

UNIVERSITY OF NAIROBI
COLLEGE OF ARCHITECTURE & ENGINEERING
SCHOOL OF THE BUILT ENVIRONMENT
DEPARTMENT OF URBAN AND REGIONAL PLANNING

REPORT ON

**ANNUAL FOURTH YEAR EDUCATIONAL TRIP TO THE COASTAL
REGION**

BY

4TH YEAR CLASS 2017



JUNE, 2017

ACKNOWLEDGEMENTS

The 4th Year Class 2016/2017 together with the members of staff who accompanied them to Mombasa, Ms Beatrice Wanjiku Ndung'u, Mr. James Murimi and Dr. Silas Muketha, take this opportunity to thank, the entire University of Nairobi Management. Specifically, we thank the Principal, College of Architecture and Engineering, Prof. Peter Ngau and the Chairman, Department of Urban and Regional Planning, Dr. Karanja Mwangi for according us this wonderful opportunity of visiting Mombasa County. Thank you for providing financial support and transport services for the trip.

The team also want to thank our bus drivers Mr Mwangi, and his colleagues. for the wonderful job done by ensuring that we reached all the places planned and we came back safely thank you so much. We want to pass our regards to all the people we met at the different places we visited including Hallers Park, Gedi ruins, SGR, Kenya Ferry Service Stations among others. We are very grateful for the detailed information you gave us, we learnt a lot. The fourth year student would also appreciate the effort of Modix Okeyo, Pertua Mutindi and Samuel Maina for dedicating their time to compile this report.

Our appreciation cannot be complete without thanking all the students for their cooperation, discipline and adhering to the instructions provided. All this made the trip the most successful one. Above all we want to thank Almighty God for the safe journey, good health, protection and care that he gave us. We could not have made it by our own strength.

Thank you so much.

Table of Contents

ACKNOWLEDGEMENTS	ii
EXECUTIVE SUMMARY	vi
CHAPTER ONE.....	1
INTRODUCTION	1
1.1 Background.....	1
1.2 Purpose of the Trip	1
1.3 Objectives of the Trip	1
1.4 Organization of the Report	2
CHAPTER TWO	3
LESSONS LEARNT ALONG THE WAY.....	3
2.1 Overview	3
2.2: Departure from Nairobi	3
2.3. Views along the Way	3
<i>2.3.1. Transportation.....</i>	<i>3</i>
<i>2.3.2 Land use planning.....</i>	<i>7</i>
<i>2.3.3 Physical Aspect.....</i>	<i>10</i>
<i>2.3.4 Way Forward.....</i>	<i>12</i>
CHAPTER THREE.....	14
TOURING FORT JESUS AND MOMBASA OLD TOWN.....	14
3.1 Overview	14
3.2 Mombasa Old Town	14
3.3 Significance of the Old Town to Urban and Regional Planning Class.....	18
CHAPTER FOUR.....	19
A VISIT TO HALLER PARK AND LARGER BAMBURI	19
4.1 Overview	19
4.2 Haller Park	19
4.3 Significance of Haller Park to Urban and Regional Planning Class.....	24
CHAPTER FIVE	25
VISIT TO NORTH COAST	25
5.1 Overview	25
5.2 Visit to North Coast	25
5.3 Watamu Marine National Park.....	25
<i>5.3.1 History.....</i>	<i>26</i>

5.3.2 Wildlife	26
5.3.3 Conservation	26
5.4 The Ruins of Gede	30
5.4.1 Introduction	30
5.4.2 History of Discovery and Excavation	31
5.4.3 Early Archaeological Research	32
5.4.4 Recent Archaeological Research	32
5.4.5 Architecture of the Gede Ruins.....	33
5.4.6 Walls of the Gede ruins.....	34
5.4.7 Mosques of the Gede ruins.....	34
5.4.8 Tombs of the Gede ruins.....	35
5.4.9 Houses of the Gede Ruins	36
5.4.10 The Palace of the Gede Ruins.....	37
5.4.11 Gede's Hinterland	38
5.4.13 Gede Museum.....	40
5.5 Opportunities Identified During the Tour of the North Coast.....	45
5.6 Challenges Faced During the Tour of the North Coast.....	46
5.7 Lessons Learnt at Watamu Marine National Park and Gede Ruins.....	47
CHAPTER SIX	50
OVERALL RECOMMENDATIONS	50
6.1 Overview	50
6.2 Proposals for Future Trips	50
6.3 Overall Recommendations	50
REFERENCES	51
APPENDICES	52
Appendix 1: 4 th Year Students Involved in The Trip to Coast.	52

List of Figures

<i>Figure 1.6: Yatta Plateau</i>	<i>10</i>
<i>Figure 2.7: Zebras and Giraffes in Athi- Kapiti Plains.....</i>	<i>11</i>
<i>Figure 3.1: Local Plan from Mombasa Old Town</i>	<i>16</i>
<i>Figure 4.1: Crocodile Ponds Haller Park.....</i>	<i>20</i>
<i>Figure 5.1: A Section of Students Enjoying a Boat Ride at Watamu National Park.....</i>	<i>28</i>
<i>Figure 5.6: Palace of the Gede Ruins.....</i>	<i>38</i>
<i>Figure 5.7: Students and Staff Paying Attention to the Tour Guide Narrating.....</i>	<i>39</i>
<i>Figure 5.8: Students and Staff Walking out of Gede Ruins</i>	<i>40</i>
<i>Figure 5.9: Traditional Giriama Dancers.....</i>	<i>41</i>
<i>Figure 5.10: A section of Students and Staff Watching Giriama Dancers at Gede Ruins</i>	<i>42</i>
<i>Figure 5.11: Students Joined the Giriama Dancers</i>	<i>43</i>
<i>Figure 5.12: Dr. Muketha Shared a Light Moment with Students after the Giriama Dance at Gede Ruins</i>	<i>44</i>
<i>Figure 5.13: Students and Locals Pushing the Bus at Watamu Marine National Park</i>	<i>46</i>
<i>Figure 5.14: Young Children Involved in Giriama Traditional Dance.....</i>	<i>48</i>
<i>Figure 5.15: Children Dancers Posing for a Photo with Students.....</i>	<i>49</i>

EXECUTIVE SUMMARY

The fourth year class of DURP visited the coastal region for their annual educational tour between 30th May and 4th June. The trip offers a rare opportunity for the students to learn about the historical planning background of the coastal region as well as the current issues faced. The students are also able to appreciate the diverse geographical landscape from Nairobi to Mombasa and identify various planning issues along the way.

The trip was guided by four main objectives which included: to explore the historic places of the coastal towns and learn their contribution to Urban and Regional Planning; to investigate the significance of coastal towns, in particular, the places visited to the planning practice in the country; to identify the strength, weaknesses, opportunities and threats faced by Coastal Region in relation to urban and regional planning; and to propose recommendations and way forward for future trips to Mombasa and other places. The trip was an informative one and students were able to learn a lot from the experience.

During this trip, the students visited the following areas in the coastal region; Mombasa old town, Fort Jesus, old harbor, Haller Park, Watamu Marine National Park, and Gede ruins. These areas presented many learning opportunities for the planning students who came up with various strategies and suggestions as to how some of these areas can be preserved and planned for in the future. The students were also able to appreciate conservation elements in planning after their visit to Haller Park and Watamu Marine National Park.

Recommendations were made to improve on future educational trips to the coast and other areas. They included; the use of video cameras to document the trips and thus create a rich data base, having the trip at the beginning of third year of study, exploring other areas to tour within the larger east african region, increasing student allowances, using alternative means of transport such as the SGR, amongst others as discussed in the report.

Modix Okeyo-Chairman PLASA

Perpetua Mutindi Kivunga

Samwel Maina Ngari

Dr Silas Muketha (Lecturer accompanying the students)

CHAPTER ONE

INTRODUCTION

1.1 Background

Educational Trips to the coastal region are historical and as a result has become a tradition in the college of architecture and Engineering and in this case department of urban and regional planning. Different department hold theirs differently.

