

“REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA”

An Urban Design Thesis Report

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Supervised by;

Prof. Dr. Shivashish Bose

&

Prof. Dr. Jayita G. Niyogi

Submitted by:

Blasius Venance

Roll No: 001710202001

Examination Roll No: M4CIV19001

M. Arch (Urban Design)

Department of Architecture

Jadavpur University

Kolkata 700032

May 2019.

JADAVPUR UNIVERSITY
DEPARTMENT OF ARCHITECTURE
KOLKATA – 7000 32

I/We certify that the thesis entitled.....

.....

Submitted by Shri/Smt.....

In partial fulfilment of the requirements of the Masters' Degree in Architecture of this University, is a bonafide work, to the best of my/our knowledge, and may be placed before the Examination Board for their consideration.

.....

Supervisor

.....

Supervisor

.....

Head of the Department

.....

External Examiner

.....

Dean, Faculty of Engineering & Technology

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ABSTRACT

This thesis is concerned with the rejuvenation of central business district (CBD) of Mbeya city, Tanzania.

Globally, in many cities and towns, there is normally a central business district (CBD), literally central area or core of the city which is the hub of administrative, economic, cultural and recreational activities of the entire city. The central area may be of historical or modern town but indeed the whole city or town is dynamic which slowly undergo changes.

Furthermore, the central business district (CBD) is a focal and center which harboring different major urban activities and give full services to the city's dweller. However, Mbeya central area has some several urban issues as revealed in findings and has been noted to pose the greatest threat that cause the center to become dormant and slowly deteriorate while the new towns surround CBD seems to take over in term of activeness.

The overall objective of this research is to study the CBD and its urban qualities in order to identify problems and finding the possible activities which may arrest the problems and uplift developments which make the center become an inclusive and attractive environment in urban design perspective.

Moreover, this research intends to find out what kind of measures and standards that will re-activate the CBD as the administrative, business and recreational hub and as a modern component of a livable city. To find out the truth of this hypothesis, different methods have been used which include, literature review, physical survey, questionnaires and internet search.

The recommendation and guidelines as drawn from the findings will help to transform the central area into thriving visually, physically, economically and become an attractive and functional center.

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CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

Globally, many central business district, especially of big and historical cities are usually of interesting and delightful, particularly the center of the city which is also the focal and core area of the city itself. Usually the center of the city is the area for all important services, and likewise is an eminent part of the city which gives status and rises economic situation of a particular city and finally make the city run. City center has always been a spatial location of significance, though its characteristic qualities have been varied considerably both spatially and temporally. The area is the heart, the brain and the soul of the entire urban organism (Sita, K. et al, 1988).

Always the central business district as the center of the city seems to be attractive as because most of this area was built nicely with the consideration of urban qualities issues, but this all comes from the availability of good and adequate services for people to continue to live and be happy. However, this becomes different for unplanned and those cities which are not taken care during their development, which similarly have weak basic social needs for people. These cases keep the city center dormant and ugly and result in an emerged small towns surrounding the city center start to grow large and active than the city center itself; such cities are often missing some important urban issues that make cities more valuable and attractive.

Modern cities of developed countries are most interesting, attractive and vibrant most of the time as designed to its inclusiveness. But many cities centers, especially of developing countries, seems to be dormant and unattractive cities, thus causing the cities to become powerless to run on itself; as there are insufficient money circulations and also leads to tourists' shortage within the city center. The city center basically is the center of major important functions, like a business, health, education, administrative, entertainments, etc., and thus these functions make the city center being part of life to city's occupants. Meanwhile, the center stands for many district activities it is expected to have a high number of people and services that may satisfy the needs throughout a day. Being a city center attracts more investors and tourists to visit the city, and thus makes the city more vibrant and livable throughout a day, and similarly increase its capital income. This happens only when the city center is well developed through urban design principles.

The city center defines the central as the part of the city which is continuously worked upon by a set of centripetal and centrifugal forces. Concentration of activities, greater accessibility proximity to work areas etc. act as centripetal forces whereas the old and dilapidated housing conditions,

degraded environmental conditions, stress and strain, inadequate infrastructure etc. are the centrifugal forces (Rashid W, et al, 2012)

Claims of urban rejuvenation or revival are not new, in the 1960s and 1970s were catastrophic for urban areas in America, with many central cities losing a significant share of their population (Michael S, et al, 2006). Various forms of urban comeback have been documented since at least the early 1990s. In the 1950s and 1960s, America's inner cities experienced sharp declines as people and businesses moved out to the suburbs. Still, a debate has emerged among urban scholars as to what kinds of cities have really made a comeback and how much growth continues to be centered in the suburbs. When the economist Jed Kolko crunched the latest Census figures, he found urban revival to be limited to the young, skilled, and affluent (who can afford and are contributing to escalating housing prices), while the suburbs continue to account for more growth (Richard F, 2016).

For Tanzania, the country has become among the fastest growing economy in the continent simply due to political stability, natural resources, geographical location as well as tourism development according to African Development Bank. In growing in the economy went similar to the improvement and development of some cities amenities and leads to some investors to get attracted but regardless these improvements most of the inner cities lack some important urban issues that make the CBD run all the time. A good city must have a generous and well design pattern, which can boost infrastructure development, promote social inclusion and enriches good quality of life (Charles M, 2016)


This research is based on the rejuvenation of central business district of Mbeya city in Tanzania, by studying CBD and its urban qualities to identify the problems that have rendered the CBD dormant so as to uplift development and attraction within the city center, moreover will help to promote economic stability within and around the CBD area.

1.1.1 DEFINITIONS

1.1.1.1 Rejuvenation;

The word rejuvenation can be defined as the process of making something more effective, modern, and successful by using new ideas and methods, (Cambridge dictionary, 2019). But also in Biology the term rejuvenation can be defined as the reversal of aging and thus requires a different strategy, namely repair of the damage that is associated with aging or replacement of damaged tissue with new tissue, literally life extension

From above meaning it can be concluded that the term rejuvenation means that helps something which has already tired or broken to a new vitality by the process of re-activation; which also to be successful, needs to have procedures to achieve it. Since the rejuvenation is the reversal of aging therefore it requires some different strategies as;



Namely,

- Repair of the damage that is associated with aging.
- Replacement of damaged tissue with new tissue.

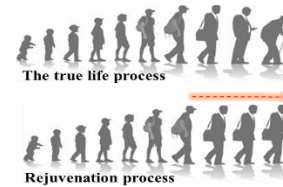


Fig. 1.1 Rejuvenation process showing extension life
Source: Author

From this simple illustration above, can be deduced that rejuvenation means form again, recover from decline, replacing body part by new growth, (Owoeye J, 2012)

1.1.1.2 Central Business District;

Central business district (CBD), has been long used as a center for cultural, commercial and political activities, this is because of its geographical characteristics qualities that makes this major activities to be happened. The center is believed to be the heart of the entire urban area. A central business district (CBD) is also defined as the commercial and business center of a city, (Wikipedia, 2019). Since the CBD is a center of an urban area, therefore the center bears the;

- Main concentration of commercial use
- Unique area of massive concentration of activities
- Capital, economic and financial activities
- Crowd & busy and High land values
- Accessible area
- Less people live at the center



Fig. 1.2 CBD with diversity of activities
Source: Las Colinas Urban Center

1.1.1.3 Mbeya city, Tanzania;

Mbeya city is among cities found in southern highlands in Tanzania which include, Iringa, Njombe, Mpanda, Rukwa and Ruvuma. The city is bordered with two countries, Zambia and Malawi.



Fig. 1.3 World Map, showing the location of Tanzania
Source: Tanzania map/Geology.com



Fig. 1.4 Africa Map, showing the location of Tanzania
Source: Google.com



Fig. 1.5 Tanzania Map, showing the location of Mbeya City
Source: Google.com

Mbeya is the first large urban settlement encountered when travelling overland from the neighboring nation of Zambia. Mbeya City Council was originally termed as Mbeya Town Council. It was transformed to Mbeya Municipal Council due to the improvement in economic condition and increase in population and later in 2006 it was transformed and termed as Mbeya City Council. Mbeya city sits at the base of Loleza Mountain, the town has several tourism attraction areas including Lake Ngozi, a huge crater lake surrounded by huge forest rich in birdlife; Kitulo Plateau National Park in the southeast of the city, and colorful wild flowers and further in southern side is bordered with Lake Nyasa.

