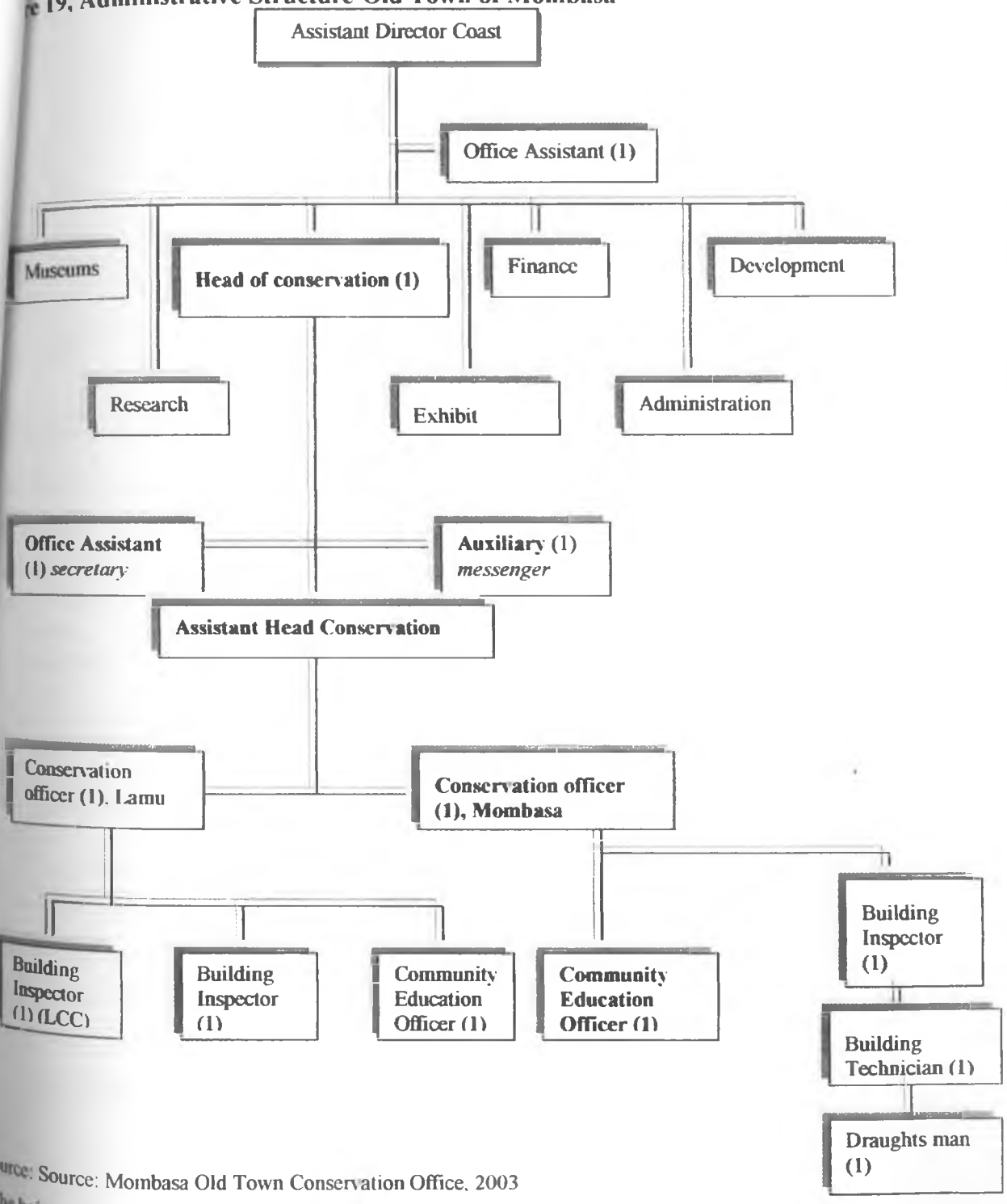
The Physical Planning Department opined that it is not easy to preach conservation to the residents, as it is unlikely to be of any direct financial or tangible benefit to them. The department further suggested that the residents should be relocated from the conservation area so that the zone can be managed as a purely museum 'location'. This is clearly misguided, as it does not recognise the old town as a social fabric and disregards the social life thriving in area.

This relationship between the physical fabric (the container) and social life (contained) is not separate as a practical application in planning. This kind of view as held by a senior planner, at the department is clearly misguided and equates conservation with conservatism. The lack of theoretical background to the planning process adopted has resulted in the conservation area being condemned to a museum piece as argued elsewhere. As such the old town is in a time freeze, a situation that is not sustainable.

ysical planning department faces financial constraints and lack of adequate el, particularly in the field of conservation. It is for this reason that planning comes evelopment. This problem could be alleviated through forward planning and creating ship with all stakeholders and specialised training in conservation.

Administrative Problems

e 19, Administrative Structure-Old Town of Mombasa



Source: Source: Mombasa Old Town Conservation Office, 2003

(The bolded type indicates personnel on the ground)

The Mombasa Old Town Conservation Office is thoroughly understaffed. On top of this it also lacks personnel qualified in heritage management and conservation. To add insult to injury, the office does not have a physical planner and all planning done is ad hoc and mere conflict resolution al a very rudimentary level. The conservation office is staffed as shown below, only on paper but the officers are not on the ground.

Table 11, Staff at Mombasa Old Town Conservation Office

Profession	No.	Designation	Level of Education
Architect	1	Head Conservation (MOTCO)	University Level
Architect	1	Assistant Head Conservation	University Level
Quantity Surveyor	1	Conservation Officer	University Level
	1	Building Inspector	Polytechnic Level
	1	Building technician	Polytechnic Level
Social Worker	1	Community Education Officer	Secondary Level
Secretary	1	Secretary	Secondary Level
Messenger	1	Messenger	Primary Level
	1	Trainee	Polytechnic

Source: Mombasa Old Town Conservation Office, 2003

The list of professionals who might be involved to a greater or lesser extent in the management of cultural heritage is a long one;

Administrators	Conservators (of collections)	Heritage Recorders
Anthropologists	Craft Persons	Historians
Antiquarians	Documentalists	Hydrologists
Archaeologists	Ecologists	Landscape Architects
Architects	Economic Historians	Legislators
Architectural conservators	Engineers (All Sorts)	Mineralogists
Archivists	Entomologists	Petrologists
Art Historians	Ethnologists	Politicians
Biologists	Geographers	Property Managers
Botanists	Geologists	Seismologists
Building Surveyors		Surveyors

This list is by no means complete but it gives an indication of the skills involved and shows opportunities for employment in the field of conservation. For meaningful conservation efforts the conservation office should have at least the following personnel given its extent and mandate; architectural conservators, architects, engineers, archaeologists, art historians, administrators and sociologists.

Table 12, Problems, Causes and Their Solutions in the Old Town of Mombasa

Problem	Causes	Possible solutions
Drug Abuse	❑ Joblessness ❑ Crowding ❑ Idleness ❑ Illiteracy ❑ Moral decadence ❑ Western cultural influence ❑ Drugs easily available ❑ Rich families	❑ Job creation ❑ Policing ❑ Education provision ❑ Counselling ❑ Rehabilitation of addicts ❑ Self employment ❑ Sensitisation
Crowding	❑ Historical development ❑ Narrow streets ❑ Poor planning ❑ High population ❑ Limited space ❑ Inadequate accommodation	❑ Control immigration ❑ Demolition of illegal buildings ❑ Create wide passages ❑ Rehabilitation of old buildings ❑ Densification through sky crappers ❑ Adaptive reuse of buildings ❑ Neighbourhood expansion ❑ Demolition and reconstruction ❑ Family planning ❑ Planning to precede development
Security	❑ Influx of refugees ❑ Unemployment ❑ High population ❑ Crowding ❑ No policing ❑ Many hideouts	❑ Intensify police patrols ❑ Create cul–de-sacs ❑ Street lighting
Accessibility	❑ Poor road maintenance ❑ Historical development of town ❑ Ageing roads ❑ Poor management ❑ Congestion of houses	❑ Enhance road maintenance ❑ Road repairs ❑ Traffic control ❑ Control development
Waste disposal	❑ Inaccessibility to disposal sites ❑ Ignorance ❑ High population ❑ Few waste collection facilities ❑ Dumping wastes in the sea	❑ Explore other methods of disposal ❑ Community sensitisation ❑ Proper management ❑ Create disposal sites ❑ Provide more collection points ❑ Sufficient systems
Unemployment	❑ Lack of education ❑ Poor economic status	❑ Job creation ❑ Self help groups
Insufficient water	❑ Poor water reticulation ❑ High water demand than supply ❑ Poor planning ❑ Pipe leakages	❑ Enhance proper water reticulation ❑ Pump more water ❑ Repair leaking pipes ❑ Boreholes ❑ Recycling of water

Source: Field Survey, 2003

4.5 Changes in the Townscape

4.5.1 Introduction

Papageorgiou (1970) asserts that historic urban centres are not a fortuitous conglomeration of monuments and other historic buildings. On the contrary, they are living urban districts with a specific structure, which create a special kind of atmosphere. He further shows that in their capacity as 'living urban organisms'; the historic urban centres are endowed with a quite specific townscape. The specific townscape of the historic urban centre involves the inner townscape (i.e. the accumulation of perspective images and urban experiences inside the city), as distinct from the outer townscape; represented by the general urban cluster in its natural setting.

It is essential that a thorough knowledge of the concept of the townscape, of its historical development and the usual principles in which it is grounded be known if we are to understand the problems posed by the rehabilitation of historic urban centres. The townscape is also a domain of human activities. This is in addition to its spatial and visual meaning. As a sphere of human activities, it does provide a mirror image of the technological facilities, the aesthetic attitudes, and the dominant social structure of every historical period.

The special aspect of a townscape represents the human significance and emotional impact of the urban cluster (ibid). The townscape provides the framework for urban experiences and social activities and their change over time. This is why inhabitants of historic districts are sentimentally attached to their environment. This fascination should not be written off as superficial and romantic yearning for the past. Its explanation as Papageorgiou shows lies in the discreet message that is transmitted by historic townscape and that speaks of the life and experiences of past epochs.

The townscape character of the Old Town of Mombasa was not created in a single historical epoch. It is an accumulation of achievements of successive epochs, which means of course, that it reflects the historical continuity of human life and of man's cultural development.

This study sought to examine how the townscape character of the Old Town of Mombasa has been evolving in the recent past. The inhabitants were asked to give their opinion on the changing aspects. The qualitative results of this investigation as discussed below:

4.5.2 Socio-cultural Changes

With the advent of tourism and western culture, exposure to mass media and general publicity and contact, people have taken to aping the western life styles. This is evident in the modern way of dressing and the spoken language. Though Kiswahili is dominant, English is not uncommon. A mixture of Kiswahili and English locally known as *sheng* is rampant among the youth. Arabic is seldom spoken outside *Madrasas* and mosques. There is a dislocation of cultural resources and Islam as a religion could be loosing its existential foothold in the old town. Intermarriages between the locals and the Europeans are now common and the residents are decrying the death of arranged marriages. It is therefore felt that though this trend may not be arrested, it may lead to erosion of the cultural face thus making Old Town of Mombasa like any other western city and killing the very cultural fabric that produces the unique urban landscape were are trying to protect.

The social fabric is also disintegrating. The extent of such disintegration can only be the subject of very detailed study. Suffice it to say that the study did establish the direction of such changes and the things that are still unvarying. The high cost of living in the study area and the legally low rents accrued from the residential premises, as discussed elsewhere, are causing a breakdown in the family set up. People are become increasing private as far as sharing is concerned. This is not a condition limited to the old city only; it certainly is a global issue.

The high levels of poverty are also leading to anti-social behaviour like drug taking. The residents also felt that unwanted pregnancies are on the increase and to them, this is attributable to the influence of western ideas propagated through television and the many entertainment facilities in the vicinity of the historic area. Cases of theft, though low were felt to be on the increase. This was attributed to idleness due to unemployment. The influx of Somali refugees in the area has also disrupted the social setting.

However, the Imams and other opinion shapers are still held in high esteem but it is necessary to strengthen the social institutions, which can even be used to control development.

Social events should be encouraged, because these help to impact social responsibility and community values. These values will help to reinstate the social hierarchy and bridge the inherent social gap. Generally, the culture of individualism must be not be encouraged further. Mosques are the most immediate expressions of religious practices and their number and variety attest this. These serve as reservoirs of social cultural history and it is

here that family education can start. However many Christian missions have their churches in the vicinity of conservation area. The evangelicals also have multiplied in the vicinity and are firmly established. These churches bear witness to the vigour of religious worship that is evident throughout Mombasa. However Islam though under threat has taken a firm hold in this zone and is not likely to be outdone in the near future.

The Old Town of Mombasa has always been a political centre for many centuries and there are many political buildings to be found here. As early as 1824 it was the seat of an unofficial protectorate before Nairobi took up that role at the beginning of the last century. Today the administrative centre of the Coast Province is in the neighbourhood of the Old Town and so is the State House. In the conservation area the Old Law Courts is now a library and the only significant administrative centre is at the Treasury Square. Here, the Municipal Council office and the District Commissioner's offices are located. The buildings where these are located symbolise the colonial era, as they are non-conforming; being English in character. The taste for new construction is fostered by the 'indirect' benefits that can result from new construction projects. Some of the colonial buildings in the area are in a state of disrepair and will require concerted conservation efforts to save them.

4.5.3 Economic Changes

The problems of living in a historic area can only be solved by a full value of life in them. It necessitates a continuation of communication between the heritage protectors, city planners and managers and the citizens to consenting negotiations, which move towards a common understanding of problems. The heritage area must in a way be able to pay for its conservation and this calls for an economic dimension in problem solving. Generally, the economic problems inherent in the Old Town of Mombasa are of a wide nature being both intra regional and extra regional.

Conservation of the precious heritage has been a challenge to both the government and the civil society at large. It has been recognized that the historic area is in danger of being destroyed in the name of economic development and modernization. This is in spite of the fact that the Old Town of Mombasa has been a seat of civilization so to speak.

The dhow trade that used to boom at the beginning of the last century has decreased tremendously. The supremacy of Kilindini Port in Maritime affairs is evident and the old port acts today acts like rural market, operational for select days in a week. This is

aggravated by the fact that the government had banned the trade in mangrove poles until mid last year. This being a major cargo of course dealt a deathblow to a major economic activity. Limitation in fishing activities has also by and large dis-empowered the inhabitants of Old Town.

It may be argued that the old town benefits from tourism, but it must be remembered that the government does not inject any monies accrued from the tourism activities in this area back to old town conservation efforts. Mechanisms must be put in place to ensure that income generated from the area also benefits the local community. Only this way can the inhabitants of this historic area benefit from any conservation efforts. It will also ensure that the populace supports the conservation efforts.

The office culture especially the yearning for the so-called white-collar jobs have replaced the simple artisans, fisherman and other local traditional craftsmen. Moreover the high mobility of people means that they are now able to work in other cities and countries and they do not necessarily bring any significant monies back home. The role of the traditional crafts is therefore lost. If this were rejuvenated a lot of job opportunities would be created for the local youth, who have now taken to drugs and other deviant behaviours.

Some of the youth were found to abandon school and become tourist guides, but currently, the effects of the tribal clashes in the coast region are still felt and this means that there are fewer tourist arrivals. This has drastically reduced tour-guide jobs. International forces, in the name of travel advisories due to terrorism threats have also negatively impacted on the tourism sector. The long and short of this is that people have become poorer and the little economic activity that exists is not sustainable in the long run.

Money has become central to the local economy. With the recognition of African art in the west, the demand for Swahili artefacts has risen. The trade in antiques has become important as a source of income for the people. This demand has led to the opening up of galleries dealing with African collections. It can be argued that the cultural values attached to these artefacts are being substituted for economical value and this considerably accelerates the acculturation process.

The economic heritage of the Old Town of Mombasa goes back on one hand to slave trading and on the other to the mercantile activities that were carried out in the city and the region. Some of the built heritage that went hand in hand with these activities do exist, namely the old port, Fort Jesus and many other significant buildings.

The railway is a good reminder to all and sundry of the caravan route, which normally originated and ended in Mombasa. With the gradual disappearance of the mercantile activity in the old city, their original owners abandoned most of the buildings. The remaining occupants have neither the means nor the desire to keep them up much less to restore them. As for the empty ones, the climate has had its toll and they can be seen as severely dilapidated edifices though they imprint a particular landscape on the Old Town of Mombasa.

4.5.4 Conclusion

The study so far has demonstrated that the influence of the neighbourhood operates as a complex system, which is a combination of many physical, environmental, economical, social-cultural and psychological factors.

The quality of the neighbourhood is therefore the total of the neighbourhood settings: space occupied, space for movement, noise etc. It also includes the social life of the people who define and give existential foothold and meaning to the above parameters. As such, all these factors combine to induce in an individual either a feeling of satisfaction or that of dissatisfaction.

Depending on individuals diverse values, systems, experiences and aspirations, certain elements can generate feelings of convenience, beauty, health accessibility or otherwise.

Evidently the social life in a neighbourhood could be more important than the physical attributes in determining the satisfaction of residents.

Chapter 5

Towards a Sustainable Townscape of the Old Town of Mombasa

CHAPTER 5: TOWARDS A SUSTAINABLE TOWNSCAPE OF THE OLD TOWN OF MOMBASA

5.0 Introduction

5.1 Major Findings: Summary of Planning and Management Challenges

From the analysis, it is clear that attitudes are neither arbitrary nor idiosyncratic but divulge common patterns of preference. A majority of the residents recognize the unique architectural heritage of the Old Town. However, the residents felt that the neighbourhood was more inconvenient than convenient because it had become unsafe and did not have adequate facilities.

An inspection revealed that most of the social amenities were within close proximity of the residents and therefore it is likely that the dirty beaches, occupation of the streets by rubbish or cars, ineffective transport system could easily add (psychologically) some mental kilometres to the distance between the respondents' homes and the location of these facilities Sometimes, the physical distance is a reality, as some have to go to the beaches outside the island, in the north and south coasts.

The neighbourhood was found to have general unsanitary conditions and the inhabitants seemed to reflect a high degree of adaptation to the actual conditions in which they find themselves. In practical policy terms, the neighbourhood should be upgraded instead of resignig to the derelict conditions.

Modern developments and especially modern buildings were found to stand out, screaming and dominating the neighbourhood. They overcome the other developments in terms of height and colour. They tend to be out of style with the historic neighbourhood. The new developments normally offer only one function e.g. office space Those that offer mixed uses are also very specialised for the various uses and do not adapt well to new uses.

These developments are increasingly being accepted as part and parcel of the Old Town of Mombasa irrespective of the problems they cause. The future of old town therefore is jeopardised unless the populace is educated on the need to conserve. More current accommodation must also be provided in the old buildings themselves because this is what the modern developments offer.

The data generally illustrates that most people felt that modern developments enhance their social status and a person living in a modern house is thought of as being trendy. The residents therefore should be educated on the detrimental implication of such attitude

towards a neighbourhood *in toto* because it is such attitudes that cause historic neighbourhoods to become derelict. The approach should be on aesthetic education.

The study has also examined the residents' perception of their problems. They were: drug abuse, crowding, security, accessibility, waste disposal, and unemployment and water provision. The most severe was drug abuse and this was attributable to idleness and joblessness. Therefore strategic interventions are necessary so that the urban core can be economically revitalised and employment opportunities created to increase real income especially for the youth.

The problems and challenges associated with the planning management of the Old Town of Mombasa are; the question of land ownership, political interference, poverty, lack of basic facilities, lack of funds, land use conflicts, historical antecedents, the primacy of Mombasa City, weak legal and institutional framework and lack of qualified personnel to plan and manage the old town.

5.2 Economic Opportunities for the Sustainability of The Historic Character

Introduction

Concerted efforts are required for the protection of the urban context and sense of place, and to revitalise the old city, to ensure that its streets and spaces are kept alive, its economic base rejuvenated and its links to the surrounding city restored. This will call for efforts in urban rejuvenation. Serageldin (1994) recommends that a powerful upward spiral of investments, social cohesion, and rising incomes to restore the inherent vitality and unique charm of historic centres be undertaken through conservation activities on specific structures.

Restoration of the historic structures to rejuvenate the economic base should encourage commercial development in this area, not to mention more tourism, which will indirectly help the struggling cultural institutions. According to Netzer (1997), the greatest success in heritage preservation can occur when the heritage element is in actual use and thus capable of generating income for its preservation. Therefore it is clear that any conservation efforts in the Old Town of Mombasa that will ensure the continuity of its historic architectural character cannot be accomplished without a revitalisation of its economic base.