In the department of Urban and Regional Planning, the education trips to the coast are a preserve for the fourth year students in every academic year. This particular one was not any different. It was attended by the fourth year students where they not only learnt a lot but also got a lot of exposure.

1.2 Purpose of the Trip

The main purpose of the trip was to explore and appreciate the spatial planning discourse of the coastal region

1.3 Objectives of the Trip

1. To explore the historic places of the coastal towns and their contribution to Urban and Regional Planning
2. To investigate the significance of coastal towns, in particular, the places visited to the planning practice in the country
3. To identify the strength, weaknesses, opportunities and threat of Coastal Region in relation to urban and regional planning
4. To propose recommendations and way forward for future trips to Mombasa and other places

1.4 Organization of the Report

Chapter One: Introduction

This chapter provides the background information, the main purpose of the trip and the objectives that guided the field trip.

Chapter Two: View along the Way

This chapter comprises of the different activities and views seen along the way to Mombasa town. The chapter details out on the places seen by giving the physical characteristics, aspects of land use planning and the way forward.

Chapter Three: Touring Mombasa Town

This chapter covers the various places visited on the second day of the trip which included Mombasa old town, Mombasa Old Port, Area around Fort Jesus, Old Town Fish market, Kenya Ferry services station in Likoni and a number of areas within the city.

Chapter Four: Visit to Haller Park and larger Bamburi area

This chapter covered the visit to Haller Park and Bamburi cement highlight the significance of these places to urban and regional planning.

Chapter Five: Visit to North Coast

This chapter covers the visit to North coast which was on the third day of the trip. Some of the places visited in North Coast include Watamu Marine Park and Gede Ruins.

Chapter Six: Overall Recommendations

This section provides the overall recommendations derived from the field trip as well as long term recommendations.

CHAPTER TWO

LESSONS LEARNT ALONG THE WAY

2.1 Overview

This section of the report provides the activities and areas viewed along the way to Mombasa Town. This chapter also shows the lessons learnt and gives the way forward for future trips to Mombasa.

2.2: Departure from Nairobi

The students and staff departed from Nairobi on 30th of May 2017 at 9am. The bus arrived slightly late considering that we were to depart at 7am. A total of 61 students, three staff members from department of urban and regional planning, two drivers and a technician formed part of this big team that woke up so early for this traditional annual forth year trip.

Upon waiting for the bus for close to two hours, it finally came and the journey commenced. We made our first stop at Naivas Syokimau to get some snacks for lunch. On the way members on board were flabbergasted by the beautiful away from the Noisy capital city of Kenya. Traversing in our regional studio study region we did some reconnaissance to the study and realized that the proposed study area boundary was too large thus Mr. James Murimi the studio master proposed a revision of the same.

The journey took longer than expected due to the numerous freight trucks on the way, numerous stopovers and poor bus breaking system. We made to our place of rest at around 11pm.

Below are some of the lessons learnt on the travel day to Mombasa.

2.3. Views along the Way

2.3.1. Transportation

a) Mombasa-Nairobi Highway

Figure 2.1: Heavy Traffic Jam on Mombasa Road



Source: Field Trip, 2017

Mombasa-Nairobi Highway is set to be a high speed road since it is a highway to several countries within East Africa region. However, there is existence of traffic calming such as Bumps and zebra crossing points and no provision for accelerating lanes/ service lanes along the route thus the long time taken to travel on the road.

Existence of lots of freight trucks on this route are also a causative of the high traffic on this route thus not convenient for travel especially for school trips. Reckless driving evidenced by overtaking and over speeding was observed since most of the long-distance drivers tend to drive at haste to get extra time to rest on arrival.

b) Standard Gauge Railway (SGR)

Figure 2.2: The SGR Project



Source: Field Trip, 2017

From observation, it was noticed that the Standard Gauge Railway line did not consider the existing land uses and towns in its alignment. It is based on the origin destination principle.

It is fenced with an electric fence and no buffer from either side hence risks electrocuting animals and small kids (Murithi, 2015). Though there is a regulatory that within wildlife Protected Areas (WPA), the design be modified to fit the requirements of KWS to enhance movement of wild animals especially elephants, giraffes, buffaloes and large carnivores among others, it was noticed

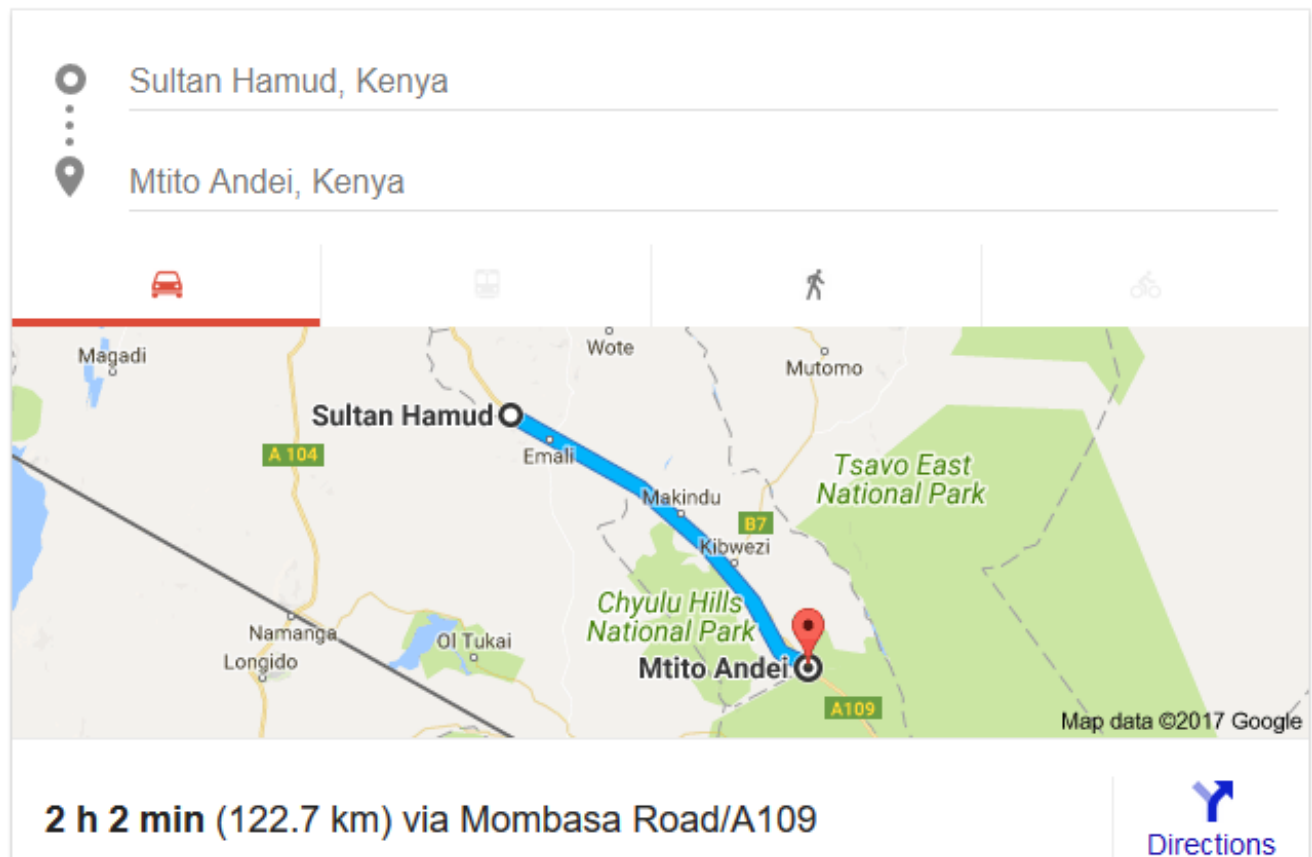
that domestic animals have not been considered thus several dead animals were observed along the SGR due to electrocution.