Mbeya is considered to be foremost city in Southern Highlands Regions, which has Mbeya Referral Hospital and serves the whole part of Southern Highlands regions, The Bank of Tanzania, and etc. all these serve as zonal representative for the mentioned part. There are also a number of companies and statutory organizations in the city which serve as zonal offices.

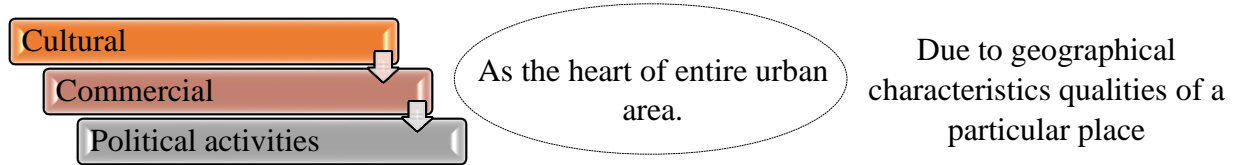
The Region lies between latitude 7° and 9° 31' south of the Equator and between longitude 32° and 35° east of Greenwich. The city experiences high temperature in November (Hottest month) with 27°C and experiences lowest temperature of 8°C in July (Coldest month), while mean temperature is 18°C. The weather from June to October, is dry and cold with heaviest rainfall occurs during the months of December to March. According to (2012 National census), the total population of Mbeya Region was 2,707,410 of which 1,409,672 were women (52.1%) and 1,297,738 were men (47.9%) while population growth rate of 2.7%; and this population comprises the all eight Districts of Mbeya Region as named Mbeya town, Chunya, Ileje, Kyela, Mbarali, Mbozi, Momba and Rungwe. Therefore the population of Mbeya town itself was 385,278 where males are 182,620 and Females are 202,658.

The town occupies an area of 214.ha and out of this area, 150.ha is the central area of the municipality, and serves as the regional administrative, commercial and industrial center for Mbeya region. The built environment of the central area is worth since the buildings were built a long time ago and are in the process of deterioration as most of the buildings are of the mud bricks; by which very few buildings are structurally sound. From the year 2000, there were some improvements made in infrastructure within the city center area such as road maintenance from Jakaranda road, the road from the market square to Sokomatola, from bus terminal stand to Sokomatola, from Uhuru torch (Monument) to Uzunguni area up to Sokoine ground. The city center also has new investment such as banking facilities, mobile networks facilities and etc.

Regardless of these improvements and some available services, still the city center is inactive especially after government working hours from 3:30 pm compared to those towns surrounding the CBD. Therefore this study has intended to propose suitable measures for re-activating the central business district as the business and recreation hub and as modern components of a livable city.

1.1.2 HISTORY/DEVELOPMENT

Central business district (CBD), has been long used as a center for;



Central business district or city center re-activation is not a new process, when revealed in 1950s and 1960s American central cities were shattered down and most of their inner cities were declined while business and people appeared to take over on suburbs, (Florida R, 2016)

Example, The urban core of Phoenix city especially of the early 21 century became;

- Economically stable and
 - Vibrant downtown
- ➔ With housing, shopping and recreational facilities.



Fig. 1.6 Phoenix downtown
Source: <http://eh.net/encyclopedia/urban-decline-and-success-in-the-united-states>

1.1.3 EXISTING CONCEPTS

1.1.3.1 Urban rejuvenation

Urban rejuvenation is most important since it can influence the development within an area which is challenged by degradation or dullness within a particular urban area; the rejuvenation can help in determining policies and guidelines action thereafter is a major tool to improve the condition of a particular urban area. “No town or city is immune from either the external forces that dictate the need to adopt or the internal pressures that are present within urban areas which can precipitate growth or decline”, (Owoeye J, 2012)

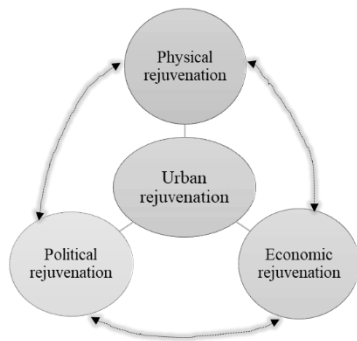


Fig. 1.7 The concept of urban rejuvenation. Source: Owoeye, (2014)

While urban regeneration concerns in implementing policies rather than developing new urbanization in an existing urban area

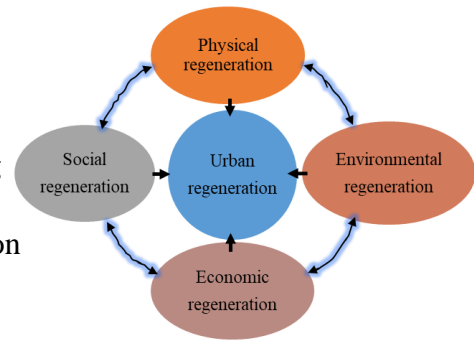


Fig. 1.8 The concept of urban regeneration Source: Michael et al, (2017)

Five themes of urban problems and opportunities, which represent the nature of urban change and new one by which urban rejuvenation can be important. (Michael et al, 2017)

1. The relationship between physical conditions and social response
2. The continued need for the physical replacement of many elements of the urban fabric
3. The importance of economic success as a foundation for urban prosperity and quality of life
4. The need to make the best possible use of urban land and to avoid unnecessary sprawl
5. The importance of recognizing that urban policy mirrors the dominant social conventions and political forces of the day, plus the new theme of sustainable development

Three partnership useful for urban rejuvenation, (Owoeye, (2014)

1. Facilitating partnership
2. Co-coordinating partnerships
3. Implementing partnership

These will help to provide positive and practical intervention activities in urban rejuvenation process. The government, citizens and international agencies together in collaborative manner they can bring back the decayed urban environment.

	Urban rejuvenation	Urban regeneration
Background	Urban decline/dormant	Vacant spaces or unused space in urban area.
Aim	Reactivation of dormant area by introducing catalyst elements where citizens will be interested	Building some new structures which can either be more functional or incorporated to the existing characters
Scale	The improvements based on small scale urban area	The large scale renovation, like housing.
Funding	Government and NGO funded	Private investment or NGO funded

Table 1.1 The difference concept between urban rejuvenation and urban regeneration
Source: Sudeshna, (2016)

1.1.3.2 Central business district (CBD)

Central Business District (CBD), was found and proposed by E.W. Burgess a Canadian-American and Urban sociologist in 1925 from his very famous mode of concentric circle regional structure of city and says the city expands from inner part to outer part.

Where by the center of the circle structure may termed as the, (Yaguang S, 2011)

- ✓ City’s geographic and
- ✓ Functional core

Which literally CBD.

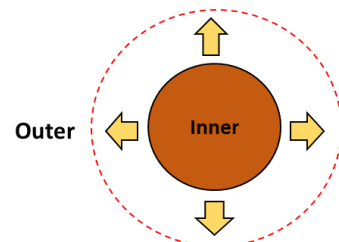
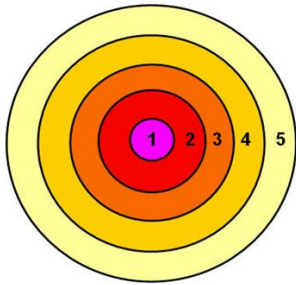


Fig. 1.9 CBD illustration
Source: Author

Burgess’s model of the city based on demand dominant model, the concept got applied in Chicago after the city center being destroyed by fire.



1. CBD (central business district)
2. Transition zone
3. Blue-collar residential
4. Middle-income residential
5. Commuter residential

Fig. 1.10 Burgess’ Concentric Zone City Model
 Source: http://cronodon.com/PlanetTech/Cities_Structure.html

The word CBD defines an urban area where the,



This word has been also used in a same meaning since colonization era, as a market area in most ancient cities; where

- Merchant,
- Farmers and
- Customers gathered together for the purpose of;
 - ✓ Buying,
 - ✓ Selling and
 - ✓ Exchanging their goods

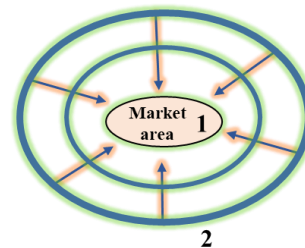


Fig. 1.11 CBD structure
 Source: Author
 1. Market area/ CBD
 2. Outer part of the city

The word used interchangeably, with,

- City center
- City core
- Downtown
- Cultural city

It is also, the terms can be used separately to each other like many countries have CBDs located away from the city center or downtown. Examples, in New York Cities.

Concepts of CBD resulted after Burgess Model being criticized; (http://cronodon.com/PlanetTech/Cities_Structure.html)

1. Holt’s sector model, 1939

Based on sectors rather than concentric circles and based on supply rather than demand. The concept were applied in Sunderland, England.

