# THE PEDESTRIAN EXPERIENCE OF SHOPPING STREETS IN STONE TOWN ZANZIBAR AND NG'AMBO

A research thesis sunmitted by: Njiru Sharon Murugi B02/34579/2014

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# **DEDICATION**

To God Almighty my enabler & To my family with so much affection.

# **DECLARATION**

This thesis is my original work and has not been presented in any other University or Institution for the purpose of awarding a degree to the best of my knowledge. This thesis is submitted in partial fulfilment of the examination requirements for the award of the Bachelor of Architecture degree, in the Department of Architecture and Building Science at the University of Nairobi.

#### **Author: NJIRU SHARON MURUGI**

Signature D	Date
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Supervisor and Chairman of Department: ARCH. MUSAU KIMEU

#### Supervisor : ARCH. MUMBI MAINA

Signature	Date
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#### Year Master : ARCH NOBERT MUSYOKI

Signature Date

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" The street is something more than a simple pathway, it is a series of connected places, somewhere for staying in, not just moving through" ~ *Cliff Moughtin*.

# ABSTRACT

The street has played an major role in cities over time by being a space for mobility, communication, exchange and social interaction. Today, the multifunctionality of the streets is often ignored, they are usually seen as pure links in a road network rather than as public spaces for pedestrians. A report by the Zanzibar Urban Municipal, Zan plan (2015), indicates that the current road network in Zanzibar town does not adequately support non-motorized transport yet walking is by far the most dominant mode of transport in the town. This has affected the economic activities of this town which require the movement of pedestrians between residential areas and jobs, leisure and shopping. Whereas this is the case, Siravo, (1996), describes the streets of the historic area of Stone town to be narrow and winding through brilliant sunshine into cooling shadows and overally intended for the pedestrians. This study therefore seeks to examine selected shopping streets within two towns in Zanzibar town; Stone town and Ng'ambo in order analyze their suitability for pedestrians and to ultimately develop guidelines for pedestrian friendly shopping streets.

After, a global survey of urban theories regarding factors that determine the success of pedestrian shopping streets, parameters and variables were identified and are used to conduct the fieldwork. The data collected from the field was done through observations, interviews, questionnaires, measurements and data logging. From the fieldwork findings it is evident that the shopping streets of the historic area of Stone town are more favourable for pedestrians compared to those of the newer town of Ng'ambo. However, they are not completely ideal and could me made better environments for pedestrians. This study therefore concludes by providing recommendations that address the so called 'modern' challenges facing shopping streets but with considerable lessons being borrowed from the historic area of Stone town which seems to have grasped the concept of pedestrian friendly streets centuries ago. Some of the key recommendations include: total pedestrianization of shopping streets, introduction of a series of social nodes along the street to pull pedestrians, having narrow streets with tall buildings (3 to 4 storeys) high to act as solar buffers and introduction of street furnishings such as sitting areas along the street that can attract pedestrians among many others.

# **CHAPTER 1 : INTRODUCTION**

1.0 Background of Study
1.1 Problem Statement
1.2 Research objectives
1.3 Research Questions
1.4 Justification of Study
1.5 Significance of Study
1.6 Scope and Limitations
1.7 Literature reviewed
1.8 Structure of Research
1.9 List of terminologies



Fig 1.1: Kenyatta street in Stone town Zanzibar demonstrating streets acting as the core of the urban society. Source: www.dezeen.com



Fig 1.2: Benjamin Mkapa street, Stone town Zanzibar demonstrating streets acting as a mere physical link in the urban society. Source: https://driverabroad.com/

### **1.0 BACKGROUND OF STUDY**

A street is an enclosed, three-dimensional space between two lines of adjacent buildings. They are the primary spaces of cities and the core of the urban society. According to Jacobs (1961), streets and their sidewalks are the main public places of a city and its vital organs. From ancient times, the street has played an indispensable role in cities by creating space for mobility, communication, commerce and social interaction. They were the first elements to mark a change of status of a place from a village to a town, from a town to a city and from a commercial center to a capital city. Streets are therefore key in determining the form and function of a city.