Connectivity with smaller towns

There are 33 crossing stations along the SGR route though they are not in use now. The train makes stop at Mtito Andei and Voi thus it's not fully connected with the smaller towns along the route. For one to board the train on the way they have to travel to these two stations thus making the SGR inconvenient in terms of accessibility.

It was also observed that the SGR has not incorporated the existing land uses in its construction in such that if it trespasses one's land they have to travel long distances to get to the other side of their property.

Figure 2.3: Distance between Sultan Hamud and Mtito Andei



Source: Google Maps, 2017

2.3.2 Land use planning

This is the arrangement of human activities on space. Along Mombasa road several land uses were observed differing from urban areas to rural areas. Poor land use planning was evident along the road thus hindering development of some towns though well placed in terms of linkages.

a) Urban Setting

It was noticed that most of the urban areas along the road were poorly planned with some of them lacking basic facilities like lavatories. This is supported by when we made stops to release

ourselves people would either ask for assistance from the nearest petrol stations or help themselves behind thickets.

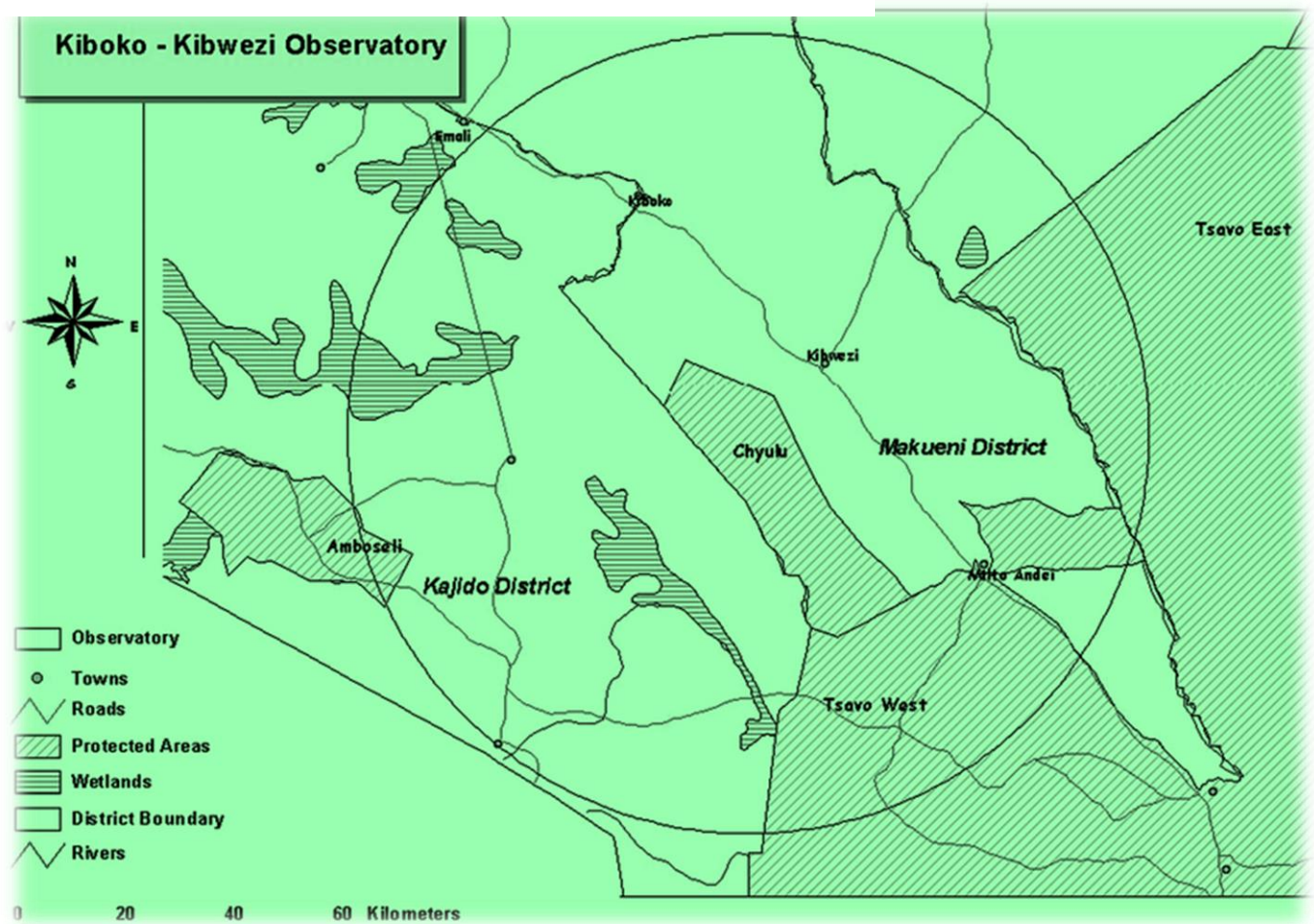
b) Rural Setting

This is characterized by large tracts of land with scattered settlements. Land in the rural areas is bare and dry. Though the area is endowed with fertile soils, due to shortage of rainfall and unfavorable weather conditions in these areas crops never make it to maturity thus the evident food insecurity in the region.

c) Tourism Attraction Areas

Major landmarks and tourist attractions of the area included the Tsavo East and West National Parks, the Chyulu Hills National Park and the world famous Amboseli National Park. The white halo peak of the Mount Kilimanjaro rises clearly to the West and all around to the South stretch miles of Maasai land.

Figure 2.4: Tourist Attraction and Conservancy Areas



This region is in many regards a land of vastness and impressive landscapes, such as the Yatta plateau, the longest lava stream in the world and the baobab country around Kibwezi West.

The Mbui Nzau Hills or **White Goat Hills** are situated just 5 km from the Kibwezi junction along the Mombasa-Nairobi highway. The hills are customarily famous from the local folk tale of a white goat that used to appear on top of the hills very early in the morning just after sunrise before the arrival of the missionaries. The images below show some of the tourist attraction sites in Kibwezi town.

Figure 2.5: Chyulu Hills



Figure 1.6: Yatta Plateau



Source: Field Trip, 2017

2.3.3 Physical Aspect

The road is surrounded by varied physical aspect ranging from the high areas (Lukenya hills, Mua hills, Nzau hills, Kilungu hills, Mbui Nzau hills and the Taita Taveta hills) to the low areas (Athi-Kapiti plains and the Low lands of Makueni, Kajiado, Taita Taveta and Mombasa counties).

a) Athi-Kapiti plains

To the south of the city of Nairobi is the Athi-Kapiti plains with relatively healthy population and migration of large herds of herbivores (Gichohi, 1996). The plains run vast from Machakos County to Kajiado and Makueni County. The famous Konza Techno City is located amid the plains.

The plains hold some of the Kenya's most amazing wildlife including the country's only white-morph cheetah (Mrwere, 1996). It is characterized by thickets and grass which support the herd of the herbivores. Within the same plains there has been frequent grabbing especially in the Machakos side and this has greatly affected the movement of these animals.

Below are images of some animals in Kapiti plains

Figure 2.7: Zebras and Giraffes in Athi- Kapiti Plains



Source: Field Trip, 2017

b) Low lands (Makueni and Kajiado)

These are large tracts of land characterized by scattered settlements and dry lands. It was observed that people on these areas do not prioritize tree planting thus the bare lands. Even though water shortage is a severe challenge in the area the soils are fertile and able to sustain vast species of trees.

Sensitization on tree planting would be of great importance since trees act as wind breakers, attract rain and can serve as a source of income to the locals. Trees such as Mwarubaini, Moringa and the fruit trees (Mangoes, Oranges, Lemons, avocados, passion fruits and water melons) do well in these areas thus with proper facilitation and sensitization people would benefit from the same.