In order to assure maintenance and upkeep as well as upgrading of the existing building stock, the residents will require steady jobs and income. The study sought to explore ways of revitalising the economy of the conserved area. Residents were encouraged to state the

developments they would like to see in the old town. While detailed studies are required of the various sectors, the study did isolate various sections that delineate a basis for an economic revitalisation program.

5.2.1 Tourism

- A policy framework that ensures revenue collected from the region is injected back to the sector will be necessary so that the residents can feel that the own the place. It will enhance *genius loci.*
- The development of small-scale culturally oriented village level adventure tours is recommended. These will offer simple indigenous accommodations located at interesting sites. Such ventures would require small capital outlays and require of the cooperation residents, who would run the whole operation and develop specialized marketing arrangements.
- Beach hotel development offers another opportunity. Currently none exists in the conservation area and due to their requirements of large parcels of land, the conservation area may be extended to cover the Mama Ngina drive. Developments along the wharf are also recommended.
- The development of small beachfront hotels probably offers a better alternative. This could be located at the area around the old port and its underused godowns and at the Leven house.
- Focussing on the historic, architectural and cultural appeal of the conservation area to attract visitors for longer stays is another viable alternative. The average tourist was found to spend about thirty minutes at Fort Jesus and less than ten in the old town proper. Long term visitors and semi permanent residents from abroad should be encouraged where they can live comfortably at relatively low costs. Small guesthouses within the area are therefore necessary.

Tourism uses should build on the current uses to include visitor reception and orientation, sightseeing, handcraft production and sales, water oriented recreation, dining and entertainment and visitor accommodation.

5.2.2 Visitor Reception and Orientation

The airport reception given at the Jomo Kenyatta International Airport in Nairobi and at the Mombasa International Airport in Mombasa is not effective in establishing contacts with the visitors. The area therefore requires an information centre more centrally located

for example at the Old Law Courts building, now Fort Jesus library. Promotional information should be made available in this centre so that all and sundry can be informed.

5.2.3 Sightseeing

Old Town of Mombasa offers a wide range of historic attractions ranging from the Fort Jesus, and includes relics of previous influences such as slave trade, the building of the town during the Omani Sultanate and the British colonial era. However visitor enjoyment is diminished by their dilapidated conditions, by absence of printed material, interpretative signs and guideposts. A route appropriate for self-guided walking tour should be worked out It should include points of interest clearly marked in plaques explaining their significance with directional signs at frequent intervals. Certain buildings along the tours should be restored as public monuments. Botanical gardens containing specimen trees and other native vegetation should also be developed at the Treasury Square. It must be professionally laid and maintained in acme conditions.

5.2.4 Handicrafts Production and Sales

Old Town of Mombasa has a rich and varied handicrafts tradition evident from the elegantly carved doors, decorative embroidery and ornamental brass work. Some of these crafts are dying out and the Swahili Cultural Centre needs to be expanded, strengthened and upgraded to a major training centre and workshop for craft producers. It should be upgraded to the level of a training institute. Training and technical assistance will be needed for the purpose of reviving latent skills and adapting traditional products to the tastes and preferences of the international tourists.

5.2.5 Water Oriented Recreation

The conservation area has following the water oriented recreational potential that is untapped: swimming, sailing, snorkelling and scuba diving, deep sea fishing, beach combing for exotic shells, sunset cruises, visits to the dhow harbour, to boat building yards and excursions to nearby coral rocks. Few of these opportunities are accessible to tourists unless they bring their own equipment or are able to make arrangements with the local fisherman.

The conservation area front should be an excellent place from which to launch a program on these water based activities. Traditional boat building and net mending should be continued and made accessible to visitors. The old port could be developed into a boat basin complete with slipways. The government could develop these and enter into

management with the private sector through concession agreements. There is potential to build a sea front promenade, as is the case in Lamu.

5.2.6 Dining and Entertainment

The Old Town of Mombasa is ideally located for dining and entertainment facilities drawing on local and tourist markets. Several of the historic structures are suitable for adaptive re-use into restaurants, teahouses or nightclubs. The Leven house and the bonded warehouses at the Government Square are a case in point. The Treasury Square also contains a disused building, which could be developed into a small hotel and a guesthouse through renovation and expansion of the existing structure. The adjacent square should be transformed into a vibrant plaza with *barazas* where visitors and residents could gather for refreshment and conversation later in the day into the wee hours of the night. It could retain its administrative function as well.

5.2.7 Harbour Expansion and Trade Development

The Old Port of Mombasa has a history of prosperity as a major centre of trade. Today, the harbour facilities are under-utilised as shipping patterns have changed and the present facilities and services are out of date. Development and revival of the old dhow trade could make transhipment to the smaller and less crowded ports along the coast less feasible.

A potential exists for the old port to re-establish its historic position as an important coastal trading centre by developing some type of customs–privileged areas. These could include:

- A free port area in which customs duties would not be imposed on most goods of foreign origin. This may require a major shift in Kenya's policy and may therefore be unrealistic in the short term.
- A duty free shopping area where customers with foreign passports/ currency can make purchases. This could be permitted as a tourism facilitation measure since the benefits would be accrued through tourism rather than the duty free operation per se.
- A free trade zone, in which duty free imports are stored, assembled or otherwise transformed before being shipped to other countries would create a lot of employment for the local population.

5.2.8 Fisheries Development

The marine resources available in the Old Town of Mombasa are numerous. Large-scale commercial fishing operations are possible. There exists a fish market and a godown

complete with refrigeration facilities in the conserved zone, but it is under-utilised. Even without a government commitment to develop commercial fishing operations, substantial improvements could result with developments in tourism. There is considerable potential for the export of selective types of fish found in the waters around the area and this should be the subject of a detailed study. However some common varieties of marine life, which do not appeal to the local tastes, could be developed for the export market.

Sport fishing has also considerable potential as an adjunct to tourism development but facilities are not presently available and one would have to go far into the north or south coasts to experience this. These should be provided in area.

5.2.9 Indigenous Film Industry

The fine blend, over many years, of African, Asian, Arabic and to some extent European cultures suggests an opportunity to develop a centre for the production of films. Television documentaries and the cinema pictures could serve a broad geographic and linguistic market Again detailed studies to determine the amount of investment are indispensable but the study is of the opinion that great potential appears to exist. There is no indigenous African film industry and its development may trigger a project to develop films based on Swahili literature and history. Development of facilities within the Old Town of Mombasa with the assistance of the Kenya Broadcasting Corporation would led to the development of an indigenous film production capability.

5.2.10 Renewal of Urban Networks

The sustainability of the historic area must also include the development of other facilities that will make life comfortable for the residents. Data collected from the field indicate that the residents are keen on small improvements. They are:

- Road repairs
- Traffic regularisation and accessibility to public transport
- Storm water drainage
- Setting up a rehabilitation centre for drug abusers
- Improvement of sanitation
- Town beautification program
- Refurbishment of Makadara grounds for the purposes of sports

5.3 Sustainable Growth and Management Heritage

The study has identified the various zones in the Old Town of Mombasa that are inherently different and will require different approaches in conservation. It has also identified guidelines for development in the general study area that can be used to ensure that the historic character of the Old Town of Mombasa is protected and sustained in the long term. The study emphasizes that the guidelines must be applied case by case.

5.3.1 Zoning

Use Zoning

Convectional land use zoning in the Old Town of Mombasa should be discouraged because, being an Islamic town, the western model of land use segregation cannot apply. The area has developed as a medieval town with mixed uses, being found in the same area and sometimes in the same building. As such adaptive reuse of buildings and areas is recommended such that such that many current uses can be house din the same area. This way the residents will benefit from economics of conglomeration. The strict limiting of an area to specific category of use should not be done as this limits the cultural richness of and social diversity of the thriving historic centre.

- **Water Front Zone**

The waterfront is under-utilised. Buildings are introverted against and are inward facing and access to it is only mainly through old port, Fort Jesus and the Leven steps. It is proposed that this area be commercialised and a sea promenade developed like is the case in Lamu. It should be made a principal thoroughfare and foci of commercial and maritime associated activity.

As discussed earlier on, the plots in this area are slightly larger than those in other areas, and many of the buildings have been radically altered, modernized, or torn down and replaced by new buildings. As a result, there are very few older buildings in this area. The government owns a larger portion of this land and therefore redevelopment is easier due to singular ownership. The old port should be revitalised as a strategic intervention as discussed later.

- **The green Belt**

The green area fronting the Fort Jesus and the Mombasa Club should be given primacy as an urban recreational area so that the residents can be catered for. It must no longer act as

garbage dump. The study proposes that this area be extended to the Mama Ngina Drive so that a large recreational belt can be consolidated. This could become a scenic corridor, as important as the traditional transportation corridor.

- **Swahili Neighbourhoods**

All are located behind the solid walls formed by street front buildings, and entrance to these areas is by way of narrow alleyways between some of the buildings. Being residential in nature, they should be conserved as such and no commercial activity, unless prime and already in existence should be allowed therein.

- **Area Fronting Roads**

Areas fronting the roads are generally given to commercial activity especially at the ground level. The plan recommends that this be retained and strengthened through adaptive reuse of obsolete building so that the area can be economically rejuvenated.

- **Buffer Zone**

Due to continued modernisation in Mombasa, the study foresees that unless urgent protective effort is undertaken, the dynamics of development will finally eat up the conserved zone. For this reason, the study therefore recommends that a buffer zone be set up at the conservation boundary that follows the legendary town wall of Gavana, especially along Makadara Road Samburu roads so that this zone, outside the conservation boundary is treated like a special planning zone. Any development in this zone must follow and respect the immediate townscape character on the adjacent conserved zone.

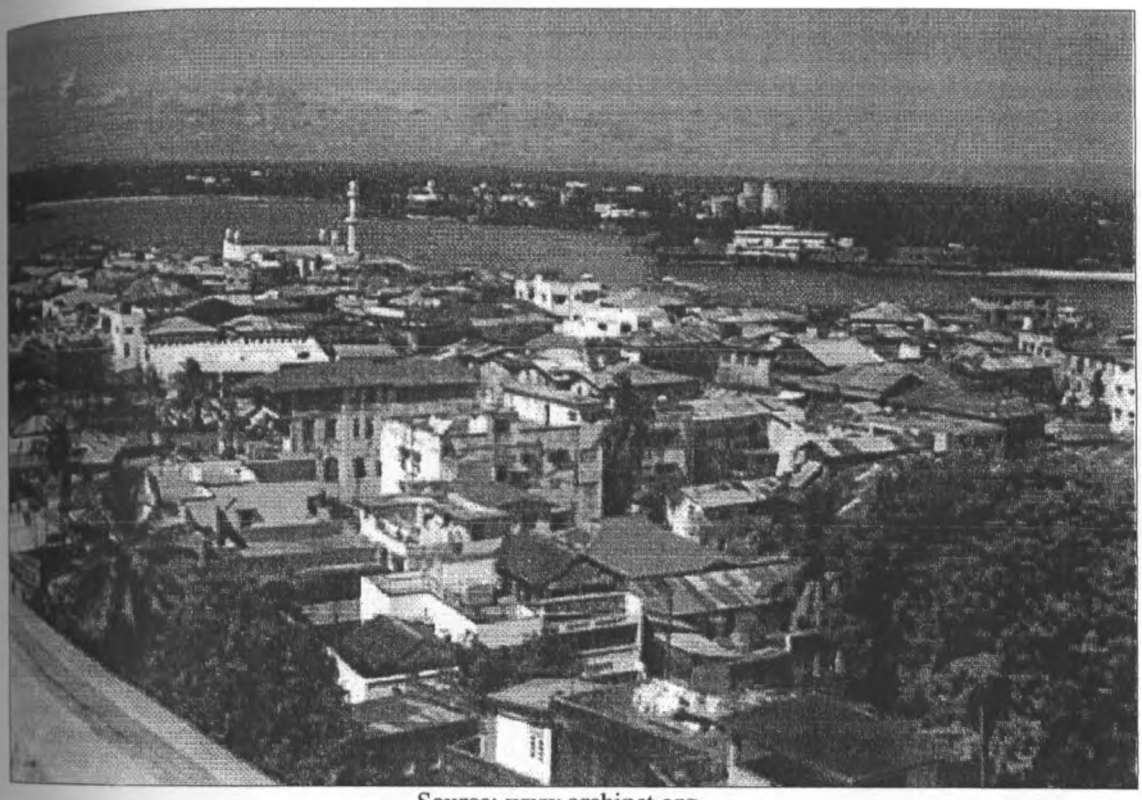
- **Density Zoning**

The study recommends that density zoning be treated case by case. However any new development must respect the streetscape character by respecting the adjacent building heights and following the adjacent building setbacks. Building higher or more plot coverage, if this is going to cause discordance should not increase the density of use. Rather, where possible roof terraces should be used because these have historical precedents in this area, as long as they do not infringe on privacy. Adaptive reuse of buildings is also recommended as a way of introducing new usage.

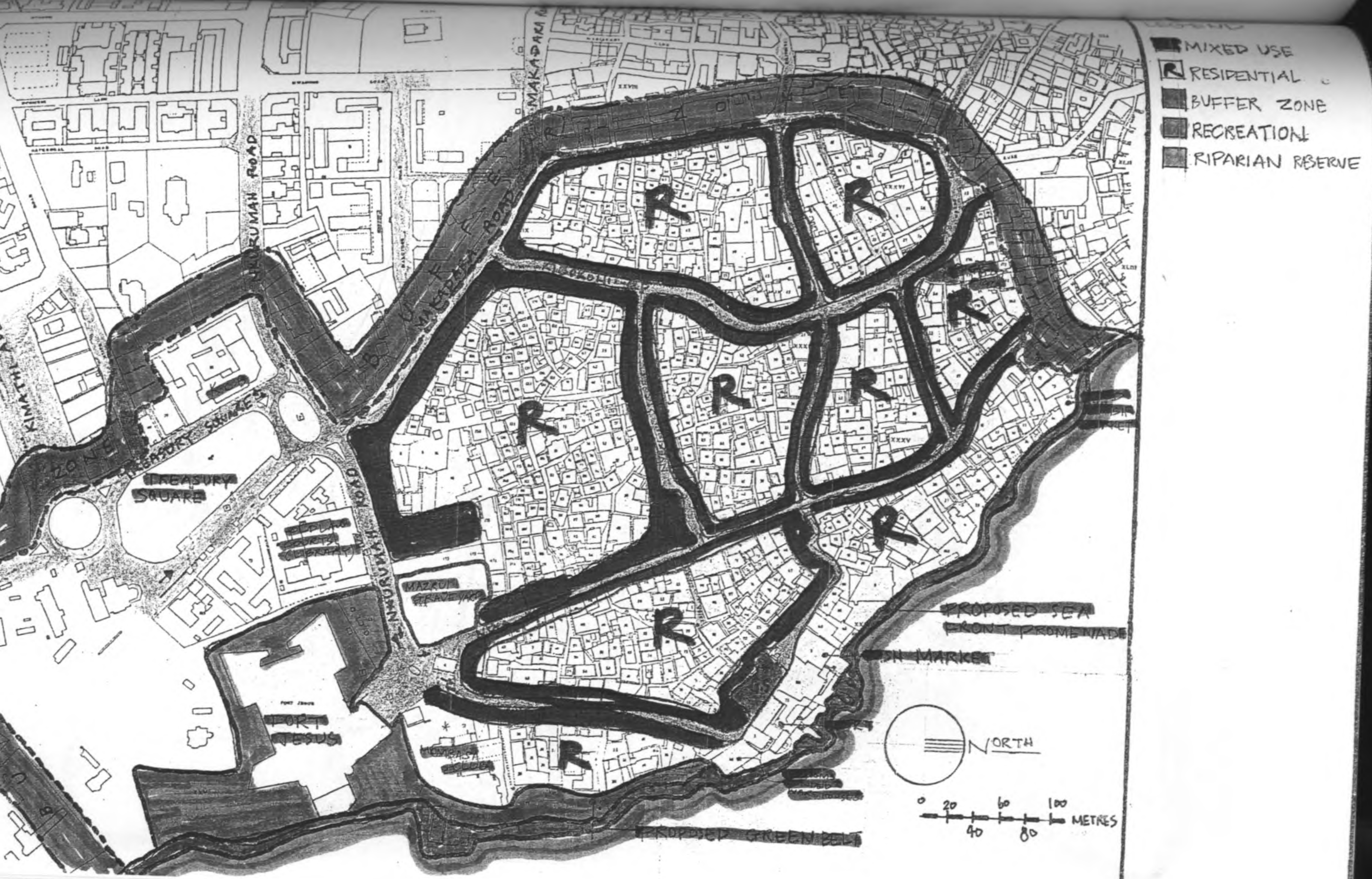
It is therefore possible for old areas to find new roles, which can conserve their fundamental character. This is demonstrated through a scheme for the revitalisation of the old port of Mombasa. This should be seen as suggesting a process of incremental

development where pilot projects and flagship schemes can be used to attract and established uses for redundant space. Density should be increased therefore, by adapting old buildings to new uses so that pressing local concerns of lack of amenities are taken care of without necessary putting up new construction.

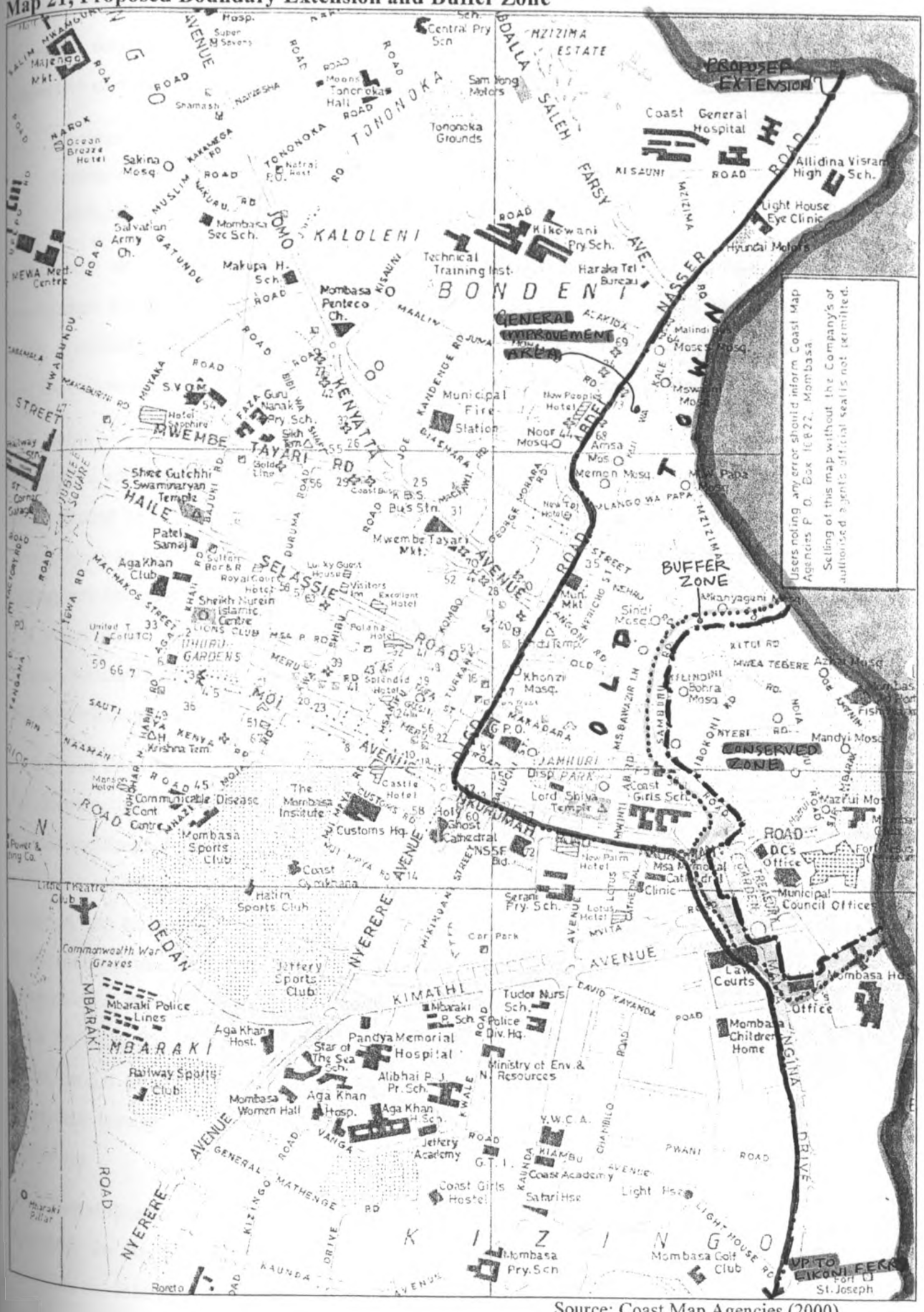
Plate 19, View of Old Town of Mombasa



Source: www.archinet.org


MIXED USE
RESIDENTIAL
BUFFER ZONE
RECREATION
RIPARIAN RESERVE
NKRUMAH ROAD
MAKADARA ROAD
KIMATHI AV
TREASURY SQUARE
MAZRUI GRAVEYARD
FORT JESUS
PROPOSED SEA FRONT PROMENADE
PROPOSED GREEN BELT
NORTH
0 20 40 60 80 100 METRES

Map 21, Proposed Boundary Extension and Buffer Zone



Source: Coast Map Agencies (2000)

5.4 General Development Criteria: The "3R" Principle

This is the fundamental principle of conservation applicable to all conservation buildings irrespective of scale and complexity. It is based on the following tenets.