Streets radiated from the nucleus of the city, which was usually the seat of political power or place of worship such as a mosque, temple or cathedral. They often constituted the "communication spine" of the city, often linking harbors to markets and other trading centers. Streets have traditionally served three main purposes: mobility, commerce and social interaction. Today, there are multiple functions of streets as links or places that have commercial, economic, civic, ceremonial, political, cultural and social value hence acting as a mirror of the complexities of the urban societies. (un-habitat, 2013)

However, this multi-functionality is often overlooked, and streets are usually regarded as mere links in a road network, enabling travel between two or more destinations. The other significant aspects of the street as a public space are often omitted. The pedestrians in these towns are faced with the challenges of inadequate space allocated to non-motorized transportation, poor street designs, poor maintainance of the streets, lack of access to basic services among many other challenges.

The result is that these streets repel the pedestrians. Reduced pedestrianization reduces the level of shopping activities within these streets and also discourages sociability. Reduced shopping activities affects the local economy and can lead to a drop in the Gross Domestic Product of a particular urban centre which directly affects the dwellers of the area. On the other hand , lack of social interactions create segregated neighbourhoods which have been associated with lack of safety, security, health and well-being of the public. (un-habitat, 2013)

As mentioned before, commerce was one of the main purposes of streets from time immemorial. The earliest shopping streets are believed to have originated from Persia from where they spread to the Middle East and Europe. From around 3000 BCE, zoning policies confined trading to particular parts of cities creating conditions necessary for the emergence of the shopping street also known as bazaar.



According to Ulrich Malisius (1985), Zanzibar was both politically and commercially the principal town of the East African Coast by 1804 with profitable trade of ivory and slaves.Zanzibar became host to traders from Arabia, Persia and India. The Indian tradesmen built up the shopping (bazaar) streets of shopfront houses within Zanzibar's townscape. According to Siravo (1996), these streets were narrow, intended for the pedestrians and winding through brilliant sunshine into cooling shadows.

These narrow streets bring forth the social life which flows out of the houses into the thoroughfares, fostering a sense of community. These streets are also conducive despite the challenging climate prevalent in Zanzibar of being warm and humid. Siravo (1996), points out a prominent architectural feature in these streets locally known as a 'baraza' which were the focal point of community life in Zanzibar. It is here that men welcomed visitors without compromising the privacy of their womenfolk and it also served as flat surface on which traders with no market stalls of their own piled their wares. (McIntyre et.al, 2013). In the newer town of Ng'ambo, the streets are wider but still manage to bustle with activities especially around the main market of Darajani.

According to Zan Plan (2015), walking is by far the most dominant mode of transport accounting for 42% of all daily trips in Zanzibar town. Although the current road network might accommodate motorized traffic, it does not adequately support non-motorized and public transportation. This is the case despite the scale and importance of both pedestrian and cycle infrastructure which is inadequate and lags far behind other forms of transport infrastructure. This has affected the economic activities of this town which require the movement of people between residential areas and jobs, leisure and shopping. An efficient and effective transport network is therefore required to link people with these activities. (Zan Plan, 2015).

Despite Zanzibar's abundance of primary factors including fertile land and soils, fresh water, natural ports, abundant fishing grounds, amiable climate and natural beauty, it suffers severe underdevelopment and is counted amongst the poorest of nations. Zanzibar Town's role in Zanzibar's economy is central contributing close to 70% of Zanzibar's GDP. (Zan Plan 2015).

Yet as pointed out, the economic activities of this town are driven by the movement of people between their residential areas and jobs, leisure and shopping. This study is therefore worthwhile in order to establish the quality of space allocated for the pedestrians in the shopping streets of this town which are its key commercial links. This study will prove useful in developing guidelines for the design of commercial urban environments that favour the pedestrian.

Fig 1.3: Map showing the Swahili Coast of East Africa Source: United Nations Department of Public Information, 1994.

INDIAN OCEAN

COMORO

MADAGASCAR

KENYA

TANZANIA

24MBIA



Fig 1.4 :Aerial view of Zanzibar town: Source:http://yallabook.com.