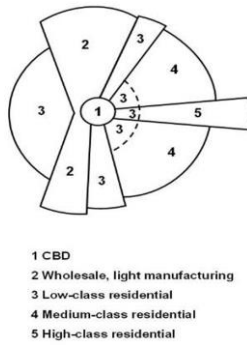


Fig. 1.12 Holt’s model

2. Harris and Ullman’s Multiple Nuclei City Model, 1945

City’s activities are grouped together, and this concept seen most in North American Cities

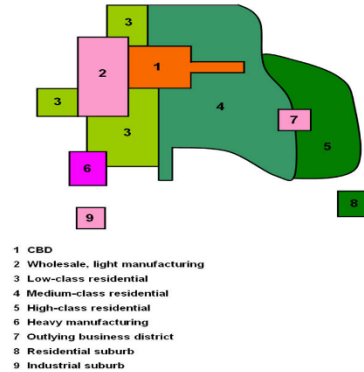


Fig. 1.13 Harris’s model

3. Vance’s urban realms model, 1964

Multiple-nuclei model, the feature of this concept is large self-sufficiency urban area. The concept was applied in US cities.

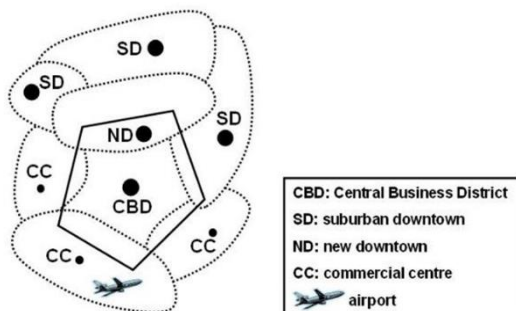


Fig. 1.14 Vance’s model

4. White’s model of the 21st century city, 1987

The city flux and forces come in to shape the development. In this concept, the old CBD continues as the city’s core and function as a financial, entertainments and tourist center. The concept was applied in US cities.

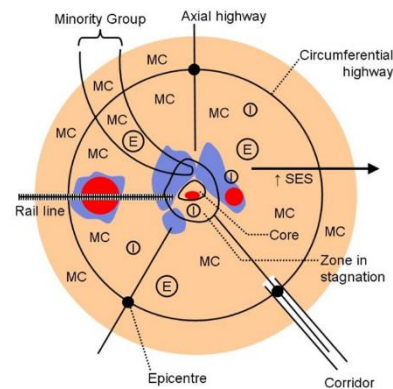


Fig. 1.15 White’s model

1.1.3.3 Vibrant city center Concepts

A vibrant city is always an enjoyable and exciting place that people could fill with full of energy and happiness, if when the city has much variety of activities that running out the day, (Yvonne 2008). Oxford dictionary 2019 defines rejuvenation as action or process of making someone or something look or feel better, younger or more vital again. Therefore, rejuvenating the CBD can be achieved through modification of its;

- Existing elements and/or
- Introducing New active elements



Fig. 1.16 Urban space with existing elements
Source: http://generalplan.sfplanning.org/I5_Urban_Design.htm

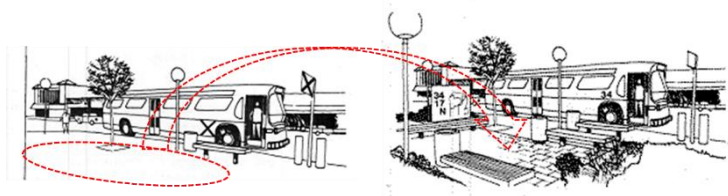


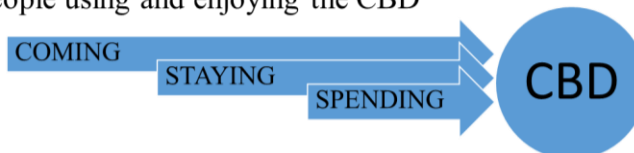
Fig. 1.17 Urban space with new active elements
Source: http://generalplan.sfplanning.org/I5_Urban_Design.htm

1.1.3.4 Lively supporting elements to CBD

The existence of people to a place always gives life and sense about the place and therefore the good place should involve people’s activities.

What does the vibrancy means toward CBD?

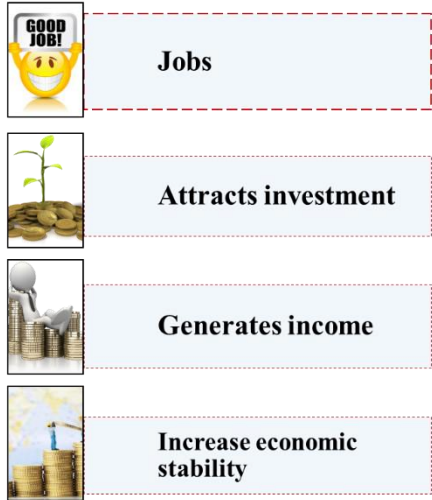
Is when people using and enjoying the CBD



A vibrant CBD always gives;

- | | | |
|----------------|--------|---------------------|
| ▪ Services and | | ✓ Customers |
| ▪ Facilities | To the | ✓ Residents and |
| | | ✓ Visitors’ demands |

Therefore by providing this concept, the CBD may create,



“A lively city scene is lively largely by virtue of its enormous collection of small elements” (Jacobs J. 1960)

Fig. 1.18 Important of vibrancy center.
Source: Sheffield destination management plan for a vibrant city

1.1.3.5 Framework of Vibrancy

For the center to have lively activities the following framework is necessary, (by Sheffield destination management plan for a vibrant city 2012-2015)

Hospitality

- Hotels and restaurants

Public realm

- Parks, plazas, pedestrian pathways, streets,
- Atriums, shopping centers and community centers.

Culture and leisure

- Museums, sports, historic environment,
- Libraries and arts.

Retail

- Range of small businesses

Access

- A CBD that can easily accessed
- Get in, out, from and beyond its boundaries

All ideas of Cultural events Festivals entertainments and Modern shopping malls activate an entire urban area while make people coming to the, People staying to the, people spending to the CBD.

1.1.4 JUSTIFICATION

The problem of the Central business district to become empty after government working hours in Mbeya city is so big that causing the city center to lose its identity and investors as compared to other cities, the problem witnessed into a different platform where people claiming the causes and problem that the city faced and the demand on how the problem needs to be solved.

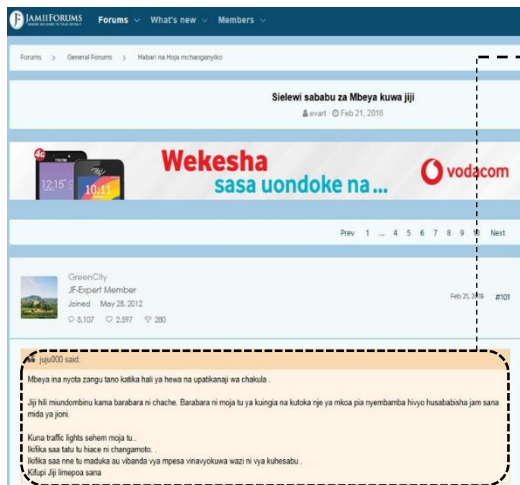


Fig. 1.19 Online JamiiForum, Feb 2018

- Insufficient Road infrastructure and Signage
- Market and retail shops are closed early
- Lack of public transport at night.

Juju Said: Feb 21 2018, said;
 Mbeya city has my five stars of good weather and food supply. *But*
 The city has few road infrastructures, traffic lights, moreover from 9 to 10:00pm there is difficult to get public transport, most of shops are closed. In shortly the city is ugly and quiet.



Fig. 1.21 Online 2 JamiiForum, Feb 2018

Mbeya city.
 About Sh15.118 billion has been allocated for Mbeya Region in the 2017/18 financial year for the rehabilitation of roads and bridges



Fig. 1.20 The Citizen, June 2017

Patrice Lumumbo, Feb 21 2018; said
 I don't find the reasons that Mbeya was awarded to be a City, as the city appeared not attractive.



Fig. 1.22 Mwananchi/News, July 2018

MP. Mbeya city
 Whoever think Mbeya city is a source of job opportunity, they deceive themselves.

Interview Feb 2018; (trader at CBD)
 The causes of dormant or decline of CBD is due to rise of new trading center near by CBD area, lack of public activities and affordable rent housing which forced some people and traders to shift their business and residence outside CBD etc.