Along the rivers in the area tomatoes, onions kales and cabbages do well with provision of water in the area it would be a rich source of these vegetables.

Water shortage is a great problem in the area hence need for the county governments to invest in dam construction to harvest rain water which would be used during the dry season. Also with the completion of Thwake dam, construction of canals to various parts of the county would help solve the water shortage problem, thus supporting tree planting, horticulture and agricultural production. This will solve the food insecurity challenge.

c) Hills

There are vast number of hills, with Lukenya hills serving as hiking zone for army teams, scouts and girl guides, Mua hills stretches to the Oldonyo Sabuk conservatory area. Along the route in Makutano (kyumvi) is the Devine Mercy Shrine hill which has a religious implication to the catholic faithful.

The Nzaui hill is associated with the history of the Kamba people where they believe that **Ngai** created the first man and woman and placed them on Nzaui hill. This is supported by the human and animal footprints on top of the hill.

The Mbui Nzau alias the **White Goat hill** is associated with a Kamba proverb “Mbui Nzau yaa yenekee”. It is on these hills where the local stations boosters have been erected.

2.3.4 Way Forward

i. Short Term Basis

a) Use of SGR

With the completion and inauguration of the SGR we advise use of the infrastructure during our trips. This will cut on the fuel cost and the drivers’ allowances thus cutting on the total cost of the trip. Using the SGR is fast thus reducing the time used on the road. Road travel risks on accidents due to the numerous freight trucks and lack of accelerating and service lanes along

Mombasa road therefore use of the SGR will reduce fears among the students and the accompanying staff.

b) Use of The Mombasa Campus bus

On the issue of connection to the various tour places arrangements can be made with the university campus at Mombasa to release their bus

ii. Long Term Basis

a) Construction of Tourism and Hospitality Facilities

To cut on the cost of accommodation the university should build their own Tourism and hospitality facility at the coastal region. This will enable it to benefit from the same since it will incorporate conference halls, hostels and a department with courses related to the tourism and hospitality.

CHAPTER THREE

TOURING FORT JESUS AND MOMBASA OLD TOWN

3.1 Overview

This section covers the second day of the trip which was the first full day this great team had in the coastal city of Mombasa. Programme for that day majorly constituted visiting a number of places within Mombasa Island. Places visited were Mombasa old town, Mombasa Old Port, Area around Fort Jesus, Old Town Fish market, Kenya Ferry services station in Likoni and a number of areas within the city. Below is a detailed outline of some of the places visited and their importance to planning students.

3.2 Mombasa Old Town

Situated on the South-East side of Mombasa Island, the town covers an area approximately 72 hectares. The town was founded by Arabs, later Portuguese till end of 17th century when Arabs reclaimed the area after siege of the Fort Jesus. In late 20th century the area came under British Administration as colonizers.

The area has a blend mix of social cultural characteristics of the Arabs, Portuguese, African and British. The town architecture is composed of thick walled, heavy doors, multistoried and squeezed building lines. Walls are made of coral stones, most were doubled lined to produce a thick wall which could support the top building floors, windows were majorly 0.5M by 1M, against the recommended one tenth of the total floor area (Kenya, 2014).

The Avenues and streets are only navigable by the three wheeled cycle commonly known as the Tuktuk, walking or cycling. The advantage of that is that there is less pollution both air and noise, in the town, while at the same time the area is prone to drowning into disasters such as fire if they ever occur. Accessing the inner town is problematic hence in case of a building on fire the damage will be immense before containment strategies are in full gear, which could maybe be only through the air.

But the question many would ask is the town so anti-planning, yet it is has the attention of the UNESCO as a world heritage center, while there are beautiful suburbs in Mombasa which are supper planned? Well answers are bare, the town represents the original Mombasa that was founded by the Arabs and the Portuguese. A narration from the local historian, he was keen to note that the town is located in the former constituency of Mvita. Before the British docked in the area Africans had known the area as a war zone resulting from the Portuguese and Arab and Zimba community wars. Hence as the British interacted with the locals on which name to refer the area the word “Vita” was more pronounced among Africans and Arabs. British named it Mvita.

The warfare characteristic of the area influenced the architecture and the planning of the town. The town building are almost three adult steps from each other, main reason as narrated by local historian is the need for security by living close to each other as possible such that in the event of any attack help would easily arrive.

Administration area including the municipal council, police quarters and law courts were located at the entrance to the town, while the residential at the middle and commercial and cottage industries at the rare end, next to the sea.

See Figure 3.1

Figure 3.1: Local Plan from Mombasa Old Town



Key features to note from the arrangement of the city is the location of the now Mazrui Cemetery. The land use is located away from other land use such as residential and commercial indicating that land use planning as an activity was practiced long before its recognition, institutionalization, standardization and professionalism after World War II.

The Mazrui cemetery is one of the key landmarks of the town. It hosts the graves of the former town administrators and town residents, notable amongst them is the late Prof. Ali-Mazrui whose lineage once reigned the town as administrators in the 1734-1837 when Sa'id a Zanzibar and Pemba Muscat toppled the throne. However the Mazrui family remained a key elite in the town and Mombasa in general throughout the British and African Independent government.

In the commercial area of the town is the Swahili cultural center. The building hosts ancient artifacts of the 14th to 19th century.

The fish cleaning and processing center next to the old port. The center supplies fish consumed in the island and the old town. The old port, which handles transportation to the Zanzibar Island and small sized cargo. The main traffic is composed of small and medium sized dhows and boats.

Figure 3.2: Mombasa Old Port



Source: Field Trip, 2017

The fort Jesus, the local historian resourceful informed how the building acquired the name. Portuguese embraced Christianity hence the architecture of the fort resembles the Christ's cross as it has the head, arms and the leg positions as positioned on the cross.

The fort was constructed in the 17th century and was used as a safe haven and a strategic attack point of the enemy as he approaches the port. The fort has a thick walls and much raised walls effective for traditional warfare defense. This explains why the Portuguese had an easy time in

the town at their reign. Unfortunately in late 17th Century Oman Arabs were able to topple the latter through the starvation strategy.

3.3 Significance of the Old Town to Urban and Regional Planning Class

Planners are charged with the authorizing developments, hence the environmental and social impacts of the proposed development are key to planning professionals.

Old town was recently named a heritage site by the UNESCO. Globalheritagefund.org define heritage site as an official location where pieces of political, military, cultural, or social history have been preserved due to their cultural heritage value. Old town is host to Portuguese and Arab military and social-political tools and cultural history inform of building architecture. Therefore planners being town land use masters are mandated to protect such site from contaminant developments. Old town is key to urban and regional planning students, especially in enriching the planning theory. The theory seeks to answer the history of planning. Old town provides real scenario where town designers practiced the role of modern planners yet did not consider themselves planners.

Old town gives the students a rough idea of the size of urban centers in the 13th-18th century, hence comparative analysis and growth trends can be developed between the Gede city in Malindi and the modern definition of urban centers.

Also ideas of solving some of the housing challenges such as cost of building materials. Buildings in Old town are multistory and about four centuries old yet lack steel reinforced columns and beams and slabs. Planners and architects could borrow the traditional technology in provision of sustainable and cheap housing to the urban poor.

CHAPTER FOUR

A VISIT TO HALLER PARK AND LARGER BAMBURI

4.1 Overview

This chapter covers the visit to Haller Park and Bamburi Cement on the second day of the trip highlight the significance of these places to urban and regional planning. It also gives the lessons learnt from the visits and the way forward.

4.2 Haller Park

Haller park ecosystem is part of the larger Bamburi Cement properties. Park is located within the 600 acre piece of land owned by the Bamburi Cement Company. The company is located at the outskirts of Mombasa city suburbs approximately ten kilometers from the main-stream City Central Business District.