02



Fig 1.5: Street located in Stone Town Zanzibar demonstrating different modes of transportation. Source: https://www.worldnomads.com



Fig 1.6: Pedestrians and automobiles competing for space in Mlandege shopping street, Ng'ambo, Source:Author, (2019)

#### **1.1 PROBLEM STATEMENT**

Streets support the physical and mental health of residents. According to un-habitat (2013), they should be clean and safe and promote social inclusion and sociability. They should be spaces that attract rather than repel the public. Streets should be able to promote: infrastructure development, enhance environmental sustainability, support high productivity and promote quality of life, equity and social inclusion.

While this is the case, today most cities perceive their streets as pure links in a road network, allowing for travel between two or more destinations. Certain important aspects of street as a public space have been overlooked and the automobile has been given priority. This has led to unconductive and unpleasant urban neighborhoods that hinder pedestrianization and ultimately socialization. (un-habitat,2013).

Zanzibar town is not the exception. According to Zan-plan (2015), the current road network has accommodated the motorized traffic but does not equally support non-motorized and public transportation. This is the case despite the scale and importance of both pedestrian and cycle infrastructure which is inadequate and lags far behind other forms of transport infrastructure. There lacks an efficient and effective transport network required to link people with the economic activities of the town.

Consequently, the economic activities of this town which require the movement of people between residential areas and jobs, leisure and shopping areas have been affected. Reduced shopping activities by pedestrians affects the local economy of Zanzibar town which in turn affects the economy of the entire island of Zanzibar. On an individual basis, the conditions of these streets affects the safety, security, health and well-being of the pedestrians.



Fig. 1.7: Graph showing a Comparative Daily trips per capita. Source: Zanplan 2015



Fig. 1.8 Chart showing Zanzibar transportation mode share. Source: Zanplan 2015



Fig. 1.9 Pedestrian standing aside to give way to a vehicle in Mtendeni street, Ng'ambo. Source: Author, 2019



Fig. 1.10 showing Darajani street in Ng'ambo Zanzibar Source: Author

The design of these streets repels the users hence reduces the shopping activities within these streets and also discourages sociability within the street.

With walking as the most dominant mode of transport in Zanzibar town, it is of value to study the quality of the space allocated for the pedestrians in the shopping streets which are the primary spaces in the urban set up. This study will prove useful in developing guidelines for the design of pedestrian friendly streets within Zanzibar which will improve the local economy and boost social interactions among the walking majority of this town.

### **1.2 RESEARCH OBJECTIVES**

1.To document the character of shopping streets in Stone town Zanzibar and Ng'ambo.

2.To analyse the character of the pedestrian environment present within the shopping streets of Stone Town Zanzibar and Ng'ambo

3.To develop guidelines on the design of pedestrian friendly shopping streets in Zanzibar.

## **1.3 RESEARCH QUESTIONS**

1. What is the character of shopping streets in Stone Town Zanzibar and Ng'ambo?

2. What is the character of the pedestrian environment of shopping streets of Stone Town Zanzibar and Ng'ambo?

3. What are the guidelines that can be developed in order to design pedestrian friendly shopping streets in Zanzibar?

## **1.4 JUSTIFICATION OF STUDY**

The findings of this study are useful in providing design guidelines for shopping streets which favour the pedestrians. These guidelines may be applied to Zanzibar and other Swahili towns of the East African Coast. Through this study, policy makers and planners will become aware of designing streets for public use and those which promote social interactions and boost economic productivity.

The impetus of this study is the belief that there exists a knowledge niche in the former scholarly studies of Swahili streets in Zanzibar. Malu (2018), looked at the environmental performance of traditional swahili markets in Zanzibar and Mombasa whereas Zahra (2017), looked at the effects of urban morphology on microclimate in Zanzibar. While both studies lean towards the thermal conditions and how they affect the comfort of the user, this study seeks to analyze all aspects affecting the comfort of the pedestrians in the shopping streets of Zanzibar Stone town and Ng'ambo. The study findings will not only have a micro effect on the comfort of individual users but if implemented and sustained, will have a macro effect of the economy of Zanzibar at large.