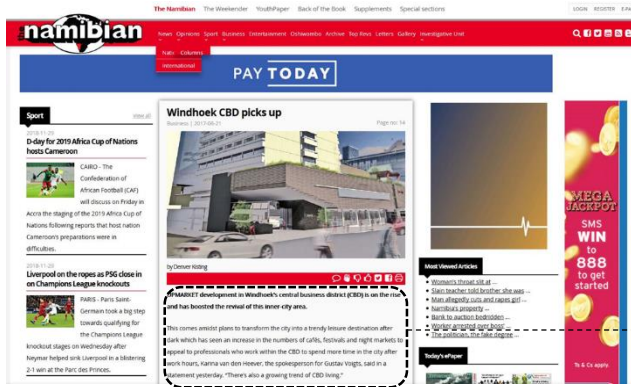


Fig. 1.23 Namibian News, June 2017
 Source: <https://www.namibian.com.na/166001/archive-read/Windhoek-CBD>



Fig. 1.24 UK. The Guardian
 Source: <https://www.theguardian.com>

From School of life.

They examined six fundamental things that a city needs to be right.

- **Order-** Organized complexity is important in a city that is why Paris and New York are good. Chaos and boringness should be avoided.
- **Visible life-** The city will be beautiful when the streets are full of people and variety of activities.
- The city should be **compact** and sprawling should be avoided. Example Barcelona.
- **Orientation** and **mystery-** The city should help someone to orient her/himself, so that can avoid lost.
- **Scale-** urban skyline should be balanced, like in Berlin and Amsterdam
- The city should be **local-** the city should explain its unique character which will avoid sameness.

Urban rejuvenation, why rejuvenation is so important to be done especially at Mbeya city center.

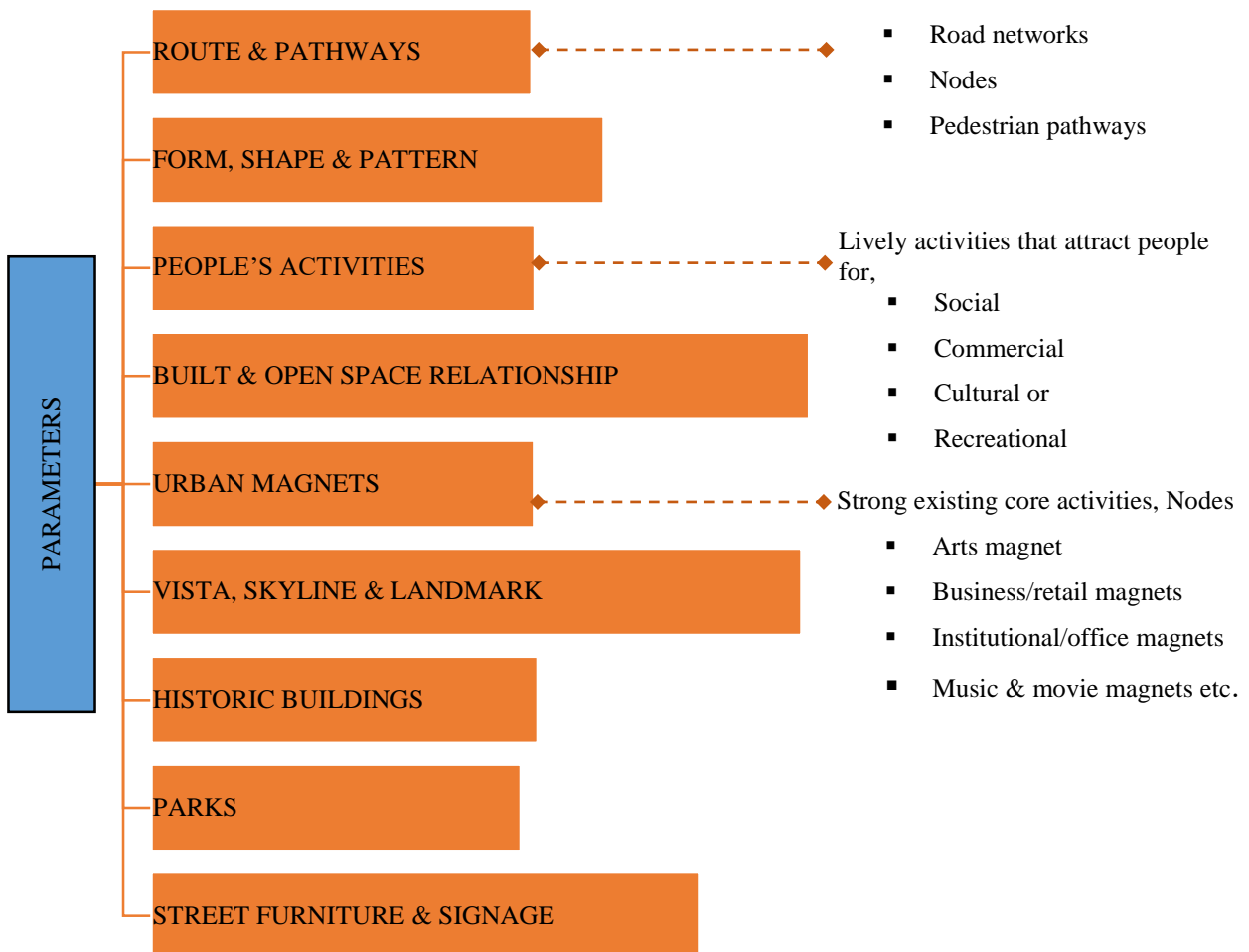
Rejuvenation helps to create a Livable CBD That can;

- Activate the CBD
- Uplift economic condition
- Attract more investors & tourist

This process will help or assist to achieve one of the United Nations Development Programme for Millennium Development Goals (MDGs) that is, *To eradicate extreme poverty and hunger.*

1.1.5 PARAMETERS FOR STUDY

The following are among the important urban parameters that need to be studied so as to achieve the process of rejuvenating the CBD.



1.1.6 BRIEF INTRODUCTION FOR CASE APPLICATION

Mbeya is the city located southern part of Tanzania the city is connected by the Tanzam highway from Dar es salaam (Commercial city) to Zambia nearby country. Mbeya city is the spine for all southern highland regions including Iringa, Songwe and Rukwa they are all depends on in terms of Business, Health services etc.

Mbeya city center (CBD) has been selected as a case application due to the problem that facing the central business district and the center has an area of 150.ha as well as 6,980 population.

From the year 2000, there were some improvements made in infrastructure within the city center area such as road maintenance from Jakaranda road, the road from the market square to Sokomatola, from bus terminal stand to Sokomatola, from Uhuru torch (Monument) to Uzunguni area up to Sokoine ground. The city center also has new investment such as banking facilities, mobile networks facilities and etc. Regardless of all these improvements and some available services, still the city center is inactive compared to those towns surrounding the CBD. Hence the area of city center has become important to study and investigate in detail the causes of deterioration and being dullness and also the study has intends to propose suitable measures for re-activating the central business district as the business and recreation hub and as modern of components of livable city.

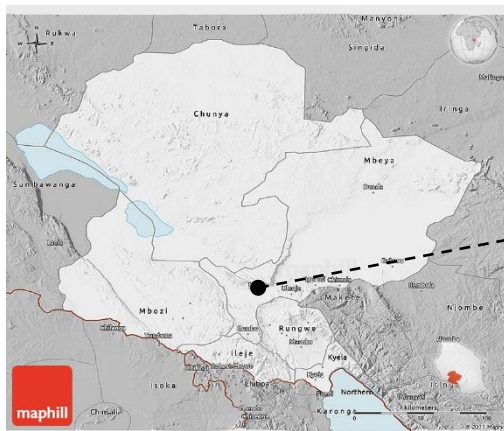


Fig. 1.25 Mbeya Region map



Fig. 1.26 Mbeya CBD map with boundary line

1.2 AIM

Rejuvenate the Central Business District of Mbeya city by taking proper measure of urban design and planning.

1.3 OBJECTIVES

1. To study the CBD and its urban qualities
2. To identify the problems that have rendered the CBD dormant
3. To investigate the possible activities that can uplift development and attraction within CBD so as to give life and increase capital income
4. To design a unique inclusive environment so as to give more sense and motivate people in and around CBD.

1.4 SCOPE OF WORK AND/OR LIMITATIONS

1. The study is limited to central business district (CBD) of Mbeya city only.
2. The study focused on both idea, indoor and outdoor activities to be done in the city centers.
3. Furthermore, they were a limitations such as; Time limits and budget limit

1.5 METHODOLOGY

The following are a methodology which needs to be followed to achieve the objectives.