Majority of 4th year class members of Urban and Regional Planning in the school of the built Environment, University of Nairobi were amazed by beautiful integration of the park with the much noisy and polluted environment resulting from the industry.

Written as narrated by Mr. Antony (Bamburi cement employee charged with the maintainace of the park)

The park was founded by one of the Bamburi Company Owner Mr. Haller. Going back to the origins of its existence, Bamburi Cement Company was founded in 1951 by Felix Mandi- a director of Cementia Holding A.G Zurich. The first commercial production was started in 1954 with an annual capacity of 140,000 tones today the capacity has increased to 1.1 million tones.

Some of the industrial locational factor for the company included availability of the raw materials, which are the limestone rocks, availability of land and transportation to the hinterland and consumers. By 1971, mining had left a significant portion of the 600 acre piece of land di-usable and barren. Rehabilitation attempts of the lands began with an experiment of twenty one

tree species of which in that only three survived the tough soil conditions. The three were planted across the park in conservation efforts that received global recognition by the United Nations Environment Programme (UNEP).

Haller Park as an ecosystem is host to wildlife such as giraffes, hippos, buffalos, crocodile's, monkeys, snakes, antelopes, Heron Egrets amongst others. See Figure 4.1 and Figure 4.2

Figure 4.1: Crocodile Ponds Haller Park



Source: Field Trip, 2017

Figure 4.2: Section of Park Wildlife

The company has engaged in a lot of environmental rehabilitation activities such as development of crocodile ponds, planting of mangrove trees which help in cleaning of saline water, adopted hippos one from Germany and one from Kenya while providing them with ample living environment, the buffalos and antelopes.

Source: Field Trip, 2017



Figure 4.3: Buffalo Haller Park



Source: Field Trip, 2017

Mr. Antony notes that the very section everyone wants to visit with eager is the snake zoos. The company has ten protected and reared ten different snake species including the python, green and black mambas which are known to be the most poisonous, then there is the cobra which curves like a walking stick when it intends to attack.

Figure 4.4: Python Haller Park



Source: Field Trip, 2017

The epitome of the park is the fish rearing unit, which was set to ensure the park is self-sustaining in terms of the income. Several fish breeds are reared and the majority of consumers are fish farmers and consultation services to various Kenyans in developing a fish farm.

Figure 4.5: Fingerlings Haller Park



Figure 4.6: Old Tortoise Haller Park



The famous mzee tortoise which was said to be 130 years. Mzee hit the headlines in the 2004 when it formed a stunning relationship with the adopted hippo stranded in Malindi beach. The tortoise which is mainly seen at the entrance of the park is the represents the environmental agenda the park has to nature.

4.3 Significance of Haller Park to Urban to Urban and Regional Planning Class

Haller Park Landscaping provides urban and regional planning students with a real environmental design scenario where barren and waste land have been turned to best of simulative natural environment.

Hallar Park planted vegetation act as carbon (IV) oxide absorber as released from the cement company therefore minimizing environmental pollution. Also a symbiotic relationship between the park and the neighboring community, the company earns income to run the park though consultancy on environmental design and fish farming.

CHAPTER FIVE

VISIT TO NORTH COAST

5.1 Overview

This chapter covers the visit to North coast which was on the third day of the trip. Some of the places visited in North Coast include Watamu Marine Park and Gede Ruins. The chapter also highlights the opportunities and challenges experienced during the day and the lessons learnt from the visit.

5.2 Visit to North Coast

On Thursday, first of June was the long awaited day for the students of urban and regional planning. It was the day to pay a life time visit to the North coast county of Kilifi. Excitement rented the air as students' board the bust at 9am, immediately after a heavy buffeted breakfast. The bus left some minutes past 9am. Hopes of seeing the features of Watamu Marine National Park filled the bus; most students had a glance of the Indian Ocean for the first time and were so eager to learn more about it. It took us close to two hours to get to Watamu town leaving behind Mtwapa, and Kilifi towns among other small centers on our way. The small town of Watamu was quiet and serene. Passing through the town, we went straight away to Watamu Marine National Park where an educational talk on the history of Watamu National Park was offered by a tour guide. Students then got the chance to be taken round the ocean through a boat ride. Deep the ocean, we were able to see a variety of sea fish. The fishes are the main component of the National park. Students with good swimming skills were able to express themselves in the deep waters. Swimming deep inside the salty park was the most interesting part of that trip. The following were the main highlights of Watamu Marine National Park:

5.3 Watamu Marine National Park

Watamu Marine National Park and Reserve is located in Kenya. Established in 1968, it was one of Kenya's first marine parks. It is located about 90 miles (140 km) north of Mombasa, Kenya's second largest city. Its coral gardens are merely 300 meters (980 ft.) from the shore and are home to approximately 600 species of fish, 110 species of stony coral and countless invertebrates, crustaceans and mollusks. Water temperature varies from 20 degrees Celsius (June to November)

to 30 degrees Celsius (December to May). The park was designated as a biosphere reserve in 1979.

5.3.1 History

Watamu Marine National Park and Reserve was established in 1968 with Malindi Marine National Park and Reserve. They were established by the Kenyan government. Watamu Marine Park is now part of a UN recognized World Biosphere Reserve.

5.3.2 Wildlife

The park's coral reefs form the physical and biological backbone of the area. With over 150 species of hard and soft corals, such as brain corals, fan corals and sponges, it provides for abundant nutrients for fish. The main park has over 500 species of fish and the reserve over 1000. There are also whale sharks, manta rays, octopus and barracuda as some of the larger species in the park.

Watamu also has different species of turtles and a turtle watch program which has managed to secure the main park's beach as a 99% viable sea turtle nesting site for endangered sea turtles. This beach is patrolled and monitored vigorously. The turtles nesting in Watamu include the Green, Hawksbill and Olive Ridley turtles. The Olive Ridley species is rare but occasionally comes to the nesting site. Leatherback turtles do not nest in Watamu or Malindi but they pass by through the nearby waters during their migration.

5.3.3 Conservation

Bleaching of the water in Watamu Marine Park, a marine protected area (MPA), occurred between 1997 and 1998. This was the single most important impact on the sea water that caused high levels of mortality to the coral reefs in Malindi and Watamu. Usually recovery is variable and depends on the reefs but Watamu was slower than average in recovery. Surveys showed that urbanization and coastal development, especially from tourism and agricultural sectors, contributed to increased degradation of the marine environment in the area. Removal of forests and natural vegetation for agriculture, removal of mangroves for building and fuel, and fishing to meet the demands of a growing urban population, all contributed to increased threats on the marine ecosystems of the MPA. This ecosystem includes of coral reefs, mangrove forests and sea

grass beds. Land-use plans had to be incorporated into the MPA management plan. The inclusion took into consideration issues of coastal destruction of habitats for marine species including marine turtles and shorebirds, as well as improved enforcement of existing land-use statutes.

In Watamu and Malindi parks, a local marine conservation organization seeks to protect marine life, especially sea turtles, by the means of a direct payment method program. The program pays local fishermen to tag and release sea turtles caught while fishing. For every turtle release, the fishermen are compensated for their time, efforts and potential damage to fishing gear, thus providing an incentive for releasing the animals instead of killing them. After the fishermen release the turtles, they notify Watamu Turtle Watch volunteers who rush to the landing site.

The volunteers then have an opportunity to measure and examine the animals as well as place ID tags on them before they are returned to freedom. This program has benefited the research of turtle nesting habits. Also, the center administering the program provides turtle rehabilitation for sick turtles, and has an adopt-a-turtle program, and studies the socio-economics of fishing communities. Fishermen are also allowed to fish in the protected reserve as long as they only take out the species of fish allowed by the park and use traditional methods of fishing.