Fig 1.11 Shopping street located in Stone Town Zanzibar showing the pedestrian majority. Source: https://pwezapweza.blogspot.com



Fig 1.12 Benjamin Mkapa Street located in Stone Town Zanzibar showing the pedestrian majority. Source: www.dongweoceanview.com

### **1.5 SIGNIFICANCE OF THE STUDY**

This study will fill the gap in the existing knowledge on design of streets as public spaces that promote productivity and boost sociability. It will provide specific knowledge in the design of shopping streets in an area such as Zanzibar where culture and climate are key. The study will be of benefit to the local governments, the policy makers and the relevant professionals on how to design shopping streets that boost the local economy and foster social interactions. The main beneficiary of the study will be the pedestrians in our urban societies whose safety, health, well-being and financial development will be guaranteed if the streets are designed and modified to be spaces of urban vitality.

This study will help identify the salient factors that affect the quality of space provided for the pedestrians in Zanzibar town. By developing guidelines on the improvement of this space, the local government can adopt the strategies in order to create vibrant, conducive and pleasant streets which will promote the quality of life and support high productivity. With the rapid rise of urbanization in towns along the Swahili Coast, the study will be of timeless value because it will apply to existing streets seeking to be revitalized and new streets being designed in the new forthcoming cities.

# **1.6 SCOPE AND LIMITATIONS**

### **1.6.1 Scope**

The study is limited to the streets of Stone town and Ng'ambo in Zanzibar. The selected cases include:

Town	Street
Stone Town	Sokomuhogo street, Darajani street
Ng'ambo	Mtendeni street, Mlandege street

Tab 1.1 Table highlighting the selected cases Source: Author, 2019

The study of these specific streets will provide an indispensable opportunity to capture the quality of environment provided for the pedestrians in this town. In selected cases, the study involves an in depth analysis on:

i) The function of the street as a social node that promotes social inclusion and equity.

ii) Street activities and their ability to promote productivity.

iii)Street geometry in terms of the street orientation, street width, street length, street character and street connectivity index and how it affects the pedestrian.

iv) Infrastructure development and the ability of the streets to facilitate access to basic services.

v) The microclimate of the streets and their contribution to the comfort of the pedestrians.



Fig 1.13 Google image showing Stone Town Zanzibar and Ng'ambo. Source: https://www.google.com



Fig 1.14 Aerial view of Stone Town Zanzibar and Ng'ambo. Source: https://yallabook.com



Fig 1.15 Bird's eye view of Stone Town Zanzibar and Ng'ambo. Source: https://shutterstock.inc

#### **1.6.2 THE LIMITATIONS**

This research is limited by time and finance. The time allocated for study is not enough for the author to carry out a research on more streets within Zanzibar town in order to compare the results. This would have been useful in designing a comprehensive design framework that applies to all shopping streets in Zanzibar town irrespective of the type of activities.

Due to the shortage of time, the author is also limited to the shopping streets of Stone Town and Ng'ambo of Zanzibar and not those found in outer urban ring beyond Ng'ambo. The author is also unable to make several trips due to financial constraints in case some information is missed out during the first trip.

#### **1.7 LITERATURE REVIEWED**

The research carried out is based on:

#### a)Literature review of material published

*i. Shatry, A. (1991) A conservation plan for Old Town of Mombasa, Kenya. National Museums of Kenya.* 

The book discusses the history and development of Old Town, the urban layout, *the street character*, the building typologies, the construction materials, the climate of the area. It also defines the public spaces within Old Town and the history of the areas and the current use then. It discusses the recommendations for improvements in certain areas within Old town and the building guidelines permissible for the area.

# ii. Usam Ghaidan (1975) Lamu, A study of the Swahili town. Nairobi: East African Literature Bureau.

This book discusses the history of built forms as well as that of the people of Lamu archipelago. It further points out the factors that led to the creation of the towns in the archipelago overtime. The author then analyses particular historic buildings and sites, then further gives recommendations for their preservation, restoration and possible future use.