The study process based on the following steps	
1	Selection of the project based or related to the current and relevant urban issues or cases.
2	Study some Literature review to understand the background of the concerned project.
3	Identification of an intervention area.
4	Framing aim and objectives in achieving the project while describing the limitations of the project.
5	Conducting survey and make analysis of case examples, to understand the problems and their appropriate interventions.

6	Surveying and analyzing both quantitative and qualitative data collected from the intervention area.
7	Finally, proposing some guidelines for the intervened area and an alternative design for the site.

Table 1.2 Research methodology
Source: Author

- Descriptive design

As one of the research design, it describes the state of affairs as it exists. This is sometimes referred to as Descriptive survey whereby the collection of information is done by interviewing or questionnaires to a sample of individuals.

- Case study design

Since the study intended to describe the CBD zones in detail, therefore the case study strategy was an important method to be used. Under this method, photo documentation were included.

- Desk search (Computer based searches)

With an exceptional to the above named methods, internet surfing also was a vital method to facilitate in succeeding the study. In order to obtain the relevant information about what other people have done in CBDs worldwide then the use of computer based search was employed to make the exercise effective.

CHAPTER 2: CASE EXAMPLES

2.1 Selection of case examples

For this study, five case examples have been selected to be studied and analyzed in details so as to find out ideas and techniques on rejuvenation or reactivation of the city center. These examples have been selected based on their activeness and since they had the same problem before in their city centers, regardless of the economic stability they possess.

2.2 Secondary Studies

Three cases were selected from African countries and one case from Australia and the last case from Sweden Stockholm.



Fig. 2.1 Windhoek CBD, Namibia



Fig. 2.2 Johannesburg CBD, South Africa



Fig. 2.3 Nairobi CBD, Kenya



Fig. 2.4 Port Pirie SA, Australia

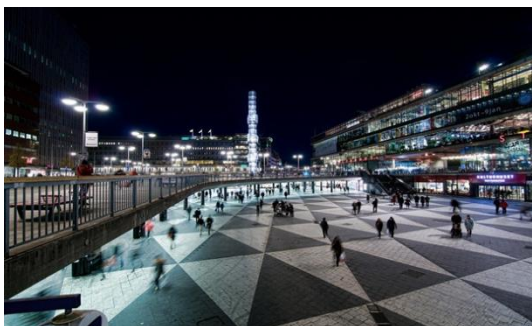


Fig. 2.5 Norrmalm, Stockholm-Sweden

2.2.1 Windhoek CBD, Namibia

2.2.1.1 Description:

Windhoek is the capital and largest city of Namibia in southern part of Africa and the center is for both Social, Economic, Political and Cultural activities. The CBD is located at the central part of the Windhoek City. The city center is selected because they succeeded in making CBD more vibrant with some new projects of which, before the center it was not live. According to census 2011, Windhoek has a population of 325,858 and total area of 2.59 km². Several projects constructed for the past few years helped in boosting the revival of the inner city.

The city council has tried to implement some new activities within the city center just to reactivate the center and become among livable center so as to attract more people at the same time attract more investors and tourists to make the center more stable. Some several projects including roads maintenance crossing the commercial street example Independence Avenue have been reshaped to consider roads services and other facilities were incorporated. Furthermore, some shopping center has been also constructed and connected physically to other services within the city center and making the services look like they are close to each other. Open spaces have been also maintained and connected visually and physically to major urban magnets and provided with best furniture and signage to make it usable and pedestrian friendly.

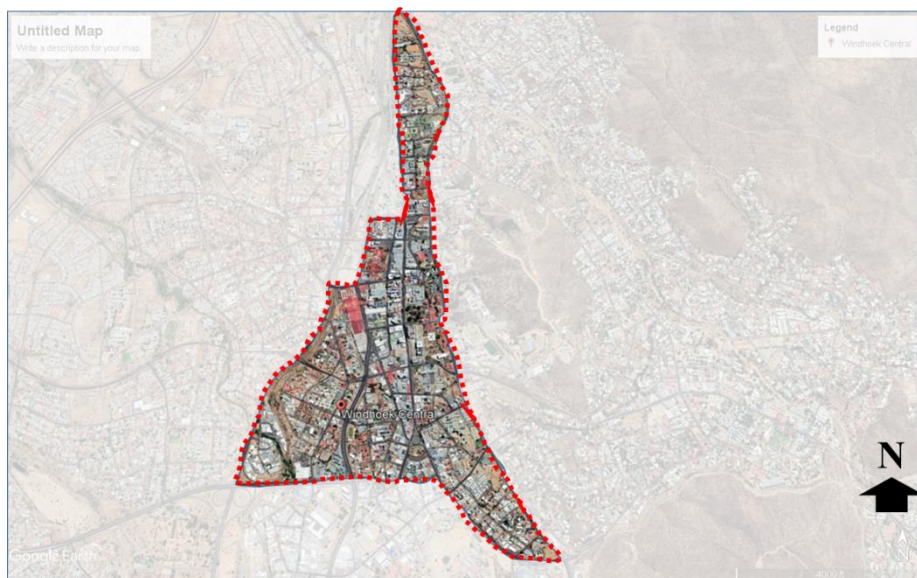


Fig. 2.6 Windhoek CBD boundaries

2.2.1.2 Analysis

▪ Route and Pathways

Roads were established to connect different parts within and outside the city center. Roads were classified into,

- Trunk Road
- Main Road
- District Road
- Street Road

Source: Road Authority Namibia, Geometrics manual, 2014

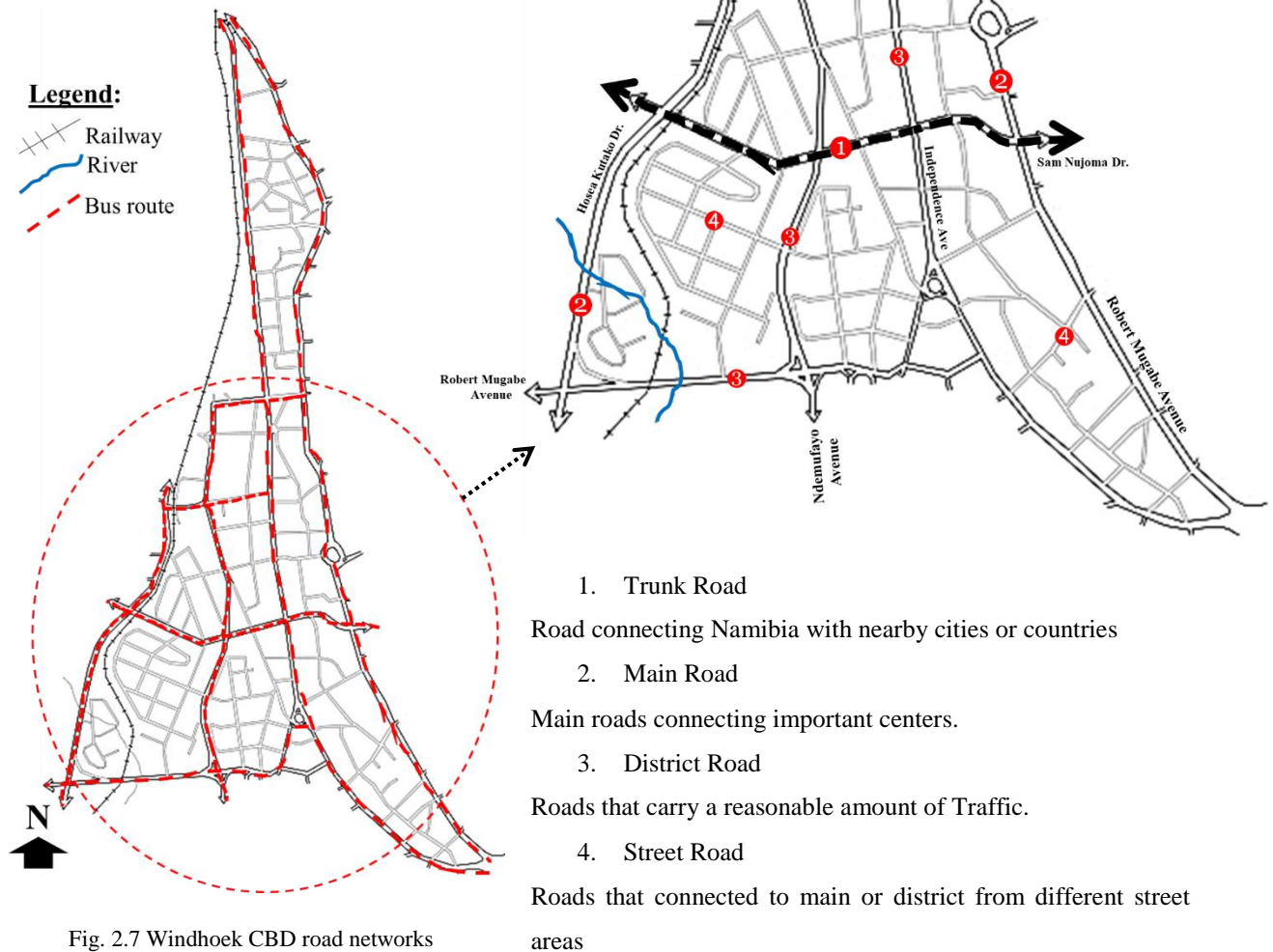


Fig. 2.7 Windhoek CBD road networks

Sam Nujoma Dr. road

A wide road crossing CBD, has single carriage way with four lanes, sidewalks are well paved with street lights. Some places the road circulated with retails shops and separated with road paved separator.