Figure 5.1: A Section of Students Enjoying a Boat Ride at Watamu National Park



Source: Field Trip, 2017

Figure 5.2: A section of Students Enjoying a Boat Ride at Watamu National Park



Source: Field Trip, 2017

Figure 5.3: Students Posing for a Photo at Watamu Marine National Park



Source: Field Trip, 2017

5.4 The Ruins of Gede

5.4.1 Introduction

The ruins of Gede, approximately one kilometer from the Marine National park was the next stop after lunch. A tour guide took students and staff round the ruins explaining every bit of it. The tour guide gave an introduction to the Gede ruins, history of discovery and excavation, early archaeological research, of the Gede ruins, recent archaeological research, and architecture of the ruins including the walls, tombs, mosque, the palace, and the houses

The ruins of Gedi are a historical and archaeological site near the Indian Ocean coast of eastern Kenya. The site is adjacent to the town of Gedi (also known as Gede) in the Kilifi District and within the Arabuko-Sokoke Forest.

Gedi is one of many medieval Swahili-Arab coastal settlements that stretch from Mogadishu, Somalia to the Zambezi River in Mozambique. There are 116 known Swahili sites stretching from southern Somalia to Vumba Kuu at the Kenya-Tanzania border. Since the rediscovery of the Gedi ruins by colonialists in the 1920s, Gedi has been one of the most intensely excavated and studied of those sites, along with Shanga, Manda, Ungwana, Kilwa, and the Comoros.

The site of Gedi includes a walled town and its outlying area. All of the standing buildings at Gedi, which include mosques, a palace, and numerous houses, are made from stone, are one-story, and are distributed unevenly in the town. There are also large open areas in the settlement which contained earth and thatch houses. Stone "pillar tombs" are a distinctive type of Swahili Coast architecture found at Gedi as well.

Gedi's location along the coast and association with similar sites along the Swahili Coast made it an important trade center. Although there are few historical documents specifically associating Gedi with Indian Ocean trade, the site is thought to have been one of the most important sites along the coast. Gedi's architecture and an abundance of imported material culture including pottery, beads, and coins provide evidence of the city's rising prosperity over the course of its occupation from as early as the eleventh century to its abandonment in the early seventeenth century.

5.4.2 History of Discovery and Excavation

Although Gedi remained unknown to most of British East Africa's colonists until the 1920s, the site was known by the local Mijikenda peoples. Currently, the Giriama, one of the Mijikenda tribes, maintain a large community around the Gedi ruins who view the site as a sacred and spiritual place. Despite changes in their belief system and the prominence of Islam in the region, evil and ancestral spirits are thought by many to reside at Gedi. According to local tradition, the ruins are protected by the spirits of its priests. These "Old Ones" are said to curse anyone who harms the site.

The Gedi ruins were first discovered by colonialists in 1884 after a British resident of Zanzibar, Sir John Kirk, visited the site. However, the ruins remained obscured until their subsequent rediscovery in the 1920s, when the site began to gain attention from the British East African government. Initial excavations at Gedi began in the late-1940s, and the site today remains one of the most intensely studied Swahili Coast settlements. The significance of the ruins has been

largely used to assess the sites role within the region in association with other sites to provide insight into the development of Swahili culture, the organization of Indian Ocean trade, the introduction and spread of Islam, and the political and economic ties between Swahili communities through their cultural remains and their spatial relationships.

5.4.3 Early Archaeological Research

Excavations commenced at Gedi in 1948 under the supervision of James Kirkman, lasting until 1958 with intermittent excavations occurring in the 1960s to the 1980s. Kirkman excavated the buildings at the city's core, including the palace, and several of the mosques and houses, as well as, cleared and repaired the walls. The Great Mosque was excavated in 1954 and the palace was excavated in 1963. Following his excavation of the Great Mosque, Kirkman's report "The Arab City of Gedi, The Great Mosque, Architecture and Finds" was published, followed by a series of monographs and papers.

Along with the excavations at Gedi during the 1950s, concurrent excavations also took place at similar sites along the Swahili Coast. Wilson's 1982 survey of the 116 sites along the coast found 34 isolated ruins, which he concluded likely, contained possible settlements or isolated dwellings. Although smaller settlements were studied, larger sites received the most attention. Other than Gede, the site most intensively excavated was Ungwana at the mouth of the Tana River, which was similar in size to Gedi. However, compared to sites similar in size, Gedi had one of the more densely populated urban centers.

5.4.4 Recent Archaeological Research

Since the 1990s archaeological research at Gedi and other Swahili coastal settlements has intensified. From the 1980s archaeological research increasingly began to focus more on the relationships between the coastal communities and their internal development, challenging the original notion that the development of the Swahili Coast was driven by foreign influence through Indian Ocean trade or by Arab colonists. Another important development in the study of Swahili coastal sites is the increased attention given to remains of structures that were not built of stone. Surveys of the open terrain at Gedi found dense concentrations of mud-thatched dwellings. In 2001, Stephane Pradines from the Institut Français d'Archéologie Orientale and

archaeologists from the National Museum of Kenya conducted a topographical survey of Gedi, which mapped the distribution of neighborhoods in order to investigate the site's urban development. Concurrently, Lynn Koplin conducted surveys of the mud-thatch neighborhoods, focusing on the area between the inner and outer walls. From 2002 to 2003, research at Gedi continued to focus on urban development prior to the fifteenth century, with focus on a group of coral houses built by social elites in the site's urban core.

5.4.5 Architecture of the Gede Ruins

The Gedi ruins make up a site consisting of 45 acres (18 hectares) that lies in the primeval Arabuko-Sokoke Forest. The ancient town at Gedi is divided by two walls, with an outer wall enclosing 45 acres (18 hectares) and an inner wall enclosing 18 acres (7.3 hectares).

Within the inner wall there are two mosques, a palace or Sheikh's house, four large houses, several clustered houses, and four large pillar tombs comprising the urban core. The inner wall also encloses four other houses and three other mosques. Between the inner and outer walls few stone structures have been identified with the exception of two mosques. Immediately beyond the outer wall there is one mosque and several other unidentified structures.

In addition to being divided by the inner and outer walls, which created an urban core occupied by the site's foremost buildings and areas of occupation between and outside of the outer wall, Gedi has a well-established infrastructure. Gedi's structures appear to be formally arranged in accordance with streets laid out in a grid pattern. Additionally the site contained sumps to collect storm water and lavatories in many of its primary buildings.

The majority of Gedi's structures were domestic residences made of thatched-roofed mud buildings concentrated between the outer and inner walls; however, the only buildings that survived to the present were constructed using coral stones extracted from the Indian Ocean. Although several of the buildings predate the fourteenth century, coral became a more common construction material for important structures and elite residences during that time period. All of the buildings at Gedi are single-story structures. The walls and other coral structures were constructed in a similar manner using lime mortar, with most foundations no greater than one foot in depth and filled with stones. Where foundations were used, they tended to be no wider than the wall they supported. There are several examples of non-utilitarian design elements.

Doorways for the buildings consist of square framed pointed archways, with tombs and mosques containing spandrels and architraves that have been carved or inlaid with porcelain.

5.4.6 Walls of the Gede ruins

The inner and outer walls were constructed similarly with the outer wall measuring nine feet high and 18 inches thick, which was also coated in plaster. The outer wall is believed to have been constructed during the fifteenth century. The construction of the inner wall has been attributed to the Portuguese presence along the coast in the sixteenth century, whilst the presence of gun ports has been used to infer that the walls were not constructed earlier. However, the practicality of the walls as defensive fortification is unclear, since according to Kirkman the walls and gates surrounding the town have no significant strength, which seems to conform to a proposal that the walls and the layout of buildings were used to maintain social barriers. Although the inner wall has a more obvious defensive function and despite the absence of gun ports and the questionable strength of the outer wall, it has nonetheless been credited as being a fortification.