#### iii. Antje Rickens- Korner (2003), Stone town styles of East Coast Africa- Cape town, South Africa

This book contains a mildly comparative study of the early Swahili Architecture in the stone towns of the east African coast, mainly Lamu and Zanzibar. It goes into detail of the various door types, architectural elements, building technology and materials present in these two towns. It also discusses various house typologies in Swahili architecture as well as contemporary styles that are surfacing particularly interior decor.



Fig 1.16 Image showing busy shopping street corner in Zanzibar town. Source: https://www.alamy.com



Fig 1.17 Image showing busy shopping street in Zanzibar town. Source: https://www.urbanadventures.com

iv. Bianca Stefano, Siravo F, (1996). Zanzibar, A Plan for the Historic town, Geneva: The Aga Khan Trust for Culture

The book gives an insight in Zanzibar as the capital of Zanzibar Archipelago; its history and development and an account of the building typologies in the Island. It goes ahead to discuss the *structure and townscape of the conservation area of Stone town Zanzibar*.

vi. Amos Rapoport (1969) House, Form and Culture. Prentice Hall Inc. This book gives an understanding of the importance of cities on human behaviour, psychological, cultural and social needs; the effects of urban forms on people and the role of images in the city.

*vii. Alexander, C (1977). A Pattern Language. Published by Oxford University Press, Newyork.* This book illustrates how the patterns of vernacular architecture connects people to their surroundings in an infinit'e number of ways.

#### viii. Lynch, K (1960) Image of the City. Published by The M.I.T. Press

This book illustrates how people orient themselves with five major elements that are publicly visible by all in the urban areas: (1) paths, (2) edges, (3) districts, (4) nodes, (5) landmarks.

*ix. Moughtin, C (2003).* Urban Design: Street and Square. Published by Architectural Press. This book gives a detailed analysis of Urban design. It covers the *streets*, squares and buildings that make up the public face of towns and cities.

*x. Moughtin, C (1995).* Urban design: Ornament and Decoration. Published by Architectural *Press.* This book offers a detailed analysis of urban design, covering the *streets*, squares and building that make up the public face of towns and cities. It includes the arrangement, design and details of these elements and the roles they play in city planning.

*xi. Jane Jacobs (1961)*. *The Death and Life of Great American Cities Published by New York: Random House.* The author of this book argued that urban renewal did not respect the needs of city-dwellers. It also introduced the sociological concepts "*eyes on the street*" and "social capital.

Fig 1.17 Image showing busy shopping street in Zanzibar Fig 1.17 Image showing busy shopping street in Zanzibar



Fig 1.18 Image showing busy shopping street in Zanzibar town. Source: https://www.alamy.com



xiii. Shibu Raman (2010). **Designing a Livable Compact city**: Physical Forms of City and Social life in Urban Neighbourhoods. Published by Alexandrine Press. The paper discusses the finding of a research that examined the relationship between urban design and layout and aspects of social and communal life.

#### b) Literature review of material unpublished

*i)Mutonga P. Wanjiru (2014)* Evolution of Swahili Architecture: A case of Mombasa, Lamu and Zanzibar. This thesis provides a basic understanding of the historic origin of some Swahili architectural elements of the different typologies of Zanzibar. It investigates the factors that impacted on the transformations of Swahili Architecture and the contributions of different societies to the evolution of Swahili Architecture.

#### ii)Essajee Asya (2017) Urban Social Spaces: The case of traditional Swahili Towns

The research discusses the character of *streets*, squares and waterfronts of traditional Swahili towns. The study establishes lessons learnt from the relationship of these urban spaces with social life in these towns.

# *iii) Abdillahi zahra adan (2017) Effects of urban morphology on microclimate in warm-humid climates*

This research discusses the effect of the urban geometry on the microclimate conditions in urban centres. The study examines the effects of the existing urban forms of Stone Town and Ng'ambo on the microclimate of Zanzibar city and highlights some of the adaptation strategies that could improve the comfort levels of outdoor spaces such the *street*.