- Maximum Retention,
- Sensitive Restoration and
- Careful Repair.

Replacement should be considered only when absolutely necessary. Total reconstruction goes against accepted international conservation practices. The Old Town of Mombasa is mainly a residential area and to maintain the historic character in view of the restricted uses, the following may be introduced and incorporated into the existing guidelines.

5.4.1 Roofs

The original roof profile, pitch and height should be retained. The roof material usually of *mabati* should be of original size, profile and colour as much as possible. The existing roof eaves projection from the property line should be retained. New construction should match existing eve lines. Skylights should be discouraged as much as possible due to the creation of a green house effect. Gutter and rainwater down pipes should also match existing. Dormer windows should not replace the balconies, as they are not congruent with the existing townscape character.

5.4.2 Front Facades

Any construction should respect at least two of the neighbouring façades character and the original ornamentation should be retained and restored. In the restoration, the use of traditional materials and construction methods should be encouraged. For commercial buildings, the canopy height and bulk must also respect the existing. The alleys must not be encroached into and if repairs are undertaken, they must respect the existing. Where *barazas* exist they must be retained and restored because they give a spatial transition space between the street and the building. Painting of the front facades with oil-based paints should be discouraged because it is environmentally unsound and peels off after some time leaving ugly scars on walls. Lime wash should be preferred against all other renderings.

5.4.3 Rehabilitations and Alterations

Generally for the purpose of rehabilitation and alteration in historic buildings, the study identifies the following as general guidelines.

- Removal or altering historic material or distinctive architectural features should be avoided, if it's original and in good shape, it should be kept intact.
- Repair rather than replacement wherever possible should be the norm. If replacing, replication of the original based on existing materials should be undertaken. Inventing something new that "might have been" should be avoided.
- When extensive replacement of missing or severely deteriorated materials is necessary and replication to exactly match the original is not feasible, the new work should match the character of the original in terms of scale, texture, design and composition.
- Buildings should not be made to look older than they really are. Rehabilitation work should be in the character of the original building. If a building has been substantially altered, nearby buildings of similar age and style may indicate what its original character was.
- A building may contain clues to guide somebody during rehabilitation. Original detailing may be covered up with other, later materials, or there may be physical evidence of what original work was like and where it was located.
- A later addition to an old building or a non-original facade or shop front may have gained significance on its own. It may be significant as a good example of its style, or as evidence of changing needs and tastes. One should not therefore assume it's historically worthless just because it's not part of the original building. This is because architectural symbols and substances accumulate over time.
- Surface cleaning should be done by the gentlest means possible. Sandblasting or use other abrasive methods should be discouraged as it erases patina. Cleaning may not be necessary at all especially for lime rendered and plastered buildings.
- If no evidence of original materials or detailing exists, alterations should be simply detailed and contemporary in design, yet fit the character of the building.

5.5 Specific Building Guidelines

Apart from the above general guidelines, the study specifically recommends the following specific guidelines.

5.5.1 Windows

- **Openings**

Closing in window openings makes the face of a building appear to have lost its "eyes." Reducing or enlarging window openings makes the "eyes" appear too small or too large for the face of the building wall.

Guideline-Original openings should not be altered

- **Type**

Replacing original windows with an entirely different type of window (e.g. steel casement replacing wooden louvers), can appear out-of-place given the type of window commonly found in buildings of particular styles and particular time periods.

Guideline-Window replacements should match the character of the original.

- **Ornamentation**

Removing ornamentation or replacing it with substitutes, which are of a different scale and design from the original leaves a building looking stripped and bare. New ornament should match the original in size, shape, scale and general design character.

Guideline-Replacement of ornamentation should match the character of the original.

5.5.2 Walls

Coral rock was virtually the sole material employed for walling. The walls were built with roughly squared coral blocks laid in regular courses some 22 cm in height. These stones were set in thick mortar consisting of lime, earth and sand. Lime plaster and lime wash are the materials with which majority houses in the conservation area were rendered and plastered with.

- **Cleaning**

Cleaning dirt or old paint off a building should be done by the gentlest means possible. Sandblasting permanently damages the surface of wall and removes patina.

Guideline-Never sandblast and gently clean the walls if necessary.

- **Repointing**

Repointing masonry walls should be done with a soft lime-based mortar rather than a harder Portland cement based mortar, which would be stronger than the walling material and could eventually crack the coral block itself. The mortar colour, texture, type and size of joint should match the original otherwise the wall will look like a patchwork.

Guideline-Repoint old masonry with care.

- **Painting Buildings**

Removing paint from buildings originally painted (especially the early British architecture) leaves the stone surface unprotected and is historically inappropriate, and results in a less lively and less colourful streetscape. Repainting of these older buildings is recommended

Guideline-Generally do not remove paint from the originally painted buildings.

- **Painting Trim**

Architectural trim (decorations) and other decorative features should be painted in a colour or shade, which contrasts with the wall colour to enliven the facade.

Guideline-Trim should contrast with the wall but must be congruent with the existing.

- **Covering Masonry:**

Covering brick or stonewalls with artificial materials alters the scale and appearance of the wall and adds no real aesthetic value.

Guideline-Generally, do not cover masonry with another material.

5.5.3 Shop Front Elevations Treatment

- **Materials**

Introducing designs and materials not found in the historic area or in buildings of a particular time period appears incongruous and often creates a hodgepodge of building materials and a mixture of images.

Guideline-The design of shop fronts should be in character with the historic area.

- **Setback**

Significantly setting back the shop front from the face of the building line is out of keeping with the historic character of the street and alters the continuity and shop front rhythm of the street.

Guideline- Setting them back shop fronts from the face of the building is inappropriate and unacceptable.

- **Openings**

Reducing the size of window openings, often by raising the windowsill or filling in the transom, cuts down on transparency, which is important to store windows. Large windows also allow for adequate ventilation in the hot and humid climate.

Guideline-Maintain transparency.

- **Architectural Features**

Covering or removing significant elements such as piers, lintels, transom, panels below shop windows, or original doors results in a substantial loss of historic character.

Guideline-Retain original shop-front features.

5.5.4 Signs

- **Location**

Signs are most successful visually when they work with, not against, the existing historic character. They are usually attached to or at the height of the shop front lintel. Signs should not project above the roofline where they would overpower the building. They should not cover up or require the removal of significant architectural elements.

Guideline-Signs should be located at the top of the shop front and should not cover up the special features of the building.

- **Size and Number**

Simple, bold designs on a minimal number of signs communicate more clearly than many competing signs. Signs should not significantly reduce shop front character or overpower the architecture of the building in terms of size and number or in the ornateness of the design.

Guideline-Signs should not overwhelm, oversize or clutter the shop front.

- **Character**

Signs should capitalize on the special character of the building and historic district and reflect the nature of the business they are identifying. Small projecting signs such as symbol signs are appropriate. Signs painted on windows and signs on awnings are also appropriate.

Guideline-Signs should be as distinctive as the businesses they identify.

5.5.5 Signs to Prohibit

The study proposes that the following signs be prohibited in the Old Town of Mombasa:

- Billboards
- Standardized, internally illuminated signs with brand names
- Sandwich boards which obstruct pedestrian traffic
- Temporary illuminated signs

This is because they appear to overwhelm the street elevation and hence aggravate the loss of historic character.

5.5.6 Utility Systems Installation

The installation of utility and mechanical systems such as water or electricity meters could detract from historic buildings if not inconspicuously placed or screened.

Guideline-The installation of utility systems should be avoided on the street facade. Specifically the study recommends the following.

Flue and Vent: Flue and vent from kitchen hoods where they exist e.g. in restaurants should be located within the envelop of the building and should penetrate at the rear slope of the roof as discreetly as possible. They should not be visible from the front of the building

Air-conditioning: Air-conditioning units and pipes are common phenomena in the Old Town of Mombasa and should be installed out of sight as far as possible. Wall or window air conditioning units on the street facade should be avoided in situations where other feasible locations exist.

Meter Box: Meter boxes should be recessed or flushed with the external surface of the rear wall, if possible and their size should be discreet.

Conduits and Pipes: All electrical conduits and new utility pipes should not be allowed on the surface of the external walls. Exposed lightning tape and conductor shall preferably be located such that they are least obtrusive from the exterior. Rainwater drop pipes should also be discreetly situated.

5.5.7 Additions to Existing Buildings

Appropriate additions are encouraged as a means of providing for current and future needs and providing for continued use of existing historic buildings. For new additions to historic buildings, the study recommends the following general guidelines.

- Additions should respond architecturally to adjacent buildings in general and to the building they are a part of in particular.
- If the original building is architecturally significant, the addition should take a respectful "back seat" to it. The addition should not overpower the original. An addition may be taller than the original building if site considerations and careful design still allow the old building to remain dominant.
- They should appear contemporary but compatible in character with the original. They should be sympathetic but not imitative in design.
- The appropriateness of design solutions should be based on the program needs of the developer and how well the proposed design relates to the original building and neighbouring buildings.

5.5.8 New Constructions

- Infill construction should be encouraged on vacant sites especially along the main streets. The strong sense of an architecturally cohesive historic area is weakened by

several gaps along the streets. New construction should fill these gaps and improve the physical quality and economic health of the area.

- Provision of parking within new structures on infill sites is strongly encouraged, but primary effort should be made to provide for automobile entry and egress at locations other than the main street side of the new structure wherever possible. Where this is not possible, frontage devoted to entry and egress should be minimized. Retail frontage should be encouraged to reinforce the pedestrian-oriented "shop front" appearance.
- New construction should appear new since the intent of a historic district is not to "freeze" an area in time, but rather to encourage new, complementary buildings which allow for changing needs and tastes. The high quality of the older structures in the historic area demands excellence in design for new buildings. New construction should not attempt to replicate the old or to introduce a false historic appearance.
- Mombasa Old Town Conservation Office review of new construction should focus on design compatibility with older structures. Proposals for new buildings should be reviewed within the context of a thorough streetscape analysis.
- The appropriateness of design solutions should be based on the programmatic needs of the client and the developer based on how well the proposed design relates to neighbouring buildings and how closely the proposal meets the intent of the conservation policy.
- The conservation office should not apply their guidelines as hard rules. Guidelines must adapt to specific site considerations, to each owner's individual needs, and to the particular design features of nearby buildings. The conservation guidelines should encourage design creativity rather than appropriate prototypes.

Therefore new construction should not try to imitate the old, but should be compatible with the existing with respect to the following:

- *Materials*-The type of materials and their colour, texture, scale and detailing should be compatible with those of the historic area and/or the original building. Predominate wall materials are coral blocks and stone for the new buildings. The predominant roofing material is *mabati*.
- *Scale*-The scale of new work and its constituent parts should be compatible with the historic area and/or the original building and the scale of its parts.

- *Form*-The shape, massing, and proportions of new work should be compatible with the historic area and the original building.
- *Detailing*-The detailing including, but not limited to, the following features and their placement on additions and new construction should be compatible with the historic area

  a Windows
  b Doors
  c Eaves cornices
  d Porches
  e Appurtenances (accessories)
  f Walls
  g Roofs

- *Height*-The height of an addition should not exceed the height of the original building as much as is practical. Buildings in the Old Town of Mombasa historic district vary from I to 3 stories high. The height of new buildings should be comparable to the height of existing buildings and should not detract from the character and appearance of the historic area. Higher heights should only be allowed where site conditions allow and the new construction remains subordinate to the surroundings.
- *Setback*-The setback of new buildings should be comparable to the setbacks of the existing buildings in the area. The building line should be consistent along the street.
- *Historic Integrity*-Compatibility of new work to original work is required, but imitation of old work in new construction should be avoided. If original openings are filled in, the outline of the original opening should remain apparent by setting new infill material back from the surface and leaving original sills and lintels in place.

5.5.9 Site Improvements

As regards site improvements, the study recommends the following;

- Site improvements should be in character with the district, responding to the colours, textures, materials and sense of scale found in the area.
- Contemporary designs should be encouraged. These designs should be compatible with historic district buildings and not detract from them.
- The design of site improvements should capitalize on the unique character of the area but should not attempt to create a false history by incorporating elements, which appear to be from an earlier time period.

Specifically the study identifies the following pertinent issues:

- **Parking Lots**

Weight and Height Limitation of Vehicles:

Limiting the number and size of vehicles allowed into the area can strengthen the character of the historic district. This is critical where parking abut alleys and other sidewalks. Large vehicles also destroy the ornate balconies.

Guideline-Cars should be discouraged from entering the conservation area as much as is practicable. This should be the subject of a detailed transportation study with a view to creation of Pedestrian precincts.

Landscaping:

The environment of parking lots can be improved through landscaping.

Guideline-Parking lots should be made more historically appropriate through careful urban design.

- **Sidewalks, Parks and Urban Furniture**

Paving materials, landscaping, lighting, seating, and other street furnishings have an impact on the historic character. The design and placement of these elements should respond to the historic and architectural character of the district.

Guideline-Paving materials should have the appearance of individual units to give the surface scale. The paving material should match existing and if possible they should be easy to remove if need be. The current use of tarmac should be avoided because the process can structurally destabilise some old structures. The pattern of the paving should respond to the architectural setting by relating to elements of abutting buildings such as entrances *barazas*. The furnishings in these spaces should relate to the character of the historic area.

5.10 Demolitions

Demolition of existing buildings should be permitted where necessary. Not all buildings in the Old Town of Mombasa should remain standing. A good example was the demolition of the old Bohara Mosque and its replacement with a new one in 1982. The study recommends the following circumstances where demolition may be permitted.

- Where public safety is threatened because of an unsafe or dangerous condition, which constitutes an emergency.

- The owner can demonstrate to the satisfaction of a legitimate authority that the structure cannot be reused nor can a reasonable economic/social return be gained from the use of all or part of the building proposed for demolition.
- The demolition request is for an inappropriate addition, or an incompatible building, and the demolition of structure will not adversely affect the streetscape.
- The demolition request is for a non-significant portion of a building and the demolition will not adversely affect those parts of the building, which are significant.

5.5.11 Buildings of a Later Period (British Colonial Architecture)

The British colonial architecture is of a later period and date from 1900 onwards. These buildings were generally constructed after most of the original district was built and are of a different architectural character due to their age, scale, material, and detailing. A good example is the colonial architecture that houses the Municipal Council, Old Law Courts (now the Fort Jesus Library) and the Kenya Commercial Bank building. Additions, alterations and rehabilitation to these buildings should either be compatible with the style and character each possesses, or should be such that it makes the buildings to become more compatible with the historic district.

5.6 Institutional Framework for Sustainable Urban Conservation

It has already been identified that part of the reason for failures conservation efforts is lack of comprehensive custodial agency, making task of managing the Old Town difficult, if not impossible. The study therefore recommends the passing of a single piece of legislation having the following characteristics.

- **Delimits All Historic Areas**

Although the Old Town of Mombasa is gazetted as conservation areas, the gazettement does not incorporate all key elements of the historic city as well as sufficient interconnecting space to allow for comprehensive and meaningful urban design in terms of land use, transport, infrastructure, facilities and the economic base. The Old Town of Mombasa conserved zone should be large enough to capture the extent of the area needing conservation but small enough not to threaten its consideration as a special case. The study recommends that detailed studies be undertaken to so as to work out a boundary that is not arbitrary as is the case. Indication on the ground is such that the historic area can be extended to all that area bounded by the Abdel Nasser road up to Allidina Visram High School, Digo Road, Nkurumah Road, Treasury Square, Mama Ngina Drive up to Fort St.

Joseph. The Sea closes the loop. The additional area incorporates the buffer zone and the green belt discussed earlier.

- **Create Conserved Areas Development Authority**

The Conserved Areas Development Authority (CADA) would function within the boundaries of the defined area as a conservation area. It would have sweeping powers and should function as an independent government parastatal. It would also represent a public-private partnership and would give a voice to the local residents as well as to outside investors. The CADA:

- Would have the responsibility of planning in all the historic areas.
- Would have the responsibility and authority for conserving all historic monuments.
- Would define and enforce building codes and regulations to conserve the historic character of the conserved area
- Would undertake the mandatory review of all new construction within that area.
- Would undertake the bulk of the infrastructure and commercial development within the designated area.
- Would be responsible for the financial aspects of all these aspects that aim at integrated land use
- Would have financial authority to borrow and use some of these borrowing to provide working capital.

The CADA should be audited by the government and be responsible to the legislature and executive so as to check these sweeping powers which can lead to corruption.

The CADA should incorporate the following partners;

- *The Government*

The Government would bring all public land under it to the Authority.

- *Property owners*

The property owners would have the actualised marked value of their property as the basis for their acceding to shares in the CADA.

- *Local residents/ renters*

Tenants could have shares allocated to them in CADA approximated by marked value of their tenancy.

- *Private investors*

These would bring know how and capital to the venture. They should involve national as well as foreign investors.

- *Waqf (Private and Public)*

Waqf property is non transactional by virtue of being tied up in trust. Waqf authorities should enter into a negotiation with CADA to surrender the Waqf properties of historic value. They should be compensated by public land outside of the historic area in a swap arrangement.

Other partners

- Local Businesses
- Non Governmental Organisations
- Lobby Groups

- **Operations of the CADA**

Assuming that CADA has been duly constituted and empowered with the legislative framework, the proposed strategies in this study can be implemented. Raising funds to undertake the physical work can be through.

- The CADA could use vacant land as collateral to borrow money from commercial banks or it could sell these parcels to developers who would agree to develop them in full consonance with the overall physical plan under the supervision of CADA. The revenue from the sales would provide working capital and the increased tax revenue that would accrue from the development of vacant land would be an on going source and strengthen the tax base.
- The CADA would be in a position to levy user charges on all improvements. It could also raise funds through sales, rentals, leases, or cost recovery measures for the provision of services.

- The CADA would provide technical advice in the upgrading of building stock not listed as historic buildings at a fee. The costs of improvements should be shared between the owners and the tenants in accordance with a predetermined formula. This is because the rent controls are a major obstacle to improvement of the buildings in the Old Town of Mombasa, and the owners have no incentive to maintain or upgrade their buildings when the expected returns are going to be very low.
- Government taxes should not be siphoned off to other areas and should go into improvement of public facilities. This is especially so with money earned from the tourism industry.

5.6.1 Sustaining Continuity and Change

This study concurs with Frey's (1999) argument that despite the urgency of change it should not happen in a compressed time. It is advocated that the approach be gentle rather than radical and any transformation process must be slow, incremental and carried out by the people. The transformation must also be feasible. Comprehensive development in a historic neighbourhood is neither acceptable socially nor economically viable. Improvement should be through conservative surgery not radical surgery. This is because in the former, the historic area can undergo change without significantly affecting the other city districts. Development in the old town should also be carried out within the framework of the larger city region in order to achieve a steady growth.

- **Flexibility in planning**

Due to continuity and change in the social economic situation the conservation of historic areas should be carried out through feasible frameworks, which are open-ended in detail (Frey, 1999). This is because the change of the urban fabric is not predictable over long periods of time.

- **Political support**

Political support is necessary of the long-term incremental sustainable development. The leadership must be visionary and must shun the 'shortermism' of politics. This is because incremental strategies can take even 50 years to get somewhere near a sustainable townscape (ibid).