5.4.7 Mosques of the Gede ruins

The mosques at Gedi contained wells and washing facilities, which would have been used for cleansing prior to worship. However, they were not constructed with minarets used for the call to prayer, which was more characteristic in other regions. Gedi's mosques were typically laid out with anterooms flanking the central room, which had a roof supported by wood beams resting on square stone pillars. The isles created by the pillars obstructed the view of the mihrab, which were situated on the north walls in the direction of Mecca.

At Gedi, two of the mosques have been dubbed "Great Mosques." The mosque traditionally known as the Great Mosque is a rectangular building located within the inner wall, which was built during the fifteenth century. The Great Mosque has three entrances and three rows of pillars in the central room supporting the roof. Above one of the entrances is a relief of a spear point flanked by a shield on its spandrel, while on the east entrance the architrave is engraved with a herringbone pattern. The structure also has one of the deepest foundations, with its 21 inch wide walls extending four feet into the subsoil.

The second Great Mosque resided in an older portion of the city, which was inhabited from the eleventh century and located to the north of the walled city. The structure that is standing was constructed in the fourteenth century on top of two earlier mosques from the twelfth and thirteenth centuries. The mosque measures 26 meters (85 feet) in length along its north-south orientation.

Figure 5.4: Ruins of the Great Mosque



Source: Field Trip, 2017

5.4.8 Tombs of the Gede ruins

The pillar tombs at Gedi, which consist of masonry based structures topped with a pillar or column, are part of an architectural style of the medieval Swahili Coastal settlements. A common feature on the pillar tombs at Gedi are decorative recessed panels. Although there are four large

pillar tombs at Gedi, the "dated tomb," located within the inner wall, stands out from the rest since it has an Arabic inscription with the date A.H. 802 (A.D. 1399).

Figure 5.5: Pillar Tomb of Gede



Source: Field Trip, 2017

5.4.9 Houses of the Gede Ruins

The surviving residential buildings at Gedi are all located within the inner wall and are representative of the living conditions of the elite members of Gedi society, since the majority of

the population lived in the mud thatched dwellings outside the city's core. The four largest houses include the House on the Wall, the House on the West Wall, the House of the Dhow, and the Large House. A cluster of smaller houses adjacent to the palace or Sheik's residence includes the House of the Chinese Cash, the House of the Porcelain Bowl, the House of the Cistern, the House of the Two Rooms, the House of the Paneled Walls, the House of the Scissors, the House of the Venetian Bead, the House of the Sunken Court, the House of the Cowries, the House of the Iron Lamp, the House of the Iron Box, and the House of the Well.

Although the houses at Gedi vary in size, their number of rooms, and their layout, the basic house at the site is a three-room structure, which usually contained a forecourt and domestic court. With the three-room layout, there was usually a long main room with two storage and sleeping quarters towards the back of the house. One of the back rooms usually had a storage compartment near the roof with access through a trapdoor. Latrines, usually located toward the back of the main room, were also present in many of the houses, while wells were present in the courtyards of some of the houses. One of the oldest stone houses dates to the fourteenth century and has a long narrow sunken court, which contrasts the wider and deeper courts found in houses constructed during the fifteenth century. The entrances of houses have a greater deal of variability in the configuration of their passageways, since many of the houses were highly concentrated and laid out to maximize the use of available space.

5.4.10 The Palace of the Gede Ruins

The palace, which housed the city's sheikh, had a large central room with two anterooms, each containing its own courtyard. A series of residential rooms were accessible from the main hall. There were also two additional courts, the audience court and the reception court, which were accessed through different gates.

Figure 5.6: Palace of the Gede Ruins



Source; Field Trip, 2017

5.4.11 Gede's Hinterland

Gedi also has a hinterland consisting of several smaller sites made up of either solitary mosques and tombs or several houses. The sites of Shaka and Kilepwa are nearby. Kilepwa, located on an island in Mida Creek, is closer to Gedi and consists of three stone houses. There is also an isolated mosque at the west end of the creek, a mosque at Watamu, and a mosque and tombs at Kiburugeni.

5.4.12 Gede's Economy

Local industries and trades likely included pottery production, metal working, construction, spinning and weaving cloth, fishing, trade, and possibly the production of salt, which are represented in the archaeological and historical record at a number of coastal sites. In addition, the local coral architecture using limestone mortar also indicates the presence of local trades associated with construction and masonry.

Food production at Gedi likely involved a mixed economy based on livestock, as well as agricultural and horticultural production. Some foods were introduced through trade. Available crops included millet, African rice, cocoyam, coconuts, bananas, citrus fruits, pomegranates, figs, sugar cane, cotton, and various vegetables, while the principal livestock was likely cattle. Sheep, goats, and chickens played an important role as well.

Swahili coastal settlements frequently conducted trade with the interior, obtaining goods for overseas trade or local consumption. However, isolated and small settlements have been interpreted as hinterlands that developed around and supported the economies of the larger settlements. Small settlements or hamlets were established between the fourteenth and sixteenth centuries within the vicinity of Gedi including sites at the end of Mida Creek, Kiburugeni, Watamu, Shaka, and Kilepwa. These smaller settlements are thought to represent agricultural communities that provided Gedi with most of its agricultural produce.

Figure 5.7: Students and Staff Paying Attention to the Tour Guide Narrating



Source: Field Trip, 2017

Figure 5.8: Students and Staff Walking out of Gede Ruins



Source: Field Trip, 2017

5.4.13 Gede Museum

From the ruins of Gede, the delegation headed to the Gede museum, few meters away from Gede ruins. The museum had archived a lot of features of the Gede ruins explaining the life history of the people who lived there, their religion and the Islamic culture.

Dancers at Gede Ruins

Gede ruin has a welcoming group of lively dancers who entertain the visitors to this historical site. The dancers who are women, men and even children are so good at what they do. They passionately dance their traditional songs to make sure that the visitors get the best of their little time spent there. Below are sample photographs of the dancers who were joined on the floor by students.

Figure 5.9: Traditional Giriama Dancers



Source: Field Trip, 2017

Figure 5.10: A section of Students and Staff Watching Giriama Dancers at Gede Ruins



Source: Field Trip, 2017

Figure 5.11: Students Joined the Giriama Dancers



Source: Field Trip, 2017

Figure 5.12: Dr. Muketha Shared a Light Moment with Students after the Giriama Dance at Gede Ruins



Source: Field Trip, 2017

5.5 Opportunities Identified During the Tour of the North Coast

1. **Planning opportunity for the Watamu Marine National Park and the Ruins of Gede:** Watamu Marine National Park and Gede ruins being a tourist attraction center and a historical site respectively should be preserved for the sake of both today and future generations. They require proper planning to attract more people hence increasing the revenue collected. This in return will lead to improved living standards of the people. The site should be organized in a manner that is integral. The ruin should have a well-defined boundary which should include all the amenities and components of the historical site. By integral I mean, the ruin, the museum, the dancing hall/venue, catering units, toilets, curio shops should all be well designed spatially. The Marine National Park should also have better catering and recreational facilities for visitors. These facilities are lacking in both cases and as it stands Marine National Park and the Gede ruins have no proper resting place leave a lone a place to sit as one enjoys the traditional dances. Gede ruin has no place even to buy a bottle of water despite the hot and dehydrating conditions of the North Coast; this is unlike Marine National Park that has informal shops and catering facilities that majorly benefit the locals. There is need to upgrade through proper planning to better facilities in the two respective attraction sites.
2. **Training opportunity:** The sites already play a critical role of dissemination of knowledge. This can be furthered by setting a training ground for the youth from the surrounding neighborhood into professional guides, caterers and makers of tourist artifacts who can work beyond the site marketing the area into a global tourist site.
3. **Partnering opportunities in provision of services:** A lot of opportunities that required partnering emerged. For example private institutions can partner with local business men and government in provision of quality safety boats at Watamu Marine National Park, quality catering, recreational and training services at both Watamu and Gede ruins.