# *iv) Waweru Lynda Wambui (2018)* An Evaluation of the Pedestrian Shopping Street Environment: A case of Old Kilindini Road, Mombasa

This research establishes the character of urban pedestrian environments with the urban context. It goes ahead to evaluate the quality of the pedestrian environments along the Swahili urban shopping street and how the users interacts with them. The study concludes by formulating a framework that can be employed to transform the shopping streets and craft bazaars of Old town Mombasa into urban spaces of vitality. This study informs this thesis by suggesting variables that can be used to evaluate the pedestrian shopping environments in Swahili towns along the East African Coast.

Fig 1.19 Image showing men resting along a street in v) Malu Ruth (2018), Environmental Performance of Traditional Swahili Markets: A case of Stone Zanzibar town: Source: https://pwezapweza.blogspot.com Town, Zanzibar and Mombasa



Fig 1.20 Image showing the narrow nature of streets in Stone town Zanzibar: Source: https://www.vagabondway.net

Source: https://www.vagabondway.net



Fig 1.21: Women resting on a stone bench in Stone town Zanzibar: Source: https://www.masterfile.com

This study documents the character of the traditional Swahili markets in Zanzibar and establishes their thermal comfort levels. This thesis concludes by developing thermal comfort strategies appropriaate for traditional swahili markets in Zanzibar. The author touches on street markets such as Sokomuhogo in Stone Town Zanzibar which begins to establish the character of shopping streets in Stone Town Zanzibar.

# vi) Manda Kakaire, (2016), Thermal comfort analysis of buildings in Stone town and Ngambo, Zanzibar

The thesis investigates the human comfort levels of the Swahili stone houses mainly looking at the old building typologies in stone town and the modern built typologies in Ngambo.

vii) Shapira & Hellerman Planners (2015), Structure Plan for Zanzibar Municipality (Zanplan) and Its Immediate Periphery and Urban Development Policy for Zanzibar Town Final Report - Summary.

This report summarises the Consultant's findings and recommendations regarding the City's historic developmental; the recommended and approved Vision and Strategy for the City's future development and policy recommendations in the relevant spheres. All these are designed to provide the requisite strategic direction and statutory tools to guide Zanzibar City's future development.

#### c) Precedent Studies

Case studies will be analyzed in detail bring out the main points showing relevance of the study as well as to exhibit the practical manifestations of the principles explained in the literature.

#### d) Internet sources

This will be key in gathering information relevant to the area of study and that are not available in published materials. It includes, maps, images, news reports and any relevant information retrieved from credible websites.

### **1.8 STRUCTURE OF THE STUDY**

#### **Chapter One: Introduction**

This chapter introduces the street as the primary space in the urban context which has multiple key functions. This chapter also illuminates the problem facing streets today of lacking productivity and social inclusion. This chapter introduces Zanzibar as the area of study and the problem faced in the



Fig 1.22: showing a busy shopping street in Stone Town Zanzibar. Source: https://pwezapweza.blogspot.com



Fig 1.23: Street located in Stone Town Zanzibar demonstrating different modes of transportation used. Source:https://www.easytravel.co.tz

streets which has led to low economic productivity. It also highlights the aims and objectives of this study , the selected scope and limitations. This chapter also explains the significance of the study and its contribution to the body of knowledge. This chapter concludes by listing the literature reviewed by the author and how the different sources have helped to gather knowledge in the specific area of study.

#### **Chapter Two: Literature Review**

This chapter provides a critical review of the literature on streets. It begins by a global survey of the phenomena of streets, the role of streets in the urban set up and the various types of streets. It goes ahead to look at the pedestrian street and the current trends in street development. This chapter also gives an account of the origin of the shopping streets until they arrived in the Swahili Coast. The Chapter provides a historic account of trade in Zanzibar and looks critically into the urban form and structure of Zanzibar town. It concludes by giving a summary of the literature highlighting the variables on which the quality of space in the shopping streets of Zanzibar can be measured.