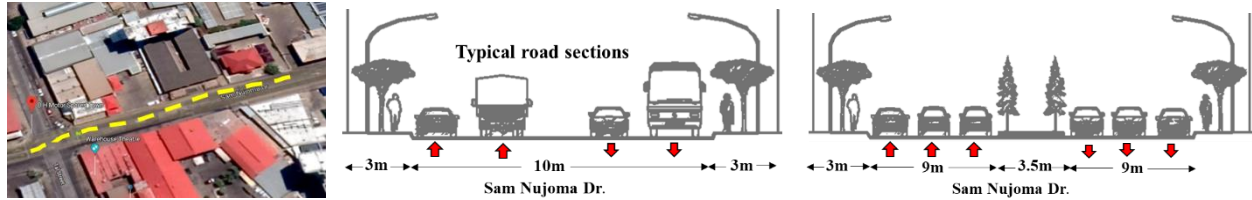


Fig. 2.8 Trunk Road section showing size and services.

Main road

A wide road bounded CBD in western side, has dual carriage way with six lanes, sidewalks are well paved with street lights example, Hosea Kutoka road.

District road

The road has dual carriage way with four lanes, paved sidewalks, street lights, retail shops and on-road parking examples, Robert Mugabe, Independence, Ndemufayo Ave. and etc.

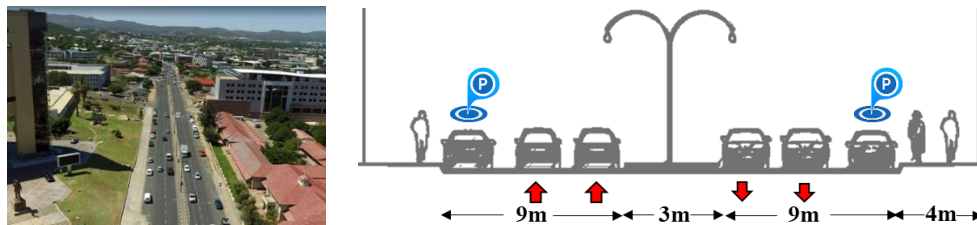


Fig. 2.9 District Road section showing size and services.

Street road

Street roads are of paved pedestrian walkways with street light which are safe. Example, Bismarck, Church Street & etc.

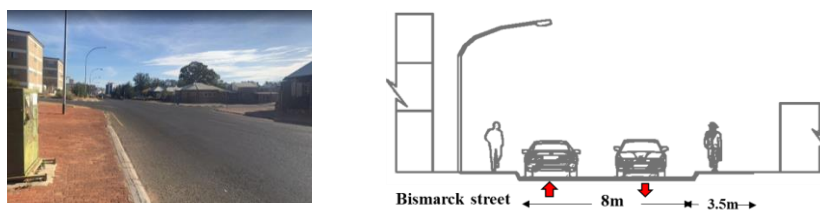


Fig. 2.10 Street Road section showing size and services.

Independence Avenue.

The road runs through the CBD from north to south, which is the most vibrant street surrounded by commercial and recreation activities. Example, retail shops, restaurants, shopping mall, hotels, park and other government services. The road was maintained to gives more open space for gathering and pedestrian path as well as more signage and furniture were given.

The avenue is safe and user friendly for pedestrians that can be explored easily by foot.

The following are sections at different road intervals.

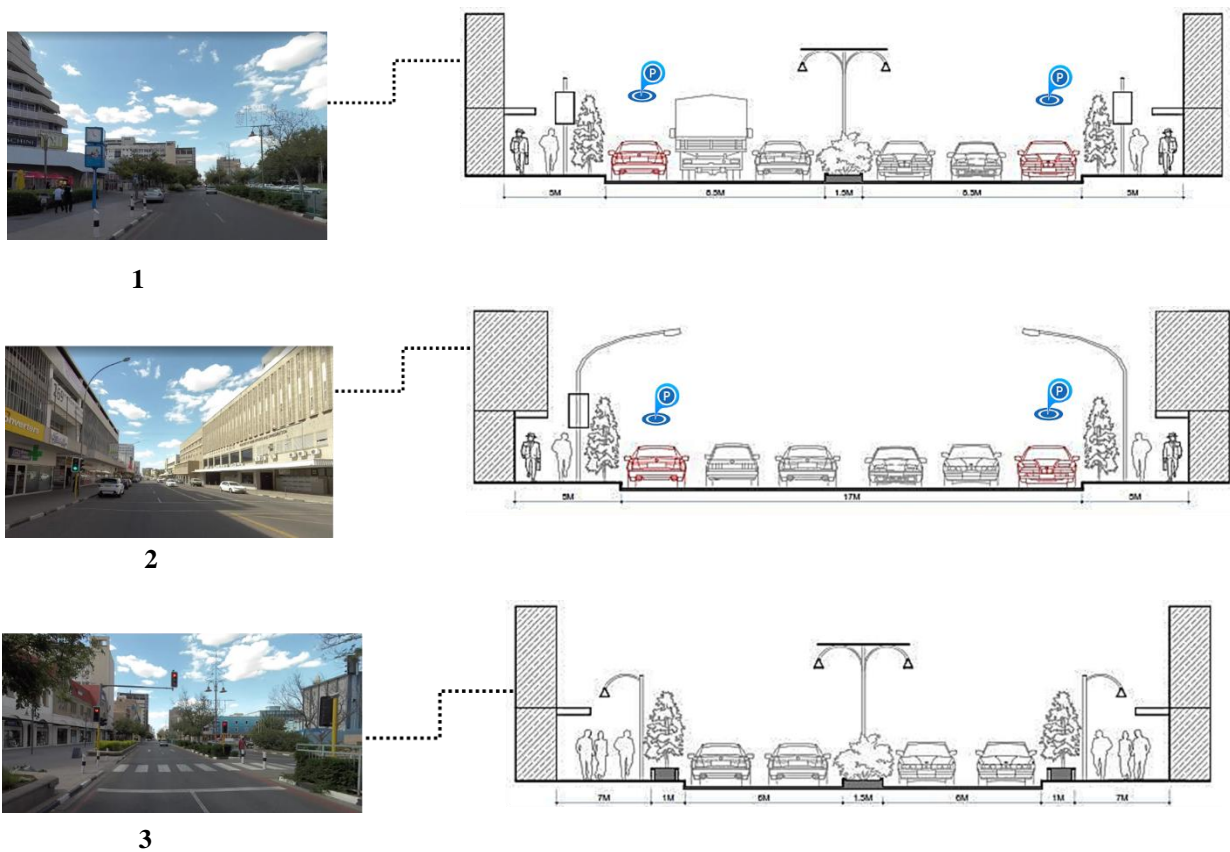


Fig. 2.11 Independence road sections showing size and services

▪ **Nodes**

The nodes have greater sense of enclosure, where different activities were incorporated so as to increase the vitality of a particular place,

- Retail shops
- Offices
- Paved and shaded pedestrian walkways

In North-east side of **node 1**, park is provided which makes the node more vibrant.

All activities along the nodes help to make the place special and active most of the time

Node 4, has very few activities thus making the area to lack some strength and sense of the place.