5.6 Challenges Faced During the Tour of the North Coast

1. **Breaking down of the school bus:** The main challenge faced during the tour of the North Coast was on the side of the university bus. There was a delay of almost thirty minutes when we left Watamu Marine National Park for Gede ruins as the bus could not ignite. Students and locals had to intervene and push the bus before it could move. This could have been a result of the long distance covered by the bus.

Figure 5.13: Students and Locals Pushing the Bus at Watamu Marine National Park



Source: Field Trip. 2017

2. **Pollution on the water:** Sewers from residential, commercial and industrial land-uses run into the ocean polluting the waters at Watamu Marine National Park: This is likely to lead to proliferation of sea plants and death of conserved animals. This calls for proper planning to ensure sustainability.
3. **Lack of a good descent catering facilities:** Watamu Marine National Park where we had lunch had no proper catering facilities where students and staff could have properly prepared meals with high hygienic standards.

4. **Boats without life jackets and other lifesaving equipment:** The two boats boarded by students during the tour of the sea were not properly equipped. They all lacked life jackets hence endangered the lives of the students particularly those who have never known how to swim.

5.7 Lessons Learnt at Watamu Marine National Park and Gede Ruins

1. **Need to document historical sites:** Documentation of historical sites is key particularly in passing knowledge and information to the several generations to come. The ruins of Gede for example is a historical site where history has been documented and as a result our generation has been able to learn a lot despite the fact that they were never there at the time.
2. **Need for the Government and private support in improving the livelihood of the people:** The ruin of the Gede being a historical site is well known and attracts so many people across the world. In order to ensure that the site remains sustainable and beneficial economically to the livelihood of the people; there is need for government and private partners to chip in to make the site more attractive. The dancers for example did not look well facilitated judging from their faded t-shirts and condition of the dancing venue. This is despite the fact that they seem to have a lot of potential of generating more revenue both for themselves and to the government (both national and county government of Kilifi). The government and community should have a proper plan for the site: There should be a proper a dancing venue with a well-coordinated programme for each particular day. This will be useful to the tourists since they can deliberately make decisions on the type of dances they are interested in and the time to be there. The dancers should also be properly trained and facilitated. This will be essential in raising more revenue by attracting more people.
3. **Child exploitation:** Exploitation of children was evident at the Ruins of Gede where the children as young as four years are involved in dancing for the people visiting the site. Involvement of children of such young ages is dangerous and can have effects on the

education of children from the surrounding neighborhood. Since various visitors may have different motives, children may be exposed to socially irresponsible behavior.

Figure 5.14: Young Children Involved in Giriama Traditional Dance



Source: Field Trip, 2017

Figure 5.15: Children Dancers Posing for a Photo with Students



Source: Field Trip, 2017

CHAPTER SIX

OVERALL RECOMMENDATIONS

6.1 Overview

This section provides the overall recommendations derived from the field trip which would act as a way forward for future trips to Mombasa Coastal town or other places.

6.2 Proposals for Future Trips

Urban and regional planning is a four year course in the school of the built environment, faculty of architecture development and design. The trip would make more impact to the students academically if it were placed in the third year of the study.

Reasons being (1) Haller Park informs the resource and environment planning I and II inform of practicability of the unit, Urban design and site planning through landscaping of the sites , urban studio I and II(integration of industrial land use into urban fabric while at the same time providing effective public realms). (2) Old town informs building technology and design class which deals with development control, structural designs of various building typologies.z Regional planning principles and techniques 1 and II .Bamburi Cement Company could provide a good example to the regional multiplier effect it has to the coast region.

At the end of the third academic year students will be required to engage in some kind of a competition which will be led by urban design and site planning and resource and environment planning course coordinators. While a panel composed of architects and land scape architects and private physical planner to be engaged as examiners. While the best project is rewarded.

6.3 Overall Recommendations

1. Owning a video camera and a videographer: The department should at least have a good camera that can take both quality pictures and videos for learning purposes. It is proposed that a professional cameraman to always accompany students during the trips.

2. The future groups should consider exploring different regions both within and without Kenya. This is because the coastal region has been over visited yet there are several other places in Kenya and within the larger East African region where planners can learn more.
3. This report recommends use of Standard Gauge Railway; a means of transport that is still new in the Kenyan transport industry to explore the region. The SGR is cheaper and faster and will cut on the cost of transport and reduce time taken to travel. It should, however, be complemented by other means.
4. The trip to be undertaken in third year: To make this trip more educational and effective to the students and beneficial to the university, it is recommended that it be undertaken in third year level where the unit “Resource and Environmental Planning 1 and 2” is taken. This will make the students to relate more with their environment (Haller Park, Marine Park etc.) and become better planners.

REFERENCES

- Gichohi, H. (1996). The Ecology of a Truncated Ecosystem, Athi Kapiti Plains. City: Unpublished Thesis.
- Kenya, G. o. (2014). National Building Regulations. Nairobi: government printer.
- Mrwere, I. W. (1996). The Athi Kapiti Conservation Initiative. Nairobi: Unpublished Thesis .
- Murithi, E. (2015). Environmental Impact Assessment Study Report for the Re-alignment of the SGR within Nairobi National Park. Nairobi: LimcomAfricaconsult.
- Information from tour guides
- Observation

APPENDICES

Appendix 1: 4th Year Students Involved in The Trip to Coast.

DEPARTMENT OF URBAN AND REGIONAL PLANING 4TH YEAR STUDENTS INVOLVED IN THE TRIP TO THE COAST

NO.	NAME	NO.	NAME
1	KIVUNGA PERPETUA	26	OKEYO MODIX
2	MIGIRO GEOFFREY ONWONG'A	27	NDUGO FRANCIS MUNDARA
3	MUTEGI WILLIAM ZACHARY	28	ODUL EVANCE AMARU
4	LEPARWA L WILLY	29	KIMUYU ROBERT MAKAU
5	KORIR KENNETH KIPLANGAT	30	IMUNDE CHRISTIAN GITONGA
6	KIMOTHO MARTIN IGNICIOUA	31	OTARA BARAKE ROBERT
7	NJOROGE PHEOBE WAMBUI	32	KUTO ANITA CHEPKOSGEI
8	MWANGI VINTAGE WANJIKU	33	OGALLU DENNIS ONYANGO
9	OLYMPIA ANNE ADHIAMBO	34	MUTUGI ALEX MUGO
10	THIONG'O JOSEPH WANGUNYU	35	OMEDO MARIE AUMA
11	JIBE ABUKAKAR MNGATANA	36	OCHOLA KENNEDY OCHIENG
12	GAKUNYI IAN NGUGI	37	MAINA SAMUEL NGARI
13	MWANGI MARK KARUGA	38	KIMANI NAPHTALI KARANJA
14	ONYANGO CLIFF MBARA	39	KATHURE ELOS Y
15	MASAI SYLVIA TATA	40	NJERI GEORGE KARIUKI
16	GICHUKI IVY NJERI	41	KABULI LORNAH MUKIRI
17	KALIMA FREMSTAO KRISTIAN	42	MBUGUA STEPHEN MARI
18	AYORO BENJAMIN ODUOR	43	NGARE YVONNE NJERI
19	LITUNYA GETRUDE GLORIA	44	OLUOCH LILIAN AMONDI
20	ONSERIO MOSE PHILIP	45	OUMA FLORENCE NJOKI

21	MUNENE ROSE WANJIKU	46	GUYO WAQO
22	GITUNDU BEATRICE HATY	47	KIMARU GITHINJI
23	CONGO JANET NJAMBI	48	MAINA MARTIN MUTUGI
24	WANGU BEATRICE WANJIKU	49	PATRICK PETER
25	GITAHU MERCY GATHONI	50	MAKOKHA JOSEPH JUMA