- **Regional Planning Framework**

Sustainability of the Old Town can only be possible if it is recognized that it cannot stand on its own because it depends on the regional, national and global environments.

Therefore, the coordination of local development in the context of a framework of the municipal area is a must.

- **Community Participation.**

Active participation of the inhabitants must be sought. The process of conservation should become apolitical and involve the people and communities so that they can influence development in response to their needs and aspirations. This will make them identify with their places and, by their involvement in the neighbourhood conservation process, they are able to undergo a process of individual development and learning (Frey, 1999).

- **Impacts of Individual Projects**

Environmental impact assessment of individual actions is possible in a slow incremental approach to conservation. The impacts of such actions will be monitored and lessons will be learnt for subsequent actions. Regular audits ought to be done so as to assess what has or has not been achieved. A cost-benefit analysis of these actions could be used as a framework in order to determine the desirability of actions.

- **Professional Responsibilities and Education**

Planners in the historic area must deal with developers, investors and the people already living there. This is to enable a balance of demands be achieved. They must also understand and be able to deal with structural, spatial and formal nature of the urban environment. Conservation efforts must also involve professionals of different expertise who should work together in order to respond to economic, environmental and ecological demands of the area, therefore education programmes for all these disciplines should incorporate a strong base in heritage management and a design base.

- **Regulating Change**

The old town cannot have a finite form unless it becomes a museum. Therefore, there cannot be an over regulating of urban development. Formal diversity must therefore be encouraged and excessively tight rules shun because they stifle design ingenuity. Under regulating must also not be encouraged because it will invite idiosyncratic projects and will bring little if any coordination.

Today's rapidly changing social economic conditions dictates that the old city must also change. However, if the change occurs at the level of the private realm, then the city as Frey shows maintains the identity generated by public realm. It will therefore continue to be recognized as unique, imageable place by both the citizens and visitors.

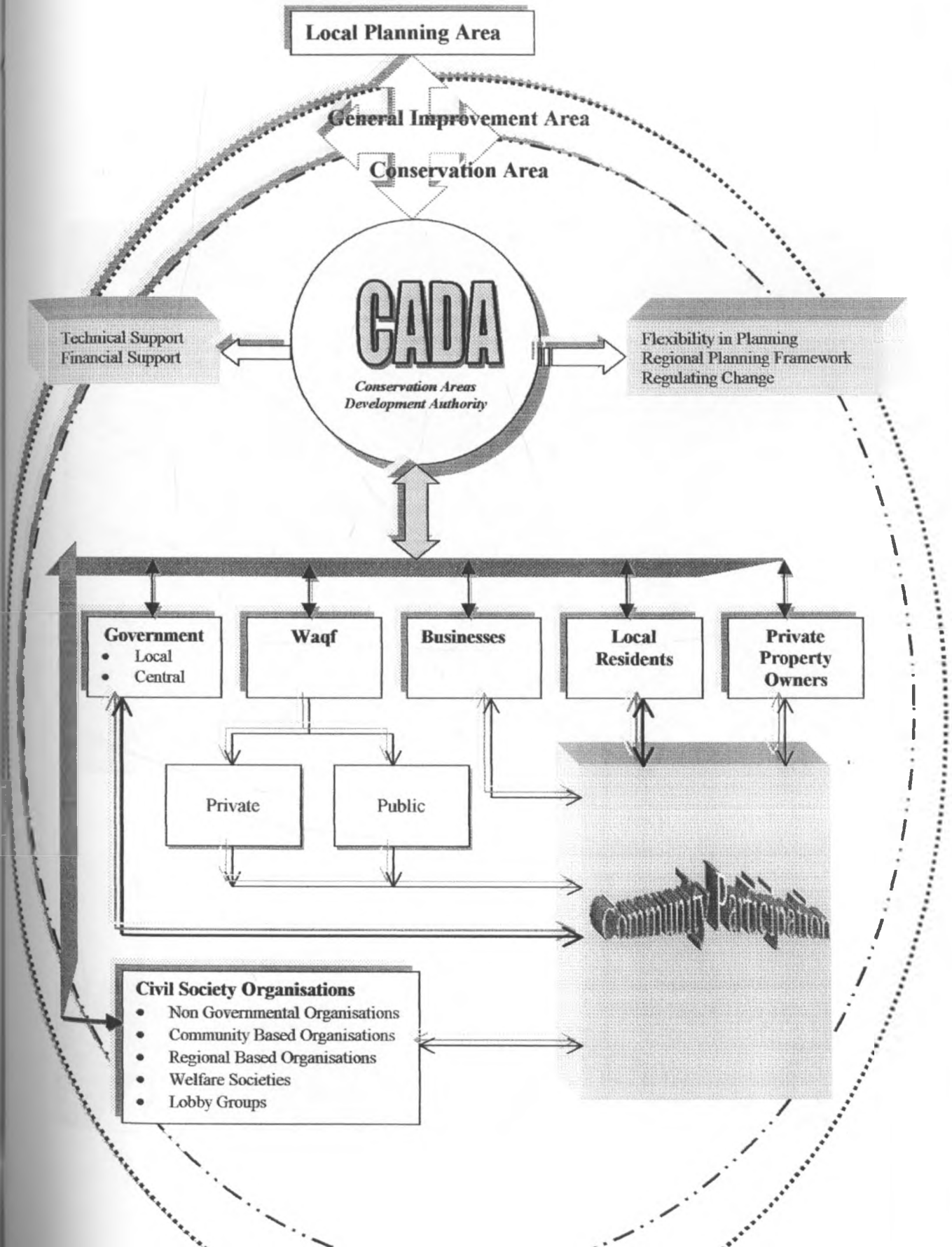
Frey (1999) has shown that if the change is in both the public and private domains, then the city will continue to work well functionally but will loose its identity and the citizens will loose the ability to foster a sense of belonging. This is because the mental map or image is due to use-patterns and long-lasting physical characteristics that make it what it is.

A heritage area must therefore provide emotional security and a sense of belonging to those who live in it. This is because it is a place with a unique physiognomy and identity. Sustainability can be assured if the area can adapt to changing needs and social economic conditions without interfering with the quality of the city's public realm.

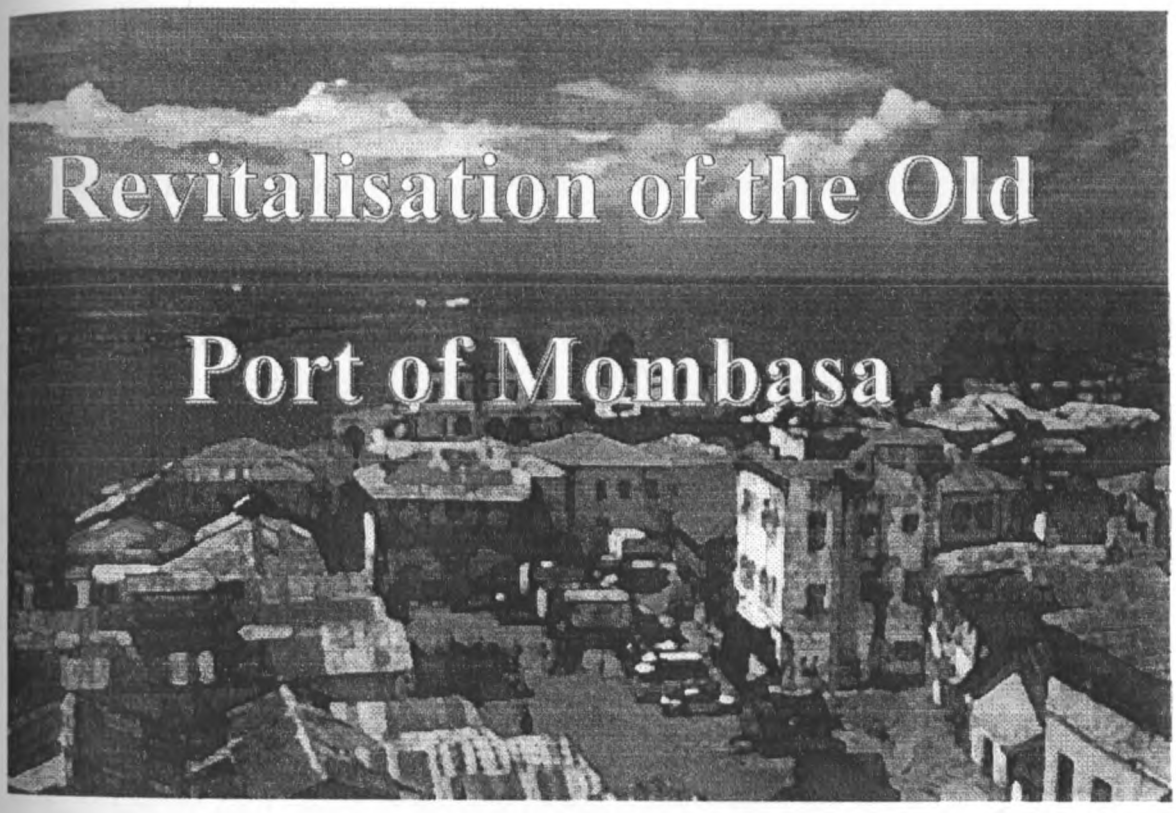
- **Relaxation of building Regulations requirements**

The local authority should dispense or relax some regulations because some specific requirements might not be possible to be met at the present circumstances e.g. in the cases of fire escapes. It would be extremely expensive to provide means of escape in some buildings. If requirements were to be relaxed it would be necessary to carry out additional work particularly where the item for relaxation falls below the relevant requirement.

Proposed Institutional Framework

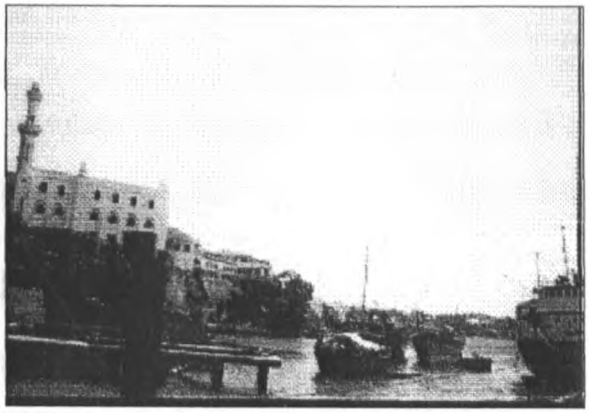


Strategic Intervention:



Government Square and the Old Port

The Old Port as a Node



Under Utilisation Of The Old Port

Source: Field Survey, 2004

5.7 Strategic Intervention: Revitalisation of The Old Port and Harbour

5.7.1 Rehabilitation of The Physical Fabric

Why Rehabilitate In The Old Town Of Mombasa?

The most significant reason for rehabilitation of buildings especially the residential ones is the physical condition. However, since the Old Town of Mombasa has various building types, rehabilitation will be based on the key factors of obsolescence or redundancy, often in common with poor physical condition.

- **Obsolescence**

This happens when buildings become unsuitable for the modern needs. A good case in point is the old port, the fish market and adjacent bonded warehouses. They are therefore excellent material for the proposition of economic rehabilitation and adaptive reuse, provided that the uses that are put into them are location apposite.

- **Redundancy.**

Old buildings that are obsolete because of age can also be said to be redundant at times. Redundancy arises when a building becomes superfluous, despite its suitability for the function it was designed for. A commercial building could be in excellent state yet there is no commerce to transact, despite the suitability to transact such business in there. Many commercial buildings in Old Town of Mombasa are ripe for economic rehabilitation and reuse.

- **Poor physical condition**

Many buildings are unfit owing to the lack of maintenance and must therefore be repaired if they are to continue in use. Generally, as Highfield (1987) argues, occupied buildings tend to be well maintained, and poor physical condition is associated with buildings, which have been vacated because of obsolescence or redundancy. If such buildings stand for a considerate amount of time then neglect, vandalism and effects of the elements lead to a rapid deterioration. It is therefore recommended that a developer commission a detailed survey of the building(s) under consideration to determine their true condition and likely repair cost since these could add a considerate amount of overall cost of rehabilitation.

5.7.2 Redevelopment Options in the Old town of Mombasa

In the Old Town of Mombasa, many intermediate solutions exist and the scale of redevelopment of any fabric must be treated case by case. It can range from the least drastic to the most dramatic (the degree of intervention will be a function of a myriad of factors including the present and desired use, the size of facility, age, materials an

methods of construction, location etc). Highfield (1987) suggests the following options, which can be applied to a historic any area.

(a) Retention of the entire existing building structure together with the internal subdivisions. Minor upgrading of finishes sanitary accommodation and natural ventilation can be carried out

(b) Retention of the entire existing external envelope, including the roof, and most of the interior with minor internal structural changes. These changes could be the demolition of some interior subdivision or the insertion of new staircases.

(c) Retention of entire existing external envelope, including the roof with major internal structural alterations, which could include the insertion of new floors where the original storey heights permit.

(d) Retention of the buildings' envelopes walls and complete demolition of its roof and interior. This is the construction of a new building behind the historic façades.

(e) Retention of only two or three elevations of the existing building and complete demolition of the remainder. A new building is then put up behind the retained façades. This option is best for corner sites.

(f) Retention of only one elevation as a single façade wall of the existing building and construction of an entirely new building behind the retained façade. This is best where the building has only one important façade, which could be the main street elevation.

(g) The most drastic redevelopment option would be total demolition of the existing building and to replace it with a new one.

The above principles are arguably sum up the available options for many of the built fabrics in the study area. The Old Port of Mombasa is selected as a superb case in which most of the above can be applied. The study conjectures that since the old port has been a key area in the history and the general evolution and de-evolution of Mombasa City, then it is one area where key investment of resources can cause spiral effects in other sectors and areas of the city and hence cause an boost up of the living standards. To this end the study proposes a project for the revitalisation of the old port. A detailed proposal is in the next section.

5.8 Revitalisation of the Old Port of Mombasa

5.8.1 Introduction

The port area was already thriving when the British arrived in Mombasa in 1890s. They set up most of their buildings in its vicinity and the Government Square was born. They redesigned the port and put up structures around 1901. These structures may have been

prominent edifices then but now their primacy is not exhibited in their architecture and use. The port actually sits as an inconspicuous element in old town townscape.

The provision of facilities in the current buildings is not in keeping with the dynamic evolution of contemporary uses. Basically the port facilities have fallen into disuse due to the drastic decline in dhow trade. There is however a little activity in trade that is under the control of Kenya Port Authority.

The old port is no longer a big attraction to tourist who used to come and see the wooden dhows. This is exacerbated by the fact that it is also an untidy spot. It boasts an unhygienic toilet block and eating-place. The area has no adequate lighting. The loading and unloading of lorries in the government square is a traffic nightmare. Damaged balconies and scratched walls in the vicinity by huge lorries are common.

5.8.2 Background Information

The Old Port of Mombasa is located adjacent to the Government Square, (one of the most important public spaces in old town conservation area), has served as the centre of commerce and business in Mombasa for many years In the early part of the last century, the port continued to thrive as government and business mingled together in the tasks of opening up the interior and carrying on trade with the rest of the world. But when the deep-water port was built at Kilindini to encourage the bigger ships to enter into Mombasa being one of the busiest ports in Africa, the old port started losing its importance gradually.

Government offices began to shift out of the Old Town and businesses associated with shipping industry moved closer to the new port. However, the smaller dhows that intermittently trade along the east coast of Africa still use the old port, though commerce is certainly at a smaller scale than 150 years ago.

From this brief account, it is evident that the port is in a primary location. The historical importance of the site in the city's heritage is clear. Unfortunately the port, as of now, no longer exhibits the monumentality and dominance it should express. There is therefore a need to remodel the whole complex, to rejuvenate the site, and reinstate its primacy both in the visual and functional spheres. An edifice that makes a significant impact on the image of the town should be erected in place of the present inconspicuous structure.

The objectives relating to the redevelopment of the Old Port are: -

- Creation an appropriate architectural image that will concretise the primacy of the Old Port in Mombasa in promotion of cultural, historical heritage, economic heritage through tourism, and as a transport centre for dhows.
- Employment of appropriate technology and building materials in the construction of this dhow port.
- Achieve and ingenious translation of forms and techniques based on the divergent architectural styles in the locale.
- Successfully integrate the different activities taking place in the port in an organized manner, namely, sight seeing by tourists, loading and unloading of goods from the dhows, information recreation, etc.
- Provide appropriate accommodation and circulation that will resolve the issues encountered in the Old Port.

5.8.3 Justification

The project is justified along the following lines.

- The need to provide a more fitting edifice in place of the extant outdated structure.
- Provision of appropriate architectural expression for the port area.
- Concretisation the historical importance of the port in the development of Mombasa town.
- Provision of an appropriate urban design solution.
- Solution of problems faced by port users.
- Enhancement and integration tourism and port activities
- Creating of more attraction to draw a wider variety of people for visits.
- Improvement of adjacent infrastructure to make the area a more pleasant place in which to stay for a longer period and the conveniences of the residents.
- Accommodation of more current needs and diversification of tourism.
- Cultural conservation so as to create a sense of place and identity.
- A refurbished historical port can act as a trigger for urban regeneration by providing confidence that an area's quality of life will improve.
- Increase attractiveness of the area and thus support inward investment strategies.
- Creation of jobs during and after completion for the local population and revive traditional craft and skills.

5.8.4 Project Constructibility

The project will take advantage of the economies of using locally available building materials and technologies both modern and traditional. Emphasis will be on the use of mangrove poles (*boriti and banaa*), eucalyptus poles (blue gum), *maji ya chumvi* and coral

rags. The main structure on the land will incorporate coral stone load bearing walls and reinforced concrete beams where appropriate and expedient. There will be strong emphasis the use of *boroti* and *banaa* so as to express orthodoxy in material usage.

The jetties, being technical in nature, will be made of concrete piles. Gravity retaining of concrete masonry will contain the wharf. This could be high in initial cost, but is advantageous in long run due to its durability, low maintenance cost, and aesthetical value. Technology to be applied will vary from traditional to appropriate. The use of local material and the appropriate technology inherent in their use will ensure that the level of expertise required in construction is locally available and enable local labour to be extensively used in the construction. To encourage project acceptability, the unskilled labour will be sourced from the heritage area.

5.8.5 Economic Viability

Great success in heritage conservation can occur when the heritage elements is in actual use and thus capable of generating revenue to pay for its conservation. The old port though an artefact is alive and the revenue to be generated may be from visitors paying admission charges, or for the use of the storage godowns. Additional activities should be introduced to increase this revenue and these could include a small maritime museum, a restaurant and an open-air theatre. Indeed such revenue may cover all cost of conservation.

Clearly the proposal is an income-generating project but its viability can also be measured in terms of the socio-cultural benefits. The current site is so valuable that the cost-benefit criteria cannot necessity apply. If the project is realized, the conservation area as a whole will be better off and any individual sub groups that may be worse off will be offset but the gains by other subgroups that will out weigh the losses. In principal, those that emerge better off will compensate any subgroup of society that is worse off.

The economic viability in rejuvenating the old port is beyond doubt in the conservation area and at the global level. Given its popularity with tourists and the already going on shipping activity plus a possible government subsidy, any developer will accrue all the advantages that have been discussed. Since resources are limited, and heritage initiatives inevitably take on a lower profile compared to housing or basic infrastructure in this country, the project will be financed through the resources it has rather than a cultural budget.

rags. The main stru
reinforced concrete
the use of *borati* and

The jetties, being technical
concrete masonry will
advantageous in long run due to
Technology to be applied will
material and the appropriate tec
expertise required in construction
extensively used in the construc
labour will be sourced from the he

5.8.5 Economic Viability

Great success in heritage conserva
use and thus capable of generating r
an artefact is alive and the revenue to
charges, or for the use of the storage
to increase this revenue and these co
an open-air theatre. Indeed such reve

Clearly the proposal is an income-ge
in terms of the socio-cultural benefits
criteria cannot necessity apply. If the
will be better off and any individual su
gains by other subgroups that will o
better off will compensate any subgrou

The economic viability in rejuvenating
area and at the global level. Given its
shipping activity plus a possible gove
advantages that have been discussed.
inevitably take on a lower profile co
country, the project will be financed t
budget

5 Sustainability

Economic Sustainability

its location, the project has access to commercial, financial, educational and social ities needed to guarantee its sustainability. It forms part of the Government Square, ch is the largest and most important open space in old town. In its immediate hbourhood is the Bohara mosque and Mandhry mosque along the Sir Mbarak Hinawy d. Also in close proximity are curio shops, retail shops and even a sports club. Fort s with its high tourist potential is less than five minutes walk away.

se and other activities will enhance financial cash flow, which will determine the ainability of its activities. Its direct consumers will be operators at the Fish Market who the harbour. Exporters and importers along the East African coast and much of the n and Arabic coast will also ensure continued business. Therefore socially beneficial vities are not likely to fail because of the supporting infrastructure and amenities.

ensure that residents in a desolate condition do not suffer, the project will involve them ugh employment so that their plight is not aggravated. Revenues from tourism should all be surrendered to the central government so that the local authority will have an ntive to ensure project sustainability. To warrant that the locals still have access to the ovated port, the levies for the necessary infrastructure will not be exorbitant.