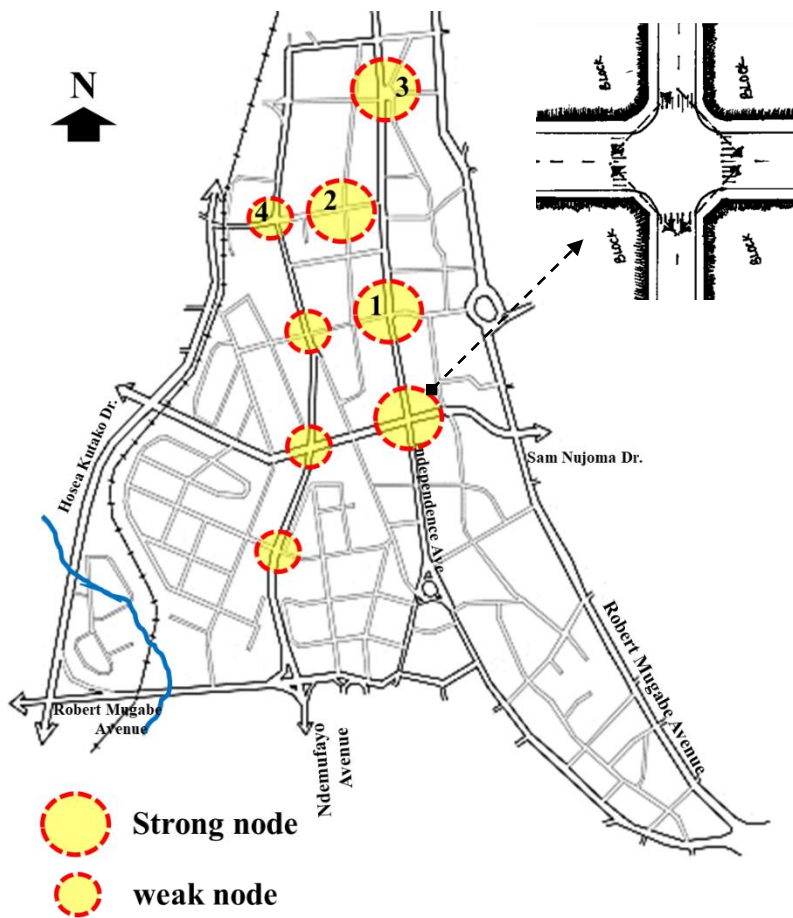


Fig. 2.12 Nodes map



Fig. 2.13 Strong and weak Node
Source: Google street view

▪ Form, shape and pattern

The streets of Windhoek are set both on straight & curved grid crossing each other that have helped to standardize blocks shape & sizes.

Most of the buildings are set rectangular and having different in height which helps to define urban space and furthermore the urban elements within the city center were distributed well and function accordingly.



Fig. 2.14 Building form and shape
Source: Google street view



Fig. 2.15 Shape and pattern
Source: Google street view

▪ People's activities

Many citizens and tourists pay a visit to Windhoek for its lively endless of many festivals to happen in the city center throughout a year. Largest festivals like,

- Mbapira or Enjando Street festival
- Bank Windhoek art festival
- Windhoek carnival (German style)
- Gams art festival and so many festivals

These all activities are accommodated within the streets since the streets are wide enough to accommodate such movement and also help to make a city center more vibrant throughout a year, while such other activities happen in the streets and in some specific area within the city center.

▪ Streetscape.

In some cases, existing parapet height are being maintained to respect the skyline of existing blocks, which gives sense of the existing street.



Fig. 2.16 Parapet height at CBD Street

▪ **Urban magnets**

Most of the interesting thing within the CBD is the way urban magnets being distributed and connected each other, from the new investment of shopping malls within the center to the open space around it are all well laid out and also help to boost the life in and around the CBD.



Fig. 2.17 CBD map showing urban magnets

1. **Zoo Park**, one of the city's green space which contains;



- Pond
- Play ground
- Obelisk memorial

2. **Shopping malls**, one of the most effected projects which made the city center more active and lively up to date, which are well connected and accessible within the CBD.

3. **Landmarks**, with an historical church of German architecture made the area become one of the famous area and attractive for tourism.

4. **Independence museum**, another attractive area, where people gathered for tourism and leisurely.

5. **Craft market**, a central market for local crafts which attracts more tourists at the city center.

Connectivity among these magnets are well reinforced and connected with pedestrian ways which make the area always accessible visually and physically.



Fig. 2.18 The pictures show different urban magnets

- **Vista and skyline**

Buildings within the center are of different heights, and most are tall and big. The buildings decreasing in heights when going away from the center, which creates the shape and unique outlook of the CBD.

The center is clustered in linear type, where major and big roads are straight crossing the CBD, and thus gives and define good view and vistas within the CBD.



Fig. 2.19 View and vista within the CBD
Source: Google Street view, 2019

- **Historic building**

Historical buildings are well maintained and conserved within CBD. & most are of German-style architecture. Due to their existence, makes people visit the town and enhance the livability of the street.



Fig. 2.20 Historical building at CBD
Source: Google Street view, 2019

- **Built and open space relationship**

From Google extract the built area of the CBD is 88% while the open space is 12% of the total area of the CBD.

The center has a wide roads and parks which gives the center a breathe relief while gives a good views to the buildings.



Fig. 2.21 Built and open space relationship
Source: Google map, 2019

▪ **Street furniture & Signage**

Different street furniture & signage were designed and placed in the urban street to emphasis and give sense to the street within the CBD.

Seating, planter beds, bollards, benches, Bus stop shelters, dust bins, and advertisement hoardings are of abundant.

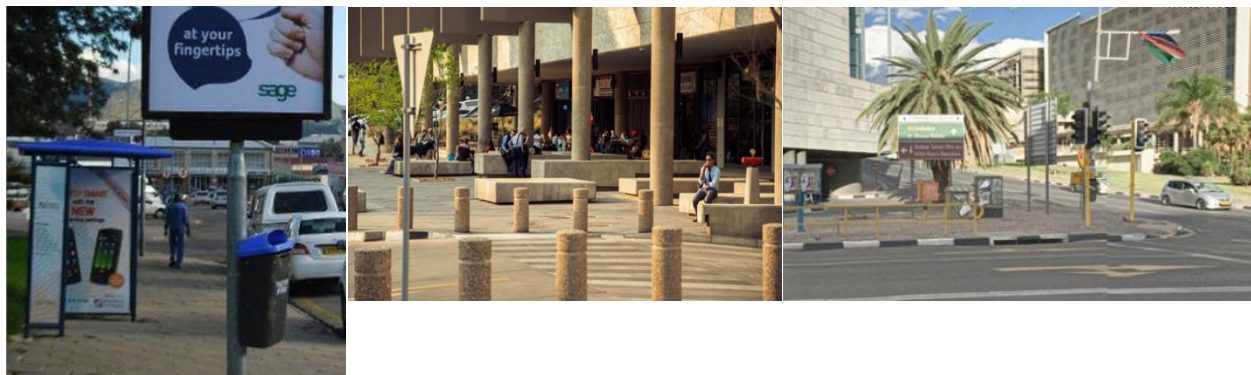


Fig. 2.22 Street furniture & Signage at a different corner within the CBD.
Source: Google Street view, 2019

2.2.1.3 Conclusion

Route & pathways

- Wide roads with pedestrian-friendly streets
- Active urban corridors and nodes
- Accessibility & short walking distance
- Accessible public transport, functional & efficient

Form, shape & pattern

- Streets crossing each other help to define the urban area in remarkable way.
- Rectangular blocks are good to utilize urban space.

People's activities

- Streets and other open space should accommodate festivals.
- Urban elements should designed to entertain and attract people.

Urban magnets

- Easy accessibility to social and recreational facilities & well connected each other.
- Quality public spaces
- Good location of shopping malls & retails
- Mixed-use serves diverse activities

Vista and skyline

- Maintaining view & vista for new structures in & out the CBD
- Creating focal points that provides good views within the CBD.

Historic building

- Free obstacles from historical structure.
- Maintaining and respect for heritage buildings.

Built & open space relationship

Open space in the built environment helps to identify the city, then more open space should be provided especially from streets to other areas.

Street furniture & Signage

- Provision of street furniture and signage to the open space help to emphasize & boost life in space.