#### **Chapter Three: Research Methods**

The third chapter involves identifying major sources of data collection as primary and secondary data. Primary data entails using interviews, observation, physical measurements, analytical sketches, photographs and analytical notes while secondary data entails a critical review of reliable source of information relevant to the study, both published and unpublished materials.

The overall parameters investigated include the physical forms of the identified shopping streets, the geometry of the streets, materiality and street microclimate parameters.

#### **Chapter Four: Fieldwork Findings and Analysis**

This chapter will give a documentation of the selected shopping streets in Zanzibar town based on the variables identified from the Literature Review. In this chapter the author will also develop a critical analysis of the selected streets based on the variables, all on the basis of whether or not they favour the pedestrians on these shopping streets.

#### **Chapter Five: Findings and conclusions**

In this Chapter, the author draws conclusions and gives recommendations on design of pedestrain friendly shopping streets. The author develops an implementable framework that can be used to improve the current state of the shopping streets in Zanziabar town and that which can help in the design of shopping streets in developing towns outside Zanzibar town. The chapter concludes by the author identifying related areas of further research.



Fig 1.24: Image showing men playing bao, a traditional board game : Source: Author, 2019



Fig 1.25: Highly ornamented door in Stone Town Zanzibar. Source:https://www.bizarreglobehopper.com

#### **1.9 LIST OF TERMINOLOGIES**

**Bao** - Is a traditional board game played in most of East Africa coast. Bao is Swahili word for game. **Baraza**- Stone bench, which is also a meeting or gathering place and reception area usually in form of a raised stone platform on the front elevation of the stone houses where people sit and hold casual discussions

**Bazaar**- Bazaar in Persian literature has a broad meaning and has been used for a crowded covered or semi-covered space known as a place in which renowned merchants conduct commercial activities **Biashara -** A Swahili word translated to mean business.

**Boriti** - these are mangrove poles used as support in the con-struction of flat roofs and suspended floor slabs along the Swahi-li coast. Boriti refers to the rounded poles. The term varies along the East African coast.

Buibui - black cloak or cover worn over all other clothing by Muslim women.

**Caravanserai-** A roadside inn where travelers (caravaners) could rest and recover from the day's journey.

Chowk - Hindi word for a multi-purpose courtyard.

Creek- A narrow area of water that flows into the land from the sea, a lake, etc.

Dhows - a traditional wooden sailing ship.

Harem - the private family quarters of a Muslim house.

Ibadi - Muslim sect that originated in Oman.

**Kaskazi** - Swahili name for the north-east monsoon winds which blow from October to February. **Kiwanda** - open walled courtyard.

Kanzu - Is a hite or cream coloured robe worn by Muslim men

Kusi - A Swahili name for the southeast monsoon winds which blow from June to September.

Mabati - this is a Swahili term for corrugated iron sheets.

Majlis- the main reception room of a Swahili house.

**Makuti** - thatch material used for roofing and shade structures; the word also means a roof covered with thatch, or a house covered with a thatch roof.

Mihrab - prayer niche; also implies shape of the prayer niche.

Mitaa - ward or section of a town.

Musafarkhana - (Swahili/Persian) house of travellers.

Musharabiya- latticework of turned or carved wood used for screens or enclosing balconies for privacy and ventilation.

Ng'ambo - A Swahili word translated to mean the other side

**Plattenbauten -** A German word to refer to a building whose structure is constructed using large prefabricated concrete slabs



Fig 1.26: Image showing Swahili house 'sebule'. Source: https://www.safari254.com

**Sebule** - indoor reception, front room or guest room, usually next to the entrance, but sometimes on the first floor.

Souk or souq- Arab market or marketplace; a bazaar.

**Stone Town-** The part of a traditional Swahili town that was built primarily of permanent stone walling material. Usually, it denotes the old part of a town, when referring to Swahili city states, for example, Zanzibar Stone Town refers to the older part of the town, despite the growth and development of New Town, Zanzibar

**Swahili**- A cultural group of Bantu origin in East Coast of Africa. Arab traders called the inhabitants along the coast the Swahili, a term derived from the Arabic word sahil or 'coast'.

Zangh - Arab word translated to mean coast of the black people