Socio-Cultural Sustainability

cording to Jenny Erbach (1997) the character and uniqueness of a place are essential to well-being and productivity of the residents and to their sense of who they are. To this , the project will encourage the cultural activities inherent in old town. There shall be a monious integration of groups already in existence, with those that may come in. It will er for adverse cultures and encourage social interaction and meeting. It will also foster ial stability through providing an identity. Safety will also be catered for though erent circulation systems for pedestrian, cars/lorries and the dhows. Street furniture will o be provided to make the walking experience enjoyable and episodic.

Biological Sustainability

e project will adapt to changing population trends, in terms of size and taste. The living cles shall be taken care of because the scheme can be incrementally developed. The nge of use of certain spaces e.g. the open air packaging area into a amphitheatre will be dertaken to provide more current needs. The aesthetic cycle will be ensured through the

use of appropriate scale. The project massing will derive from the existing character of the neighbourhood townscape. The building materials will be selected such that they are easy to maintain and can also age gracefully to produce 'patina', which is very aesthetic. As a city tissue, the buildings, envelope and massing will respect the existing scale in the historic district.

- **Ecological Sustainability**

The improvement of the natural physical environment and mitigation of any adverse effects on it will consider;

Energy efficiency

The project will be bio-climatically sensitive. It shall take advantage of natural day lighting to limit use on artificial lighting to specific spaces at night only. The width of the structures will be limited to the traditional mangrove span of three metres to ensure maximum cooling effect. Solar energy should be harnessed to provide hot water and power for electrical appliances where possible.

Thermal comfort

Thermal comfort will be achieved by using roofing materials with low thermal mass, through planning and functional zoning to encourage free flow of air currents into spaces.

Noise control

This will be achieved through sensitive planning and zoning of the port and adjacent activities.

Ventilation

The project will rely on natural air currents for ventilation. It will tap the various wind flows experienced on the site to encourage cross ventilation of the whole scheme.

Garbage

Garbage bins will be provided at strategic points in the scheme. A high capacity incinerator will also be provided not only to the scheme but also for the area adjacent government square.

Sewer and Wastewater Management

The existing sewer and waste disposal system will be used. It utilizes a septic tank, which will be enlarged to increase its capacity for the increased population. The septic tank will also be renovated to avoid any damage to the surrounding marine ecology.

Drainage and erosion

The site drains naturally towards the sea. Drainage systems incorporating surface drainage and underground drainage will be used to ensure efficient drainage and avoid erosion and stagnating of water.

Fire prevention and control

Several fire hydrants will be located strategically to draw water from the ocean and help in fire fighting. Fire hose reels and extinguishers will have to be conveniently located along circulation routes at the floor area of 481 sq. m per hose reel or extinguisher.

5.8.7 Integration into the Neighbourhood

The project will be sensitive to the site and its neighbourhood context. Two floors will be the maximum height allowed The project will further enhance the skyline of the neighbourhood by providing a pleasant contrast to the *mabati* roofs.

5.8.8 Technology and Materials

Local traditional and modern building materials will be used. This will include mangrove *(banaa and boriti*) poles, coral stone, reinforced concrete etc. Where appropriate, all building materials used will be locally sourced. Technology use will depend on the building material. However as noted elsewhere, it is proposed that locally available traditional and appropriate technologies be used.

5.8.9 Facilities And Services To Be Offered

There is close symbiosis between heritage and tourism since the desire to conserve and the desire to visit were mutually stimulating. The project therefore proposes to provide facilities for tourists, local residents, fishermen, sailors, stevedores and other users. This will include eating-places, entertainment areas, docking facilities and a small maritime museum among others. Typical entertainment includes restaurants and a sea front promenade. Harbour facilities will include commercial and tourist jetties, warehouses, workshops and health facilities. Additional facilities for the locals will be provided and this will include *dakas* and *barazas*. It is foreseen that the project will be a prototype for port rehabilitation in other old ports of East African littoral.

5.9 The Brief

5.9.1 The Client

Since the redevelopment is in public interest, the client is deemed to be the residents of the Old Town of Mombasa. The redevelopment is intended to cater for the changing needs of

quality and quantity. The changing needs of the society include a need to increase volume of port users both in terms of tourists and the locals who both visit and conduct shipping and other businesses there. To cater for this growth, not to mention the dilapidated state of the port, there need to be a turn towards providing more efficient docking and tourist facilities. This will enable it to sustain high user rates and enhance its economic viability, which is dwindling.

The rejuvenated port will therefore be a self-sustaining environment providing business, leisure and entertainment facilities for both locals and foreigners. The port will provide wholesome and sensitive environment designed for people's working, enjoyment and convenience. It will cater for as many of the residents needs as economically viable to enable the developer obtain financial benefit from the clients' use of the port.

5.9.2 Urban Design Considerations

From an urban design perspective the desire is to have a more conspicuously monumental edifice. These principles include juxtaposition of divergent architectural styles, abstractions and simulations from the surrounding and related features. Such an edifice would represent the significance of the old port in Mombasa's history and development

In addition to the facilities directly linked to port activities it will be necessary to reorganize and plan the immediate area fronting the main building. This area is the government square.

5.9.3 Spatial Requirements

The project envisages the provision of the following facilities and spaces;

- A small maritime museum.
- An additional jetty for fishermen.
- A jetty for tourist boats and dhows.
- Additional docking facilities; transit sheds, a lighthouse and a small workshop.
- A facelift for the existing structures.
- Interior reorganization of the dhow registration depot.

5.9.4 Redevelopment Brief

Table 13, Existing Facilities on Site

1. Old Port	Area (m^2)
Godown No. 3	301.5
Umbrella Shed	289.4
Wood And Iron Shed	109.6
Godown No. 4	122.4
Stacking Ground 1	86.6
Stacking Ground 2	85.6
Plat form 1	72.7
Platform 2/jetties/food market	445.9
Administration	301.5
Total Built Up Area	**1815.2**
Total Open Area	**687.8**
Built Up Ground Area	**821.9**

2. **Adjacent Plots** (to be incorporated into the project)	Area (m^2)
Godown No. 3 A	258.6
Fish market/ Godown No. 1	222.6
Fish stalls	232.3
Landing Stage	111.5
Godown No. 5 (Samaki Industries)	190
Hookers Bonded Warehouse No. 4	527
Total open area	**111.5**
Built up Ground Area	**1430.5**
Total Built Up Area	**1542**

A. Total Built Up Site Area (excluding open areas)	**2553.9**
B. Total Ground Built Area	**2252.4**
C. Total Site Area	**3353.2**

Table 14, Proposed Additions and Alterations

Category	Required Space	Function	Capacity	Area (m^2)	Design Considerations
Administration	Curator's Office	Management	3 Visitors	20	Close to Entrance
	Conservation	Information	5 Visitors	25	Open to Public
	Ticketing	Ticketing	2 Staff	10	Open to Public
	10% Circulation			5.5	
		Subtotal		**60.5**	
Exhibition	Primeval History	Exhibition	20 Visitors	200	Good ventilation and
	Chinese Times		20 Visitors	40	Circulation, enhance
	Portuguese		20 Visitors	200	views
	Arab		20 Visitors	200	
	British		20 Visitors	50	
	Contemporary		20 Visitors	300	
	Rare Books		20 Visitors	40	
	Epic/Hamziyas	Recitals	10 Visitors	40	
	10% Circulation			107	

		Subtotal		**1177**	
Recreation	Card Room	Playing Cards	5 People	10	Good Views & Ventilation
	Billiard	Playing Billiards	6 People	12	
	W/Cs	Ladies/ Gents		20	
	10% Circulation			4.2	
		Subtotal		46.2	
Amenities	Sea Food Restaurant	Food	60 People	42	Good Views of Ocean
	Snacks		20 People	25	
	W/Cs	Ladies/ Gents		20	
	10% Circulation			8.7	
		Subtotal		**95.7**	
Shopping	Music Shop	Sales	2 Staff	10	Good Views of Ocean
	Photo Shop	Photography	2 Staff	12	
	Book Shop	Books	1 Staff	10	
	Antiques	Artefacts	3 Staff	35	
	W/Cs			20	
	10% Circulation			7.7	
		Subtotal		**84.7**	
Docking	Transit Shed	Cargo Storage	5 No.	150	Good Circulation
	Light House	Navigation	1 No.	40	Good Vantage Point
	Workshop	Repairs	1 No.	200	Good Security
	Jetty	Fishermen Etc.	1 No.	30	High Safety
	Jetty	Tourists	1 No.	30	High Safety
	15% Circulation			45	High Safety
		Subtotal		**495**	
		Total New Area 1959.1 m^2			

Table 15, Structures Recommended for Demolition

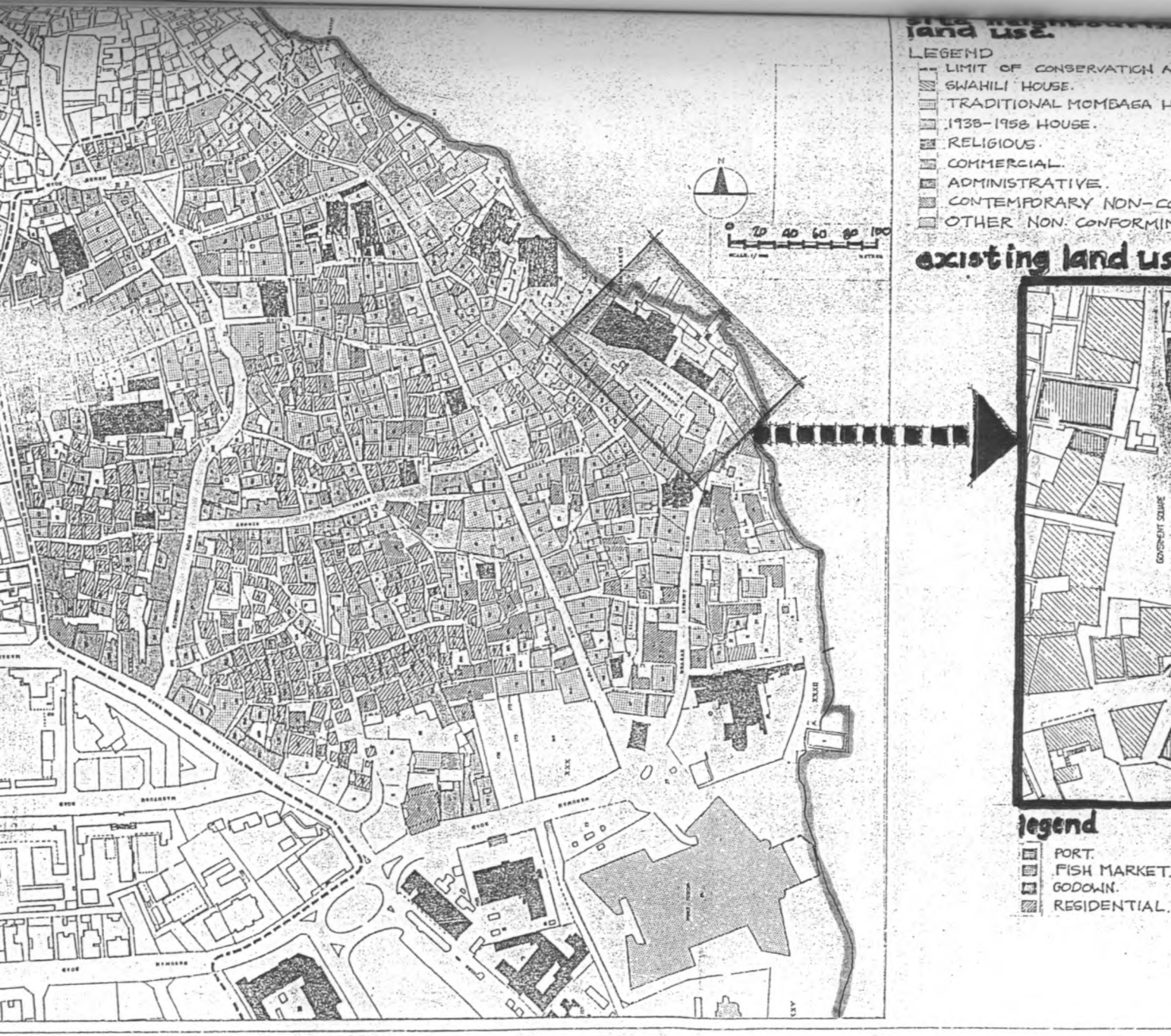
Structure	Area (m^2)	Reason
Umbrella Shed	239.4	Architecturally ill, very rusty
Godown No. 5	190	Under utilised, not economically viable
Ware house No. 4	527	Under utilised, not economically viable
Wood and iron shed	109.6	Under utilised, architecturally obsolete
Subtotal	**1066**	

Table 16, Structures Recommended for interior Reorganisation

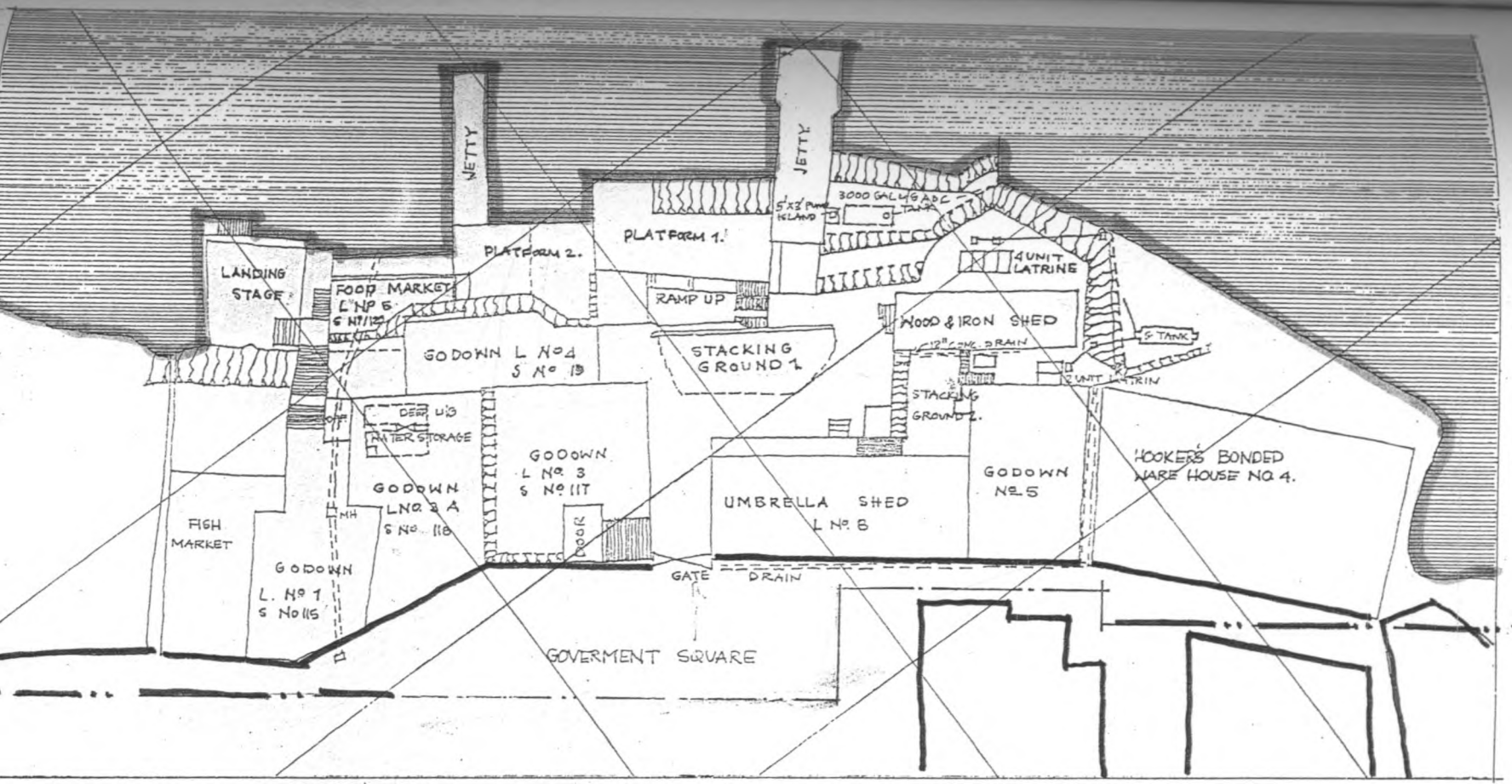
Structure	Area (m^2)	Reason
Dhow registration Deport	301.5	Functionally unacceptable
Fish Market And Stalls	454.9	To incorporate cold rooms and barbeques
Subtotal	**756.4**	

Table 17, Other Minor Areas to Reorganise

Structure	Area (m^2)	Reason
Stacking Ground	169.2	Unsafe
Platforms/ food market/jetties	518.6	In a state of disrepair
Subtotal	**687.8**	


land use.
LEGEND
LIMIT OF CONSERVATION A
SWAHILI HOUSE.
TRADITIONAL MOMBASA H
1938-1958 HOUSE.
RELIGIOUS.
COMMERCIAL.
ADMINISTRATIVE.
CONTEMPORARY NON-C
OTHER NON CONFORMIN
0 20 40 60 80 100
existing land us
legend
PORT.
FISH MARKET.
GODOWN.
RESIDENTIAL.


RELIGIOUS
COMMERCIAL
ADMINISTRATIVE
CONTEMPORARY NON-CONFORMING
OTHER NON CONFORMING
existing land use plan
SITE NEIGHBOURHOOD CONTEXT AND



existing plan layout 1:500

north

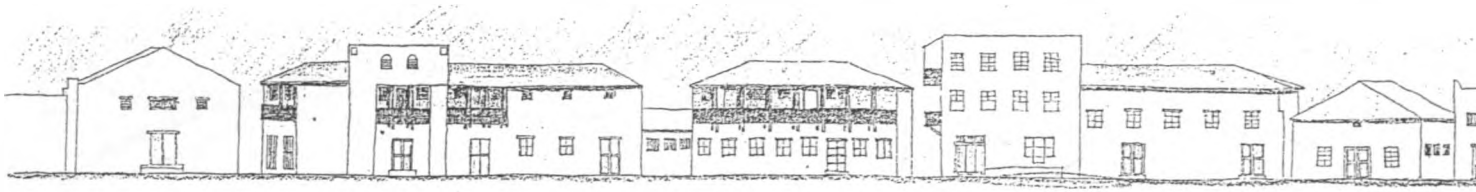
SPACE	AREA (M²)
GODOWN No. 3	301.5
UMBRELLA SHED	289.4
WOOD & IRON SHED	109.6
GODOWN No.4	112.4
STACKING GROUND 1.	85.6
STACKING GROUND 2.	83.6
PLATFORM 1.	72.7
PLATFORM 2+ JETTIES+	
FOOD MARKET	445.9
ADMINISTRATION (1ST FL)	391.5

SPACE	AREA M².
GODOWN No 3A	258.6
GODOWN No. 1	222.6
FISH STALLS	232.3
LANDING STAGE	111.5
GODOWN No. 5	190.0
WARE HOUSE No. 4	574.0

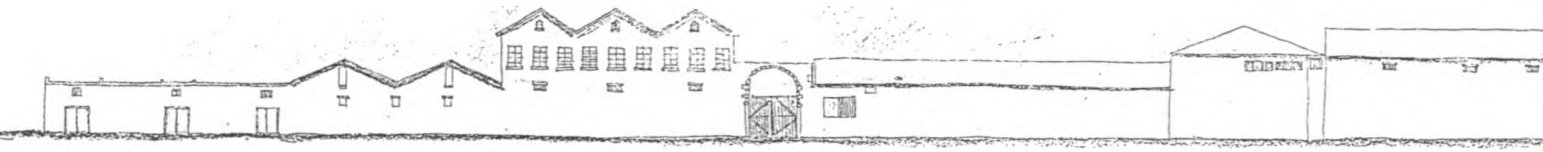
SUMMARY

TOTAL BUILT UP AREA (EXCLUDING OPEN SPACES): 2552.9M²
TOTAL BUILT UP GROUND FLOOR AREA: 2252.4M²
TOTAL AREA (GROUND FL.+1ST FL.+OPEN AREAS: 3353.2M².

FIGURE 21, ELEVATIONS OF THE OLD PORT

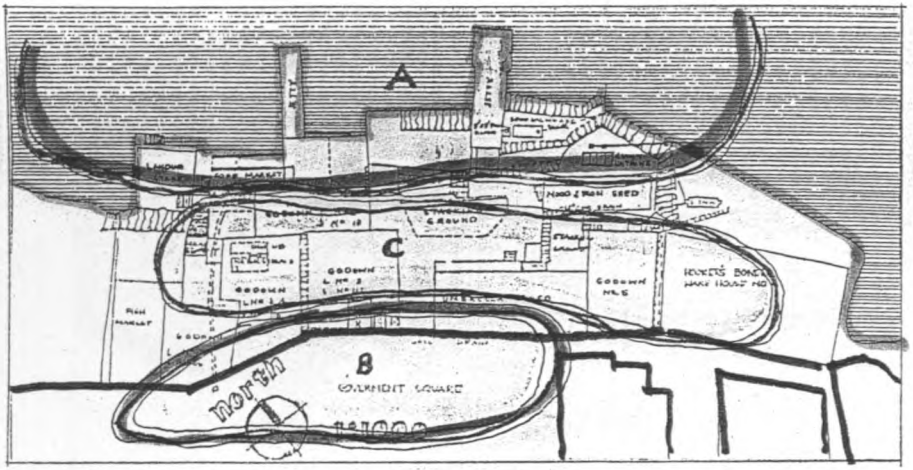


ELEVATION OF THE GOVERNMENT SQUARE FROM THE PORT VASCO DA GAMA STREET 1:200 A—A



ELEVATION OF THE PORT FROM GOVERMENT SQUARE. 1:200 B—B

Zoning

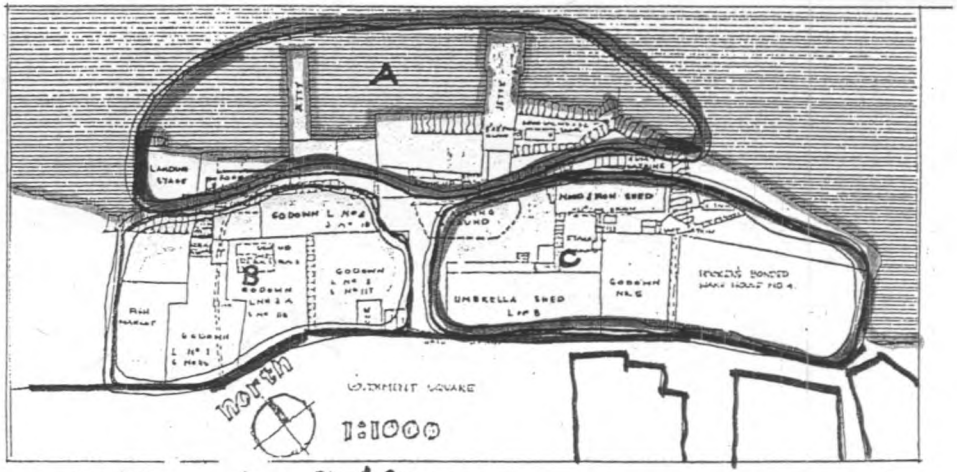


noise

ZONE A:
- -HIGH NOISE ZONE FROM DIESEL ENGINES AND NOISY SAILORS.
- -APPROPRIATE FOR NOISY FACILITIES EG. BOAT PARKING, WORKSHOPS, PLANT & MACHINERY.

ZONE B:
- -MEDIUM TO HIGH NOISE ZONE: CLOSE PROXIMITY TO GOVERNMENT SQUARE WITH VEHICULAR AND PEDESTRIAN ACCESS.
- -BEST FOR VEHICLE PARKING, ENTRANCE HALLS AND RESTAURANT.

ZONE C:
- -LOW NOISE ZONE: APPROPRIATE FOR ADMINISTRATION, INTERNAL COURTS AND RESTAURANT.



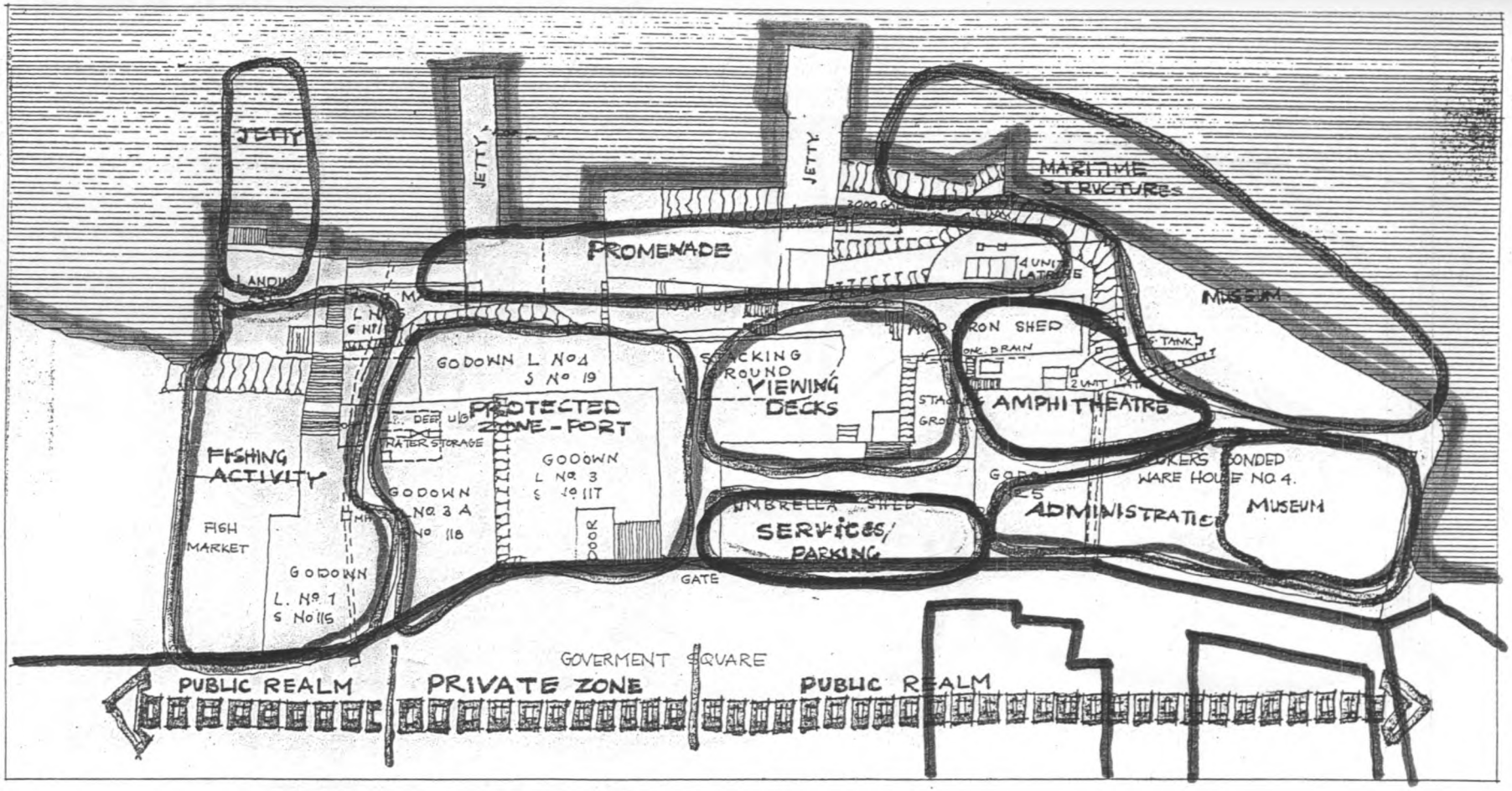
existing buildings

ZONE A.
- -THE JETTIES ARE IN A STATE OF DISREPAIR. THEIR ARE ALSO INADEQUATE.
- -PROVIDE ADDITIONAL JETTY FOR FISHERMEN AND TOURISTS AND MAKE GOOD EXISTING STRUCTURES.

ZONE B:
- -THE BUILDINGS ARE STRUCTURALLY SOUND BUT ARCHITECTURALY UNIMPRESSIVE.
- -FACE LIFT AND INTERIOR REORGANISATION REQUIRED.

ZONE C:
- -BUILDINGS UNDERUTILISED.
- -THEY ARE IN A POOR STATE OF DISREPAIR.
- -DEMOLISH AND SET UP A MARITIMS MUSEUM.

zoning concepts.

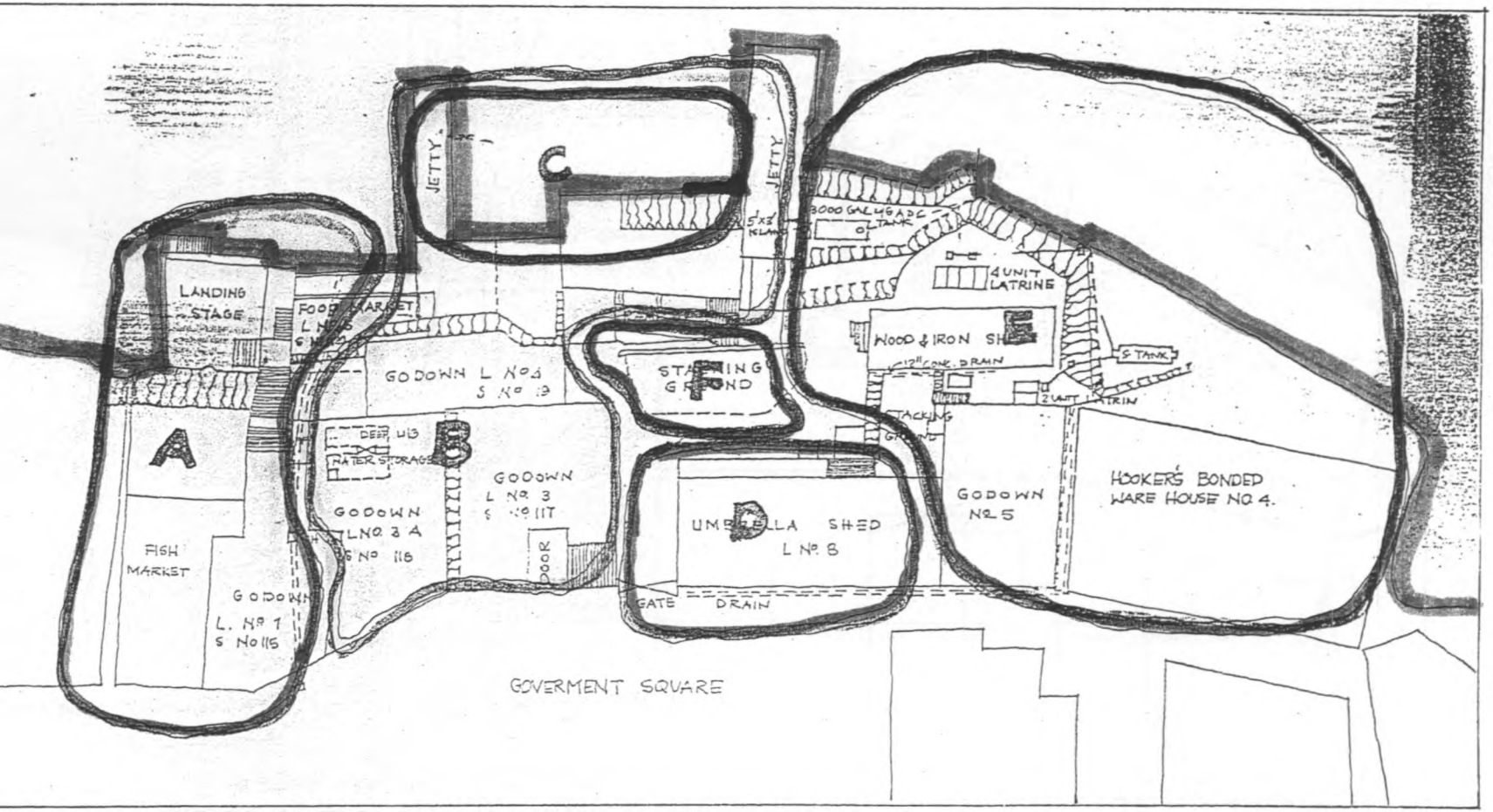


1:500

concept synthesis and evolution.

- THE AMALGAMATION OF ALL CONCEPTS DESCRIBED SHOULD CUMULATE IN A DESIGN THAT FULFILS THE CLIENTS OBJECTIVES FULLY WHILE SATISFYING THE USERS.
- THE OUTLINED CONCEPTS WILL BE DISCERNABLE IN BOTH PLAN AND 3.D. LEVEL.

Composite map



ZONE A: FISHING ACTIVITY
- MAINTAIN STATUS QUO AND INTRODUCE A JETTY.

ZONE B. PORT ACTIVITY. REORGANISE CUSTOMS DEPOT.

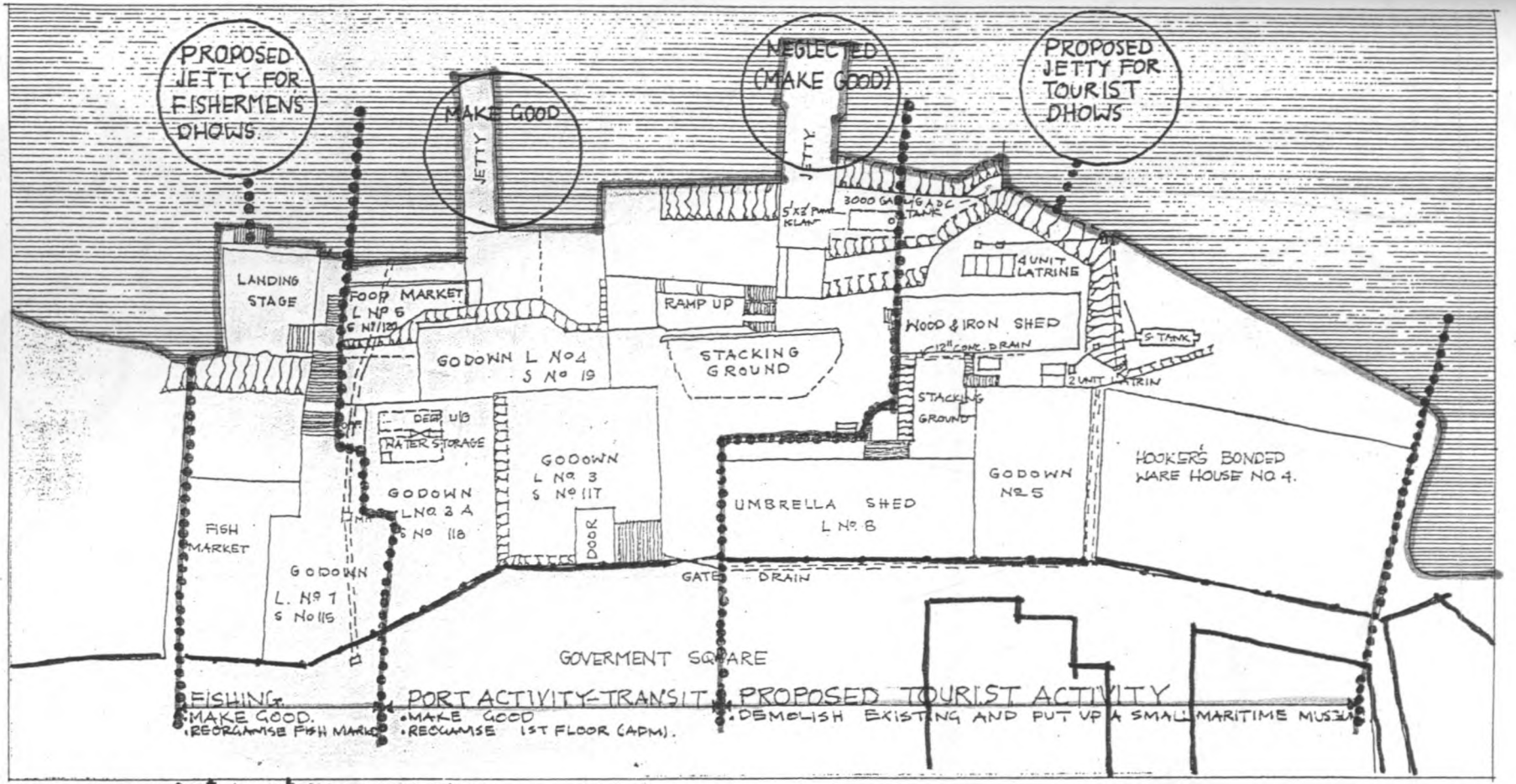
ZONE C. ANCHORING AND DOCKING FACILITIES FOR CREWS: MAKE GOOD.

ZONE D. BEST FOR PARKING. DEMOLISH AND RE.

ZONE E. BEST FOR ADDITIONS. INTRODUCE A MARITIME MUSEUM HERE.

ZONE F. BEST VIEWS.
INTRODUCE DECKS AND MAKE GOOD EXISTING.

MAP 26, COMPOSITE MAP

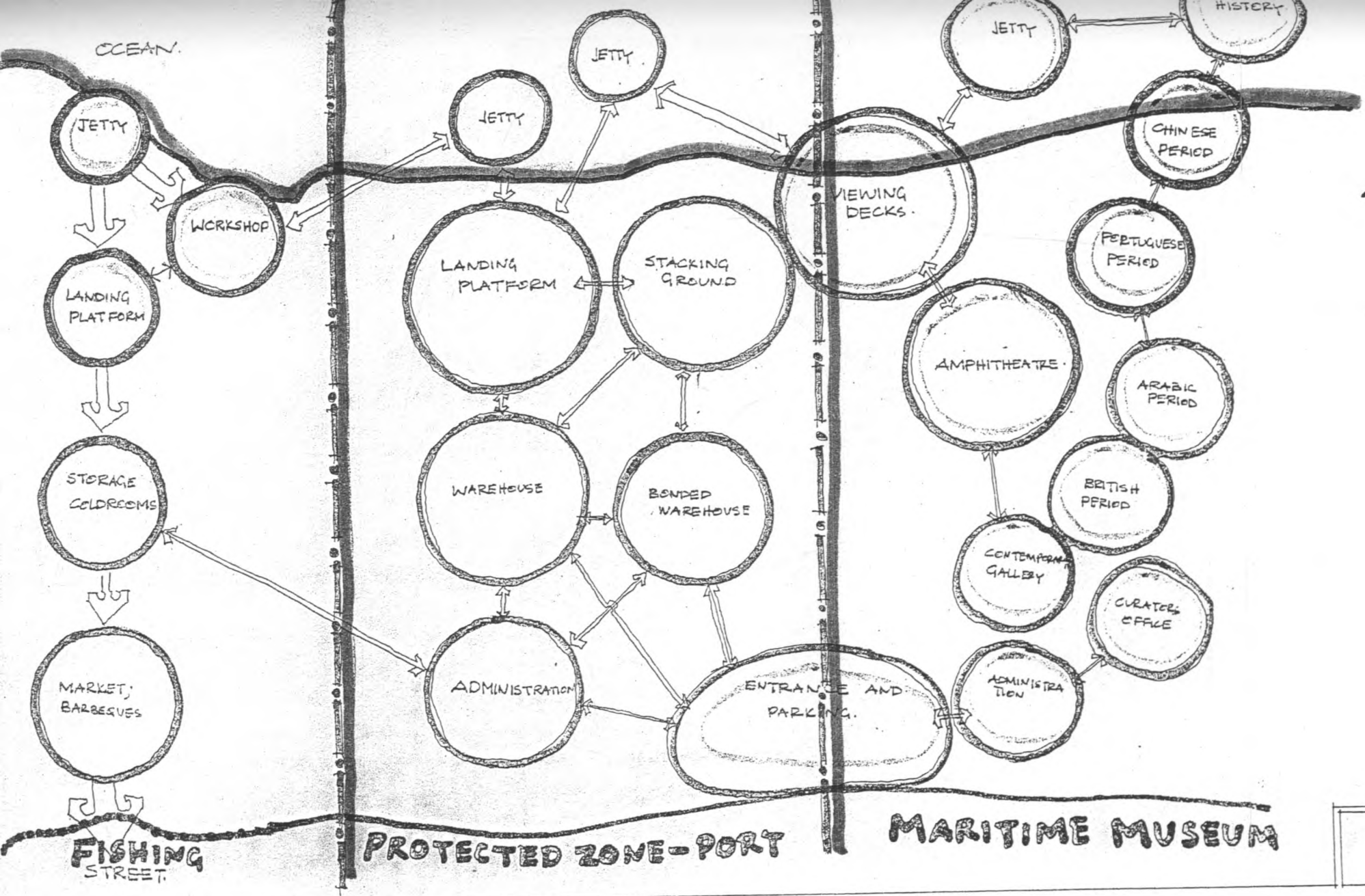


proposed land use 1:500

- DEMOLITION.
  1. UMBRELLA SHED.
  2. GODOWN NO.5
  3. HOOKERS BONED WAREHOUSE.
  4. WOOD AND IRON SHED.
- REASON.
  ALL ARE ARCHITECTURALLY ILL AND UNDERUTILISED.

- STRUCTURES TO REORGANISE THE INTERIOR.
  1. DHOW REGISTRATION DEPOT.
  2. FISH MARKET AND STALLS.
- REASON.
  TO PROVIDE MORE CURRENT ACCOMMODATION. EXISTING OUTDATED.

- NEW STRUCTURES.
  1. A SMALL MARITIME MUSEUM.
  2. TWO JETTIES AS PER BRIEF.
- REASON.
  TO KEEP THE TOURIST HERE FOR A LONGER TIME SO THAT HE CAN SPEND MORE.


OCEAN.
JETTY
WORKSHOP
LANDING PLATFORM
STORAGE COLDROOMS
MARKET, BARBEQUES
FISHING STREET
JETTY
JETTY
JETTY
LANDING PLATFORM
STACKING GROUND
WAREHOUSE
BONDED WAREHOUSE
ADMINISTRATION
ENTRANCE AND PARKING.
VIEWING DECKS.
JETTY
HISTORY
CHINESE PERIOD
PERTUGUESE PERIOD
AMPHITHEATRE.
ARABIC PERIOD
BRITISH PERIOD
CONTEMPORARY GALLERY
CURATORS OFFICE
ADMINISTRATION
PROTECTED ZONE - PORT
MARITIME MUSEUM

Chapter 6

Conclusions and Recommendations

A Swahili *Siwa*

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.0 Conclusions

The position occupied by this research is that precise standards should not be used in guiding development in such a zone, as is currently the case. It is a great disservice to prescribe a standard solution for all occasions in the form of the design guidelines, while simple criteria for basic design is ignored. The state of the art here is essentially pragmatic and opportunist, and what we see today is mere ad hoc cosmetic treatment of the urban landscape. While special studies may be necessary for the determination of strategic priorities, local programmes can effectively be chosen pragmatically by expression of the grassroots support.

Some of the buildings in the Old town have fallen into under use. Under the circumstances it is not possible to achieve sustainable use of these buildings. The reason being that the Old Town is decaying towards a museum piece instead progressing in time and space as a living tissue, thanks to the conservation approach embraced. The tendency has been to deal with the individual building or group of buildings rather than at the whole conservation area as a living system. The physical effect of the policy of minimum change is un-sustainability of the building function.

6.1 Urban Conservation Approach

6.1.1 Introduction

An urban conservation approach for the Old Town of Mombasa should aim to revitalise the urban function of the historical centre by aspiring to implement innovative solutions in the areas of building refurbishment, training and employment, information technology, social inclusion and environmental protection. It should be an example of good practice in urban development for the following reasons:

- Innovative urban management arrangements;
- Integrated planning for focal urban areas;
- Identification of new business opportunities;
- Inclusion of participatory elements in various fields;
- Support activities for marginalized groups;
- Broad dissemination approach.

The conservation exercise should be embedded in the wider revitalisation efforts of the greater Mombasa area and can be summarised under:

- **Building refurbishment:** renovation and rehabilitation of housing in the area and accompanying businesses e g. the Fish Market, Old Port and Leven House.
- **Training and employment:** support for business-start-up and training in renovation skills for young people and ethnic minorities;
- **Social inclusion:** educational and information support for special target groups (people with alcohol and drug-related problems, young people with no recreational facilities);
- **Environmental measures:** upgrading parks and squares and setting-up a waste management system.

6.2 Integrated Conservation Strategy

Although Old Town of Mombasa is a lively place with trade and sightseeing, it is also an area that suffers from deteriorating conditions in living standards and buildings. Increase in population and poor standard of local amenities result in a decline of economic activities and reduced attractiveness of residential environment. An initiative is necessary to implement an integrated set of measures in various fields with potential to contribute to enhancing physical conditions and the local economy. This can be undertaken under in the following areas:

6.2.1 Economic Revitalisation/ Business incubation

This relates to attracting of new investment to the area by optimisation of existing measures and initiatives and promoting new initiatives consistent with an overall concept of economic revitalization. New initiatives should be implemented with the help of actors from the sectors concerned (e.g. fishermen, craftsmen, traders, job seekers etc.). Expanding the Swahili Cultural Centre would keep arts and crafts alive. The Conservation office should envisage professional training, and open a business advice centre, which gives advice to business-start-ups, cooperative ventures, immigrants and women.

6.2.2 Safety /Security

This theme relates to crime prevention, health and proximity to services. Improving neighbourhood services and caring for marginalized social groups constitutes a priority in developing of a safer environment for local residents. Provision of measures should be directed towards alcohol addicts and drug users. A social unit should be set up which should be involved in counselling, individual help, mediation between different cultures, direct health assistance and cultural animation. Partnerships with young people and the community should also be started in order to improve educational and recreational

activities for them. Security should also be improved through more policing and a local police post should be opened in order to bring back confidence in public safety.

6.2.3 A good place to live

The physical renewal of open spaces and buildings is important to create job opportunities on the one hand and to prepare for new economic, cultural and recreational activities that, in addition, attract local people as well as visitors outside business hours. Improvement in the physical environment is vital for health reasons, upgrading business infrastructure and starting new initiatives (e.g. public houses, artistic activities). Housing rehabilitation should firstly be concentrated on buildings along the Ndia Kuu and Sir Ali Mbarak Hinawy Road as this will have a strategic impact in attracting of other activities by public and private owners.

A prime goal is up-grading the old port and the fish market in the Government Square area. As this is a central meeting place and business area for the community, fundamental improvements should be planned: the bonded warehouses should have more current accommodation; re-establishment of hygienic and sanitary conditions in the fish market, and introducing refrigeration facilities in the same. As the attractiveness of the place depends on an adequate infrastructure the Municipal Council should implement activities such as creating catering services, opening sport facilities, putting in place green areas, carrying out measures to reduce atmospheric pollution etc

6.2.4 Sustainability

Environmental protection measures have been primarily conceived in the areas of waste management and neighbourhood improvement through maintenance of the building fabric. In particular the beach should be cleaned and maintained

6.2.5 Linkability

Under this, actions should be implemented that are concerned with physical access to the area. Priority should be given to reorganize public transport and parking. Private cars and parking should be banned from parts of the historic area Building a sea promenade like the one in Lamu will make the area experience a fundamental change in transport activities.

6.2.6 Footways and Carriageways

The Historic area can be improved by the partial or total removal of traffic, through pedestrianisation or the use of shared surfaces. However, the traditional form and

appearance of the street remains important. The study therefore recommends that conservation of paths in the Old Town of Mombasa be based on the following principles:

- Develop an understanding of the special qualities of the place and depart as little as possible from the traditional form of the streets and their materials;
- Respect existing or established traditional materials and detailing;
- Review existing signing and consider scope for rationalisation;
- Anticipate and minimise new signing requirements at the earliest design stage;
- Limit formal design to formal spaces;
- Provide for maintenance and invest in quality.

6.2.7 Materials

Where historical materials survive these should be retained as much as possible, and natural materials used in new works. Traditional materials are most appropriately used in combination with traditional detailing. In the historic area, street surfaces were once little more than rammed earth and rubble and it is worth considering the use of paving blocks as a natural successor, with an appropriate aggregate sub-surface bed (this is already happening and should be sustained).

The scale and layout of materials also need to be considered. The visual impression of a scheme can sometimes be improved with the incorporation of public art or plantings. Features such as the introduction of patterns into paving schemes, however, are rarely based on tradition, and a useful rule-of-thumb is to restrict formal patterns to formal areas. The paving pattern at the Government Square therefore should be revised.

6.2.8 Signing and Street Furniture

Modern usage of streets has demanded an increase in provision of street furniture to including seats, litterbins, traffic signs, guardrails and bollards, sometimes at the expense of visual order. Changes in layout or level may be suitable alternatives to ranks of bollards where these would be unsightly. Where bollards are used these should be in keeping with the character of the area: for example, *Boriti* or *banaa* posts may be more appropriate in some settings than the use of iron.

Some modern street furniture should also use historical styles. While there is certainly a role for reproductions, particularly where locally distinctive designs are used, there is also a place for modern designs to give continuity to a tradition of craftsmanship. An audit of

existing signs, with a view to rationalisation and maintenance, can be a useful way of improving the effectiveness of signs as well as removing clutter.

6.2.9 Lighting

The almost universal illumination of built-up areas is a relatively recent phenomenon. The problem in historic areas is that, if light levels which ensure safety and security are to be achieved, the light sources must either be higher (to give a wider spread), or more frequent. A review of light coverage requirements can take into account the need for security and whether a contribution may be made from other sources such as illumination from buildings. Modern, discreet wall-mounted fittings may be more effective than steel or aluminium columns. The use of light fittings designed to aim light downwards and thereby reduce "light pollution" is worthy of consideration.

6.2.10 Access

The access needs of all road users should be considered. Uneven sets in the road cause discomfort to some road users such as people in wheelchairs, or those pushing prams. While this may be inevitable in some parts of the historic area, much can be done through good maintenance and special provisions.

Dropped kerbs combined with tactile surfaces at pedestrian crossing points, will assist mobility impaired, blind and partially sighted pedestrians. It is important to give careful thought to the design of crossing points to avoid the tactile surfaces forming awkward geometrical shapes, which can detract from the appearance of historic streets.

Bollards can be obstacles particularly for visually impaired people. To minimise the risks for pedestrians, where bollards are installed it is recommended that they are 1m high with a distinguishing colour at the top.

6.2.11 Traffic Calming

A number of features can be employed to control vehicle speeds. Care will need to be taken in this to ensure that the design of schemes incorporating these features does not diminish the visual amenity or character of the area. This will involve the use of bollards, speed bumps, signs, and community education. This area certainly requires detailed research.

6.3 Towards Historic Planning of the Old Town of Mombasa

The conservation of the Old Town of Mombasa can be successful if goals are formulated to provide direction for many of the facets of the conservation milieu. These range from creating a memorable image and identity, to preserving the many artefacts and structures, which are representative of historic cultural heritage both locally and nationally. These goals address organizational and physical development, resource allocation and public relations.

> The study specifically recommends the creation of an independent body that is a planning and management authority, which will conserve, protect and interpret historic, cultural and natural resources associated with the Old Town of Mombasa's heritage in order to help stimulate tourism and economic development, thereby improving the quality of life for the region's residents.

It is this autonomous body, which will see to it that the following goals and strategies are implemented in order to facilitate continuity and change in the conserved area.

6.3.1 Organizational Structure

> Goal: Create an organizational structure that will provide adequate financial, staff and other resources to ensure the Old Town of Mombasa has the ability to implement conservation measures and maintain their long-term viability.

Strategies:

- Maintain and strengthen a heritage area management entity that sets policies and provides guidance to a director and staff who execute policies and programs established by it. The management entity should be organized to represent communities and interest groups from the conservation area. This could be in the form of an independent government parastatal capable of raising its own resources. This has been successfully achieved in Zanzibar, which is a reputable precedent.
- Increase the participation and commitment of local and regional lending institutions, tourist organizations, the outdoor recreation industry and other groups on the management entity and appropriate subcommittees;
- Develop a fund raising and public relations capacity to build support and strengthen the funding base;
- Establish long-term capital, programmatic and organizational priorities;

- Create an umbrella group of local organizations to meet periodically to advise and contribute to the formed entity.

6.3.2 Capacity Building

Goal: Develop cooperative partnerships with project sponsors and viable grass roots organizations that build human, technical and financial capacity.

Strategies:

- Support the organization and development of local project sponsors, public, private and not-for profit groups;
- Provide training and technical support in craftsmanship, project development, hospitality services and associated skill areas;
- Provide financial support to local groups and organizations for capacity building and project development;
- Enter into cooperative agreements with stakeholders to build support for increasing tourism investments and in developing regional visitor services capacity;
- Develop model inter-jurisdictional agreements to promote efforts to preserve heritage resources.
- Involve the local governments and other organizations, such as Friends of Fort Jesus the in support of projects and programs.

6.3.3 Project Development

Goal: Implement a phased strategy of linked heritage experiences that engage visitors of varying levels of knowledge and interest while advancing cultural and resource conservation of the greater Mombasa Municipal area and the Old Town.

Strategies:

- Develop staffed visitor centres and destination centres at major locations, such as Fort Jesus and other selected locations that collectively embody the full range of the area's preservation and interpretive programs;
- Create settings and surroundings that place facilities in an appropriate context and immerse the visitor in the *Swahili* experience;

- Create centres of learning and discovery in selected locations, such as the communities of *Boharas* and *Baluchis* where visitors can find a more authentic experience away from the visitor centres and destination locations;
- Create a heritage grant and loan fund that provides, under the direction of the management entity to provide financial support for preservation, development, interpretation and education projects and initiatives.

6.3.4 Identity, Marketing and Promotions

Goals: The Old Town of Mombasa will achieve ready recognition by the public by virtue of its strong brand name as a cultural heritage tourism destination.
Develop and implement a marketing and promotional campaign focused on integrated cultural heritage destinations targeted to a diverse group of visitors.

Strategies:

- Establish a design vocabulary to govern the design and fabrication of way finding and interpretive signs;
- Provide clear informational and directional signs from area entry points to visitor attractions and services;
- Create a unique and attractive logo for use on all informational and destination signage and printed materials (advertising, marketing, etc.)
- Establish a public relations program and publicity campaign to cultivate support and capitalize on low- and no-cost promotional opportunities;
- Forge marketing partnerships with public, private and not-for profit organizations that depend on visitor markets;
- Target market niches where initial promotional efforts are likely to have the greatest returns (e.g. retirees who can come and spend considerable time in old town.)
- Identify strategies and persons that can help link communities with visitors from appropriate market niches.

6.3.5 Interpretation

Goal: Interpret the history, culture and technology of the conservation area and, in compelling and thought-provoking manner, tell the story of the people of the region.

Strategies:

- Establish a small number of interpretive themes, which characterize the area's social, economic, cultural, and occupational history and strategies for linking these themes with popular interest in history and historic conservation.
- Locate printed and archival sources containing interesting first person accounts of the area's history and identify means of making such accounts more accessible to area schools and hospitality-training programs;
- Identify opportunities for training for volunteers, hospitality workers and other interested persons in the history of the area and in the heritage authority's strategies and themes;
- Identify opportunities for linkages between conservation activists at the community level and existing state and regional networks of humanities and arts professionals

6.3.6 Education

Goal: Foster an ethic of pride and stewardship of the residents who will understand the importance of the conservation of the heritage area

Strategies

- Develop programs with area public and private schools to build awareness, pride and support for heritage conservation and interpretation initiatives;
- Foster the ability of local libraries, museums, historical societies, service clubs and other appropriate institutions to mount temporary programs and exhibits of documents, artefacts, photographs and films;
- Encourage the inclusion of historic and cultural curricula in primary, secondary and tertiary levels of learning.
- Encourage good stewardship of resources through existing and new education programs.

Resource Protection, Preservation and Growth Management

s: Promote the protection and conservation of the region's rapidly vanishing artefacts, tures and sites.

ɔurage projects that balance conservation and growth issues to provide for economic lopment while protecting resources

tegies:

Maintain a current prioritised listing of historic heritage resources, artefacts and structures;

Develop a technical committee to seek funding and provide assistance in documenting and evaluating such sites and structures;

Encourage National Museums of Kenya listing for buildings, structures or districts not currently listed;

Recognize and publicize the contributions and efforts of persons in preserving or protecting heritage resources;

Provide mechanism for protecting endangered structures, sites and physical artefacts that may be at risk due to development or redevelopment pressures;

- Encourage local communities to adopt land use development guidelines
- Reward good development practices by providing preference in project funding to participating communities;
- Protect and enhance the seafront
- Create a buffer zone to the conservation area through extension of the boundaries. It is suggested that Mama Ngina Drive should be part of the new conservation area and will provide the much-needed additional space for the development of appropriate recreational zone.

6.3.8 Access and Circulation

Goal: Encourage improvement of linkages between nodes and landmarks and improve access and linkages to the various districts.

Strategies:

- Integrate transportation and improvements into planning through strategic improvement projects for example the old port (already discussed)
- Promote improved linkages between destinations and enhance accessibility from major roadways;
- Where appropriate, provide opportunities for non-motorized transportation including dhows and pedestrians;
- Evaluate corridors for redevelopment e.g. the sea front can be converted into a promenade.
- Integrate the conservation area into the greater municipal region when planning for the district.

6.3.9 Tourist Services and Community Development

Goal: Foster a relationship between hospitality and tourism industry and visitors, and provide assistance in exceeding visitor expectations, both in terms of quality and location of services.

Strategies:

- Work with community and economic development organizations on recruiting and retaining hospitality industry service providers, as well as encourage small business start-ups, such as bed and breakfast establishments;
- Institute a data collection effort to gather and analyse information on market characteristics and visitor perceptions about the old town's experience;
- Encourage hospitality training to individuals in the Mombasa's tourism industry.
- Periodically train tour guides.

6.4 Areas For Further Research

Detailed studies are required to investigate the following hypotheses that have not been answered by the study but are pertinent to conservation efforts:

- Land use activities taking place within the inter-phase of the Old Town and the greater Mombasa are detrimental to the urban fabric of the Old Town of Mombasa.
- Development in conservation areas can only be achieved incrementally.
- The economic development of the Old Town of Mombasa can only take place in the matrix of the greater Mombasa region.

Further more the study recommends the historic areas and buildings outside the conservation area be the subject of detailed study because they reinforce the historical character of the greater Mombasa town.

SELECTED REFERENCES

1. Aldrick J. et al. (1997) **The Old Town of Mombasa. A Historical Guide;** Mombasa: Friends of Fort Jesus
2. Alreck, Pamela et al; (1985) **The Survey Research Handbook;** Illinois: Richard D. Irwin Inc.
3. Barret, J.; **(1974) Urban Design as Public Policy;** New York: Architectural Record Books
4. Bayer, C.; (1983) **Dreaming The Rational City;** Massachusetts: MIT Press.
5. Blij J.;(1968) **Mombasa, An African City;** Evaston: North-western University Press.
6. Borg, W. et al; (1983) **Educational Research;** London: Longman.
7. Broadbent, G. et al (ed.); (1980) **Meaning And Behaviour in The Built Environment;** New York: Wiley and Sons.
8. Broadbent, G.; (1990) **Emerging Concepts in Urban Space Design;** London: Van Nostrand Reinhold.
9. Browning, D.C (ed.); (1971) **Rogets Thesaurus;** Essex: J.M Dent and Sons.
10. Brunswick, E.;(1956) **Perception and Representative Design of Psychological Experiments;** USA: University Of California.
11. Canter, D., et al; (1995) **Psychology and The Built Environment;** USA: Oxford University Press.
12. Cullen, G.; (1961) **The Concise Townscape;** Sussex: The Architectural Press.
13. Del-Bue, L.; (1986) **Preservation and Presentation of the Cultural Heritage in Kenya;** Nairobi: National Museums of Kenya.
14. Dobby, A.; (1978) **Conservation and Planning;** London: Hutchinson and Co. Ltd.
15. Ebong, O. M.; (1993) 'The Perception of Residential Quality - A Case Study of Calabar, Nigeria'; **Third World Planning Review,** Vol. 5 No. 3; August PP 274-285.
16. Eysenk, H. J.; (1957) **Sense and Nonsense in Psychology;** New York: Penguin Books
17. Fielden, B. M.; (1994) **Conservation of Historic Buildings;** Johannesburg: Reed Educational and Professional Publishing Ltd.
18. Fielden, B. M.; Jokilehto, J.; (1998) **Management Guidelines for World Cultural Heritage Sites;** Rome: ICCROM.
19. Fitch, J.; (1980) **Historic Preservation: Curatorial Management of The Built World;** Virginia: The University Press Of Virginia.
20. Fraenkel, R. et al; (1990) **How To Design and Evaluate Research in Education;** New York: McGraw-Hill Inc.
21. Frazier J. et al.; (1992) **Introduction to Scientific Geographic Research;** New York: McGraw-Hill.
22. Ghaidan, U.; (1976) **Lamu: A Study in Conservation;** Nairobi: East African Literature Bureau.
23. Ghaidan, U.; (1976) **Lamu: A Study of The Swahili Town;** Nairobi: East African Literature Bureau.
24. Highfield, D.; (1987) **Rehabilitation and Re-use of Old Buildings;** London: E &F.N. Spon.
25. Hooweg J., Foeken D., Obudho, R.A. (eds); (2000) **Kenya Coast Handbook: Culture, Resources and Development in the East African Littoral:** Hamburg & London: African Studies Centre (Leiden, the Netherlands)

26. Hoyle B. S, (2002) **Seaports and Development: The Experience Of Kenya And Tanzania;** London: Gordon & Breach.

27. Isall, D ; (1972) **The Care of Old Buildings Today;** London: The Architectural Press Ltd.

28. Jewell, H. A.; (1996) **Dhows at Mombasa;** Nairobi: East African Publishing House.

29. Jones, M. J.; (1976) Conwy History with a future in Reynolds, J. (ed.) **Conservation Planning in Town and Country;** Liverpool: Liverpool University Press.

30. Khan, K.; (2002) **Cultural Heritage in Kenya** *(Unpublished)*

31. Kenya, Republic of; (1984) **The Antiquities And Monuments Act Cap. 215;** Nairobi: Government Press.

32. Kenya, Republic of; (1984) **The National Museums Act Cap. 216;** Nairobi: Government Press.

33. Kenya, Republic of; (1997) **Mombasa District Development Plan 1997-2001;** Nairobi: Government Press.

34. Kenya, Republic of; (2002) **Mombasa District Development Plan 2002-2008;** Nairobi: Government Press.

35. Kiamba, M.; (1995) **'Conservation of Historic Towns In Kenya;** Nairobi: Department of Land Development, UoN.

36. King, J., Procesi, D.; (1990) **A Conservation Plan For The Old Town of Mombasa Kenya;** Nairobi: National Museums Of Kenya.

37. Kothari, R. G.; (1996) **Research Methodology: Methods and Techniques;** New Delhi: Wiley Eastern Ltd.

38. Lemur, M. R. (ed) (1976); **Internal Council For Monuments and Sites. Vol. XIII;** Louvain.

39. Letizia Del-Bue, (ed); (1992) **Mombasa Old Town Conservation Office Priorities of Restoration:** Mombasa: National Museums of Kenya.

40. Lynch K.; (1960) **The Image of The City;** London: The M.I.T. Press

41. Middletown J.; (1992) **The World of The Swahili: An East African Mercantile Civilization;** London: Yale University Press.

42. Moriset, S.; (2003) **Revitalisation of Leven House, Mombasa, Kenya;** Nairobi: Africa 2009, National Museums of Kenya.

43. Mugenda, O.; Mugenda, A.; (1999) **Research Methods Quantitative and Qualitative Approaches;** Nairobi: Acts Press.

44. Nasar, L (ed); (1988) **Environmental Aesthetics: Theory Research and Applications;** New York: Cambridge University Press.

45. Oakley, D.; (1970) **The Phenomenon of Architecture in Cultures of Change;** New York: Pergamon Press Inc.

46. Obudho, R.A., Aduwo, G.O.; (1990) Small Urban Centres and The Spatial Planning in Kenya. In J. Baker Ed., **Small Town Africa. Studies In Rural-Urban Interaction;** (Pp.51-68). The Scandinavian Institute of African Studies.

47. Papageorgiou, A.; (1971) **Continuity and Change: Preservation In City Planning;** London, Pall Mall.

48. Patrick, K. (ed.); (1983) **Chambers 20th Century Dictionary;** Edinburg: WR Chambers.

49. Prieser, F. E., (ed); (1984) **Environmental Design Research:** Volume I and II: Selected Papers; USA: Dowen Hutchinson and Ross Inc.

50. Regine, D.; (1972) **The Conservation of The Historic Monuments In The Federal Republic of Germany;** Munich: Heinz Moos Verlag.

51. Remero W. Patricia; **Lamu: History, Society And Family In An East African Port City;** Princetown, N.J: Marcus Wiener Publishers.

52. Sarkar, Indrani; (1994) **Conservation Scenario In Kenya** - A Paper Presented To The Centre For Built Environment At Calcutta

53. Sarkar, Indrani; (1996) **A Study on Conservation Issues.** *Unpublished*

54. Sharon, A.;(1973) **Planning Jerusalem;** London: Weidenfeld and Nicolson

55. Simon, L.; (1969) **Basic Research Methods in Social Sciences: The Art of Imperial Investigation;** New York: Random House Inc.

56. Siravo, F., Pulver, Ann; (1986) **Planning Lamu: Conservation of An East African Sea Port:** Nairobi: The National Museums of Kenya.

57. Smealie, P., Smith, P.; (1990) **New Construction For Older Buildings;** New York: John Wiley and Sons Inc.

58. UNESCO; (1972) 'Preserving and Restoring Monuments and Historic Buildings'; **Museums and Monuments XIV,** Paris.

59. Varkey, K., Roesch, K.; (1981) **Pilot Study for Conservation and Revitalization of Old Town Mombasa;** Nairobi: Department of Architecture; UoN.

60. Vernon, M.D.; (1962) **The Psychology of Perception;** New York: Penguin Books; 1962.

61. Zeisel, J.; (1977) **Inquiry By Design;** Cambridge: Cambridge University Press.

APPENDICES

APPENDIX I

UNIVERSITY OF NAIROBI

DEPARTMENT OF URBAN AND REGIONAL PLANNING

MA THESIS 2003

Continuity and Change in Historic Planning.

(Towards a Sustainable Townscape of Old Town of Mombasa)

PHYSICAL PLANNER INTERVIEW SCHEDULE

***Declaration*: The information provided under this survey shall be used for academic purposes only.**

Interviewer..... Date.....

Time.....

Respondent's Name (optional):.....

1. What growth and development strategies have been adopted in the planning of Mombasa City?
2. (a) Are there any proposals to extend the city's administrative boundaries? Yes [ ] No [ ]

(b) If yes, to what extent and direction?

3. (a) What are the planning implications of the elevation of the Municipal Council of Mombasa to city status?

(b) What planning interventions do you make to accommodate such implications if any?

4. How does the development of auxiliary towns like Malindi and Kilifi affect the growth and development of Mombasa City?

5. How is the entire city organized for the different land uses?

6. What is the total area of the city?

7. What are the areas of the following land uses in the city?

User	Size in acres	Percentage
Residential		
Commercial		
Educational		
Industrial		
Public Purpose		
Public Utilities		
Recreation		
Transportation		
Non-urban Land use/ Agriculture		
Other		

8 (a) Are there any conflicts among the existing land uses? Yes [ ] No [ ]

(b) If yes, please explain

9. What would you comment on the general planning in the City of Mombasa?

10. Briefly comment on the role of the Physical Planning Office in the Mombasa City.

11. What has been the impact of the Physical Planning Act in the city since its enactment in 1996?

12. (a) What are some of the planning challenges in the city?

(b) What are the possible solutions to these challenges?

13. What is the role of the City Council in the conservation of historic areas and buildings?

14. What are some of the council's programme areas regarding the conservation of historic areas and buildings?

15. What challenges do you face in the execution of these roles?

16. What are the possible solutions to these problems?

17. What is the role of the Old Town of Mombasa at the city level?

a. Culturally
b. Socially
c. Economically
d. Physically/functionally

Any Other Comments

Thank you

APPENDIX II

UNIVERSITY OF NAIROBI

DEPARTMENT OF URBAN AND REGIONAL PLANNING

MA THESIS 2003

Continuity and Change in Historic Planning.

(Towards a Sustainable Townscape of Old Town of Mombasa)

CONSERVATION OFFICER INTERVIEW SCHEDULE-MOTCO

***Declaration*: The information provided under this survey shall be used for academic purposes only.**

Interviewer..... Date.....

Time.....

Respondent's Name (optional):.....

1. When was the conservation office set up?
2. What is the total area of the conserved zone?
3. What is the role of MOTCO in the conservation of the Old Town of Mombasa?
4. (a) What are the challenges and problems you experience in the planning and management in the Old Town of Mombasa?

(b) What are the possible solutions to these challenges?

5. (a) Are there any proposals to extend the conservation area boundaries? Yes [ ] No [ ]

(b) If yes, to what extent and direction?

6. (a) What are the implications of the elevation of the Municipal Council of Mombasa to City status on the planning and management of the Old Town of Mombasa?

(b) What planning interventions are made to accommodate such implications if any?

7. How does the greater Mombasa City affect the conservation area?

(a) Culturally

(b) Socially

(c) Economically

(d) Physically/functionally

8. How is the entire conservation area organised for the different land uses?

9. What are the areas for the following land uses in the conserved area?

User	Size in acres	Percentage
Residential		
Commercial		
Educational		
Industrial		
Public Purpose		
Public Utilities		
Recreation		
Transportation		
Non-urban Land use/Agriculture		
Other		

10. (a) Are there any conflicts among the existing land uses? Yes [ ] No [ ]

(b) If yes, please explain

11. What would you comment on the general planning in the Old Town of Mombasa conservation area?

12. What has been the impact of the Physical Planning Act in the conservation of the Old Town of Mombasa since its enactment in 1996?

13. How is the conservation office staffed? Please fill in the table below.

Staff	Designation	Level of Education

14. What were the sources of funds in the last financial year for the conservation efforts?

Source	Amount	Remarks

15. What is your role in the conservation of other historic areas and buildings in Mombasa City outside the conservation area?

16. What guides development in the Old Town of Mombasa conserved zone?

17. Please explain the approval process for new developments in the conserved zone.

18. To what extent is the community sensitive to conservation of their historic neighbourhood?

19. What has been the impact of residents' education on conservation of their historic neighbourhood?

20 What is the role of the interest groups that you work closely with in the conservation efforts?

Interest Group	Role

21. How has the old town been changing in the recent past?

(a)Culturally

(b) Socially

(c)Economically

(d) Physically/functionally

22. What are the sources of stresses and problems associated with the management and revitalisation of the Old Town of Mombasa?

23. What are the opportunities for the sustainability of the historic character of the Old Town of Mombasa?

24. Are there any new developments proposed in the Old Town of Mombasa?

(List them in order of priority below)

Development	Location	Reason

25. In your opinion, what is the future of the Old Town of Mombasa?

Any Other Comments

Thank you

APPE

THE

Declara

Intervie

Time...

INSTRUC

Respond

(a) Age...

(b) Occup

(c) (i) Re

(c) How lo

(d) Level

You are

how you

you feel

thus: Cro

these check

Crowded

1. BEAU

2. CONV

3. HEAL

4. A

APPENDIX III

UNIVERSITY OF NAIROBI

DEPARTMENT OF URBAN AND REGIONAL PLANNING

MA THESIS 2003

Continuity and Change in Historic Planning.

(Towards a Sustainable Townscape of Old Town of Mombasa)

THE PERCEPTION OLD TOWN OF MOMBASA'S ENVIRONMENTAL QUALITY

***Declaration*: The information provided under this survey shall be used for academic purposes only.**

Interviewer..... Date.....

Time.....

INSTRUCTIONS: Please respond to all questions.

Respondent's Name (optional):.....

(a) Age.....(Years)

(b) Occupation.....

(c) (i) Resident.....(ii) non-resident.....(iii)tourist.....(iv)other.....

(c) How long you have lived in Old town? .....(Years)

(d) Level of education.....

You are requested to mark any of the five spaces between the pairs of words which best describe how you perceive the historic neighbourhood in terms of the characteristics below. For example, if you feel your house is extremely crowded place a check mark on the space closest to 'crowded' thus: Crowded: _____ _____ _____ _____ _____ spacious. If neither crowded nor spacious, place the check mark at the middle space thus:

Crowded _____ _____ _____ _____ _____ Spacious.

1. BEAUTY

	Aesthetic	Unique _____ _____ _____ _____ _____ Common
	Ornate	Decorated _____ _____ _____ _____ _____ Plain
	Age of Buildings	New _____ _____ _____ _____ _____ Old

2. CONVENIENCE

	Quietness	Calm _____ _____ _____ _____ _____ Noisy
	Friendliness	Friendly _____ _____ _____ _____ _____ Hostile
	Facilities	Adequate _____ _____ _____ _____ _____ Inadequate
	Space	Spacious _____ _____ _____ _____ _____ Crowded
	Burglary/Safety	Safe _____ _____ _____ _____ _____ Unsafe

3. HEALTH

	Disease	Healthy _____ _____ _____ _____ _____ Unhealthy
	Sanitation	Clean _____ _____ _____ _____ _____ Dirty
	Waste Disposal	Effective _____ _____ _____ _____ _____ Ineffective
	Air Quality	Fresh _____ _____ _____ _____ _____ Stingy

4. ACCESSIBILITY

	To Work	Close _____ _____ _____ _____ _____ Far
	To Market	Close _____ _____ _____ _____ _____ Far
	To Hospital	Close _____ _____ _____ _____ _____ Far
	To School	Close _____ _____ _____ _____ _____ Far
	To Open Space/ Park	Close _____ _____ _____ _____ _____ Far

ATTITUDE MEASUREMENT TOWARDS NEW DEVELOPMENTS IN THE OLD TOWN OF MOMBASA

You are now requested to give your opinion concerning modern developments or built forms in the Old Town of Mombasa. You do this by placing a check mark on a scale of 1 to 5 after the word describing a certain aspect of the developments. A mark on **1** means *very slightly* and a mark on **5** means a *very much*.

KEY.

1: Very slightly **2:** Slightly **3:** Indifferent/ undecided **4:** Much **5:** Very much

For example:

Do you feel that the new developments in Old Town of Mombasa are good?

1 2 3 4 5

The check mark shows that you feel they are *slightly good*. A mark on 5 would mean you feel they are *very good*.

1. PLEASANTNESS

How do you rate the pleasantness of the new developments in the Old Town?

i. Ugly:	1	2	3	4	5
ii. Stimulating:	1	2	3	4	5
iii. Secure:	1	2	3	4	5
iv. Good:	1	2	3	4	5

2. COMPLEXITY

Do you feel that these built forms are lively?

i. Inconsistent:	1	2	3	4	5
ii. Subdued:	1	2	3	4	5
iii. Lively:	1	2	3	4	5

3. UNITY

Do you feel that these built forms are appropriate for the historic environment?

i. Functionally:	1	2	3	4	5
iv. Building style:	1	2	3	4	5

4. AESTHETIC DIMENSION

What is your rating of the new developments in terms of aesthetics?

i. Interesting:	1	2	3	4	5
ii Unique:	1	2	3	4	5
iii. Bold:	1	2	3	4	5
iv. Pleasing:	1	2	3	4	5
v. Specialised:	1	2	3	4	5

5. SOCIAL STATUS

Do you feel that the modern developments enhance your social economic standing?

i. Expensive:	1	2	3	4	5
ii. Simple:	1	2	3	4	5
iii. Lavish:	1	2	3	4	5
iv. Well kept:	1	2	3	4	5

6. AFFECTION

Do you feel that modern built forms are genuine and fit in as part of the environment

i. Timeless:	1	2	3	4	5
ii. Aged:	1	2	3	4	5
iii. New:	1	2	3	4	5

7. ORIGINALITY

Are the modern built forms unusual and surprising in the environment?

i. Curious:	1	2	3	4	5
ii. Ordinary:	1	2	3	4	5
iii. Surprising:	1	2	3	4	5
iv. Special:	1	2	3	4	5

8. ORGANISATION

What is your rating regarding the functional suitability of the modern developments?

i. Ordered:	1	2	3	4	5
ii. Simple:	1	2	3	4	5
iii. Clear:	1	2	3	4	5
iv. Straight forward:	1	2	3	4	5

PROBLEMS AND OPPORTUNITIES IN THE OLD TOWN OF MOMBASA

1. What are the main problems you experience in the Old Town of Mombasa? (List them in order of priority below e.g. Security, burglary, drug abuse, poor roads, lack of shopping facilities, waste disposal, crowding, lack of water etc.

Problem	Cause	Possible Solution

2. In what ways can the Old Town of Mombasa neighbourhood quality be enhanced?
3. How has the Old Town of Mombasa been changing in the recent past?

(a)Culturally
(b)Socially
(c)Economically
(d)Physically/functionally

4. What new developments would you propose in the Old Town of Mombasa?

(List them in order of priority below)

Development	Location	Reason

5. In your opinion, what is the future of the Old Town of Mombasa?

Any other comments

Thank you

APPENDIX IV

UNIVERSITY OF NAIROBI

DEPARTMENT OF URBAN AND REGIONAL PLANNING

MA THESIS 2003

Continuity and Change in Historic Planning.

(Towards a Sustainable Townscape of Old Town of Mombasa)

OBSERVATION SCHEDULE.

Recorder.....
Date.....
Time.....
1. Plot No: _____
2. Village or street: _____

3. Indicate the position of the building on the map.

4. Type of structure
   i. Traditional stone house
   ii. Stone veranda building
   iii. Shop-front building
   iv. Makuti building
   v. Mosque
   vi. Others:
   - Non-conforming traditional
   - Non-conforming modern
   - Conforming modern
   - Others (Specify) _____

5. Present status
   i. Intact and in use
   ii. Intact and partially in use
   iii. Intact and vacant
   iv. Partially collapsed and in use
   v. Partially collapsed and vacant
   vi. Ruin

6. Date of construction_____. Source (a) Factual _____(b). Estimated_____
7. Builder _____. (a) Known _____(b). Unknown_____
8. Historic significance. _____. (a) None_____. (b). Unknown_____
9. Present use
   i. Mercantile and food
   ii. Educational and exhibition
   iii. Residential
   iv. Administration/health
   v. Carpentry/shop
   vi. Stable
   vii. Others
10. Environmental relationship
   i. Row intermediate
   ii. Row end
   iii. Single detached
   iv. Others
11. Threat to building
   i. Deterioration from weather
   ii. Proposed demolition for new building
   iii. Demolition on in process
   iv. Material cannibalism
   v. Major alteration proposed
   vi. Major Alteration in process
   vii. No threat
   viii. Others _____
12. General
   i. Colour _____
   ii Height of building _____
   iii. Texture (specify) _____
   iv. Tone (Specify) _____
   v. General height of adjacent buildings _____
13. Spatial Planning
   i. Has courtyard
   ii. Has no courtyard
   iii. Others (Specify) _____
14. Sketch general plan
15. Indicate North (direction of Mecca)
16. Sketch/Photograph general elevation of the building and its neighbours.
17. Identify the main structural module_____
18. Area of building _____ Width; _____ Depth; _____
19. Veranda type

i. Three bays_____
ii. Four bays_____
iii. Five bays_____
iv. Six bays_____
v. Others _____

20. Balconies (if existing)
i. First floor_____
ii. Second floor_____
iii. None_____
iv. Others _____

21. Roof shape
i. Flat_____
ii. Hipped_____
iii. Gable_____
iv. Others _____

22. Mark the main entrances on the plan
23. Indicate the position of the street.
24. Ceiling type and conditions:
i. Mostly Banaa_____
ii. Some banaa_____
iii. No banaa_____
iv. Mostly boriti_____
v. Some boriti_____
vi. No boriti _____
vii. Other (Specify) _____

25. Fill in the table below

MATERIAL USE

No	Element	Material used	When (most recent
1.	ROOF Covering Structure Others (Specify		
2.	WALL Structure Plaster/rendering Others (Specify)		
3.	FLOOR Structure Covering/finish Others (Specify)		
4.	DOORS/WINDOWS Frame Shutter Fittings Others (Specify)		
5.	BALCONIES/CANOPY/VERANDA		
6	SERVICES Water Sewage Electricity Drainage Refuse collection Others (Specify)		

26. Use this space for sketches, photographs, notes etc.