2.2.2 Johannesburg CBD in South Africa

2.2.2.1 Description:

Johannesburg CBD is one of the main business centers of Johannesburg, in South Africa and is the densest collection of skyscrapers in Africa. But back in the late 1980s and 1990s many businesses and people fled the center and left the CBD unsafe and dormant. In response to the deterioration of the CBD, the local council began developing and implementing various revitalization strategies in an attempt to revive the area. A variety of entities were formed to this end, and most prominently the Johannesburg Development Agency, bringing together both the public and private sectors. Projects were devised so as to revive the Johannesburg CBD. Projects which were invented to revive the CBD include,

- Mixed use development
- Marketing and promotion
- Recreational facilities
- Management and strict enforcement of formal services

Johannesburg CBD

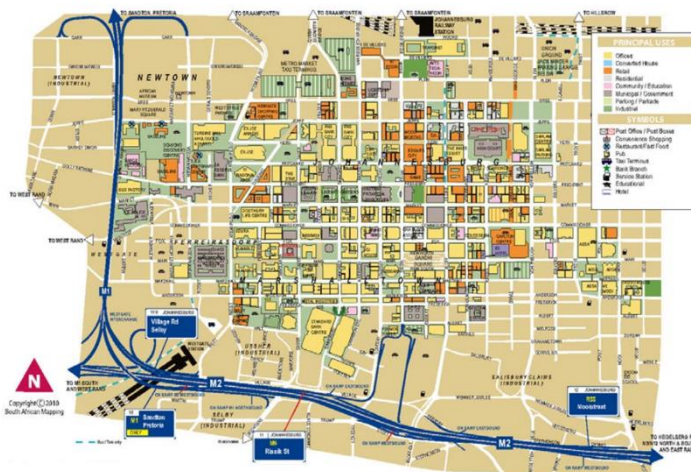


Fig. 2.23 Johannesburg CBD map.
Source: Google search, 2019

2.2.2.2 Analysis

Urban magnets

- **Mixed use development**

The city municipal developed the techniques by which hawkers and retail were incorporated together and residents occupied space in former office high rises were converted into residential units this helped a lot to bring back life and people to the city center.



Fig. 2.24 Hawkers & retails at the street
Source: Google search.



Fig. 2.25 Apartments within the CBD
Source: Google search.

The project of converting office spaces into apartments is still gaining traction in the Johannesburg CBD.

- **Marketing and promotion**

Improving business activities by allowing private investors, adjacent to the park, informal traders have been allocated space where they can ply their goods under newly-erected shelters, and it all seems to work, so-called “block leaders”.



Fig. 2.26 Informal traders in Johannesburg
Source: Google search.



Fig. 2.27 Johannesburg Railway Station
Source: Google search.



Fig. 2.28 Death and Revival Street, the restaurant building

- **Recreational facilities**

Renovation and greening of the former dilapidated and crime-ridden Bokkie Park, a mini auditorium for performers, cement benches in strategic places, and popular basketball court these all were renovated to revive the life in CBD.



Fig. 2.29 A park that allows mixed use activities
Source: Google search.



Fig. 2.30 Wits drill hall then and now
Source: Google search.

- **Management and strict enforcement of formal services.**

Like cleaning and maintenance of CBD’s landscape as well as CBD’s security. These were addition services provided by local authority.



Fig.2.31 St. Scene in Pretoria Main shopping road
Source: Google search.



Fig.2.32 Bree St. Central Johannesburg
Source: Google search.

2.2.2.3 Conclusion

- **Urban magnets**

The process of rejuvenation can be achieved also by activating the existing urban magnets and promoting business activities, as this revealed at Johannesburg inner city during those days where their inner city went down. Therefore maintaining and connection among those magnets are seen to be very important in the rejuvenation process.

2.2.3 Nairobi CBD, Kenya

2.2.3.1 Description:

Nairobi is the capital city and the largest city in Kenya, in 2015 several project have been done to stimulate and make the CBD more active and attractive to investors and tourists around the world. The project achieved through both Nairobi County Government and Public Private Partnership (PPP) which raised the fund to meet the target. The projects which were invented in CBD were;

- Redevelopment of old housing into Apartment buildings
- Development of on surface and multi-story car parking
- Rehabilitation of medical facilities
- Improvement and construction of new roads to disperse activities in or away from the CBD
- Trees planting along the roads within CBD.

The improvements were included in urban development master plan and the plan has made with a national vision to 2030 aiming to develop Nairobi as an Iconic place and attractive city center.

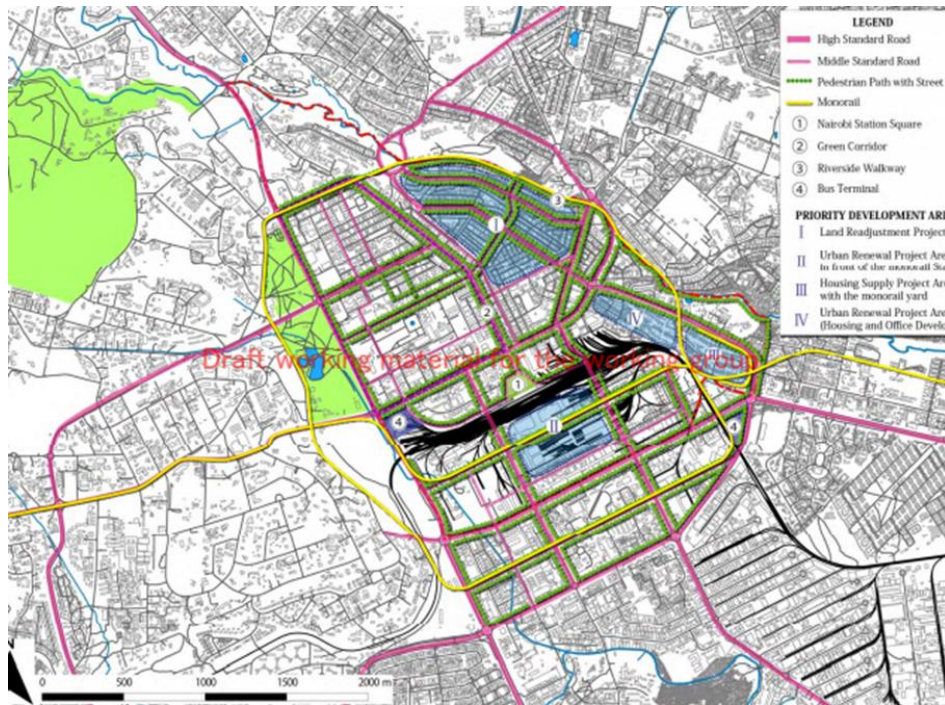


Fig.2.33 Proposed integrated master plan, CBD-Nairobi
Source: Google search.

2.2.3.2 Analysis

- **Route & Pathways**

From their angle of developing the center from being unpleasant, the project was targeted to plant trees and provides the signage along the roads so as to strengthen the life within the streets.



Fig.2.34 View at Harambee Ave.
Source: Google search.

- **Urban magnets**

Parking facilities.

In order to create a world class working environment, Nairobi County Government created the projects that inviting attracts people and other investors which include building a multi-story car park within the city center, which is between Jogoo House, National Bank Buildings.

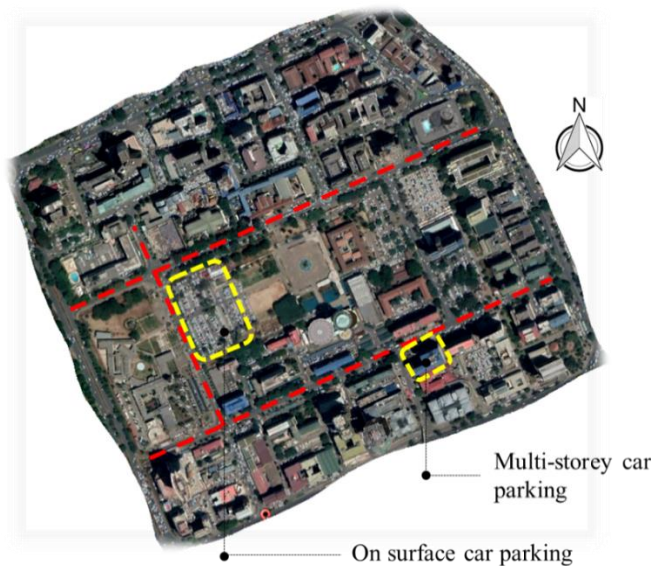


Fig.2.35 CBD map showing parking facilities.
Source: Google map.

Apartment facilities.

Nairobi County Assembly Planning and Housing Committee decided to demolish bungalows which were built during the colonial era in 1980s and 70s which are in deplorable conditions and replaced them with high-rise apartments just to revamp the center of Nairobi and attract people to invest.



Fig.2.36 Apartment facilities at CBD.
Source: Google search.

Some new structures after demolition in Ngong Road, and others same to Old Ngara, Uhuru, Pangani and Jevanjee

2.2.3.3 Conclusion

- Route & Pathways

In order to give life and attraction within the streets, the trees are most important to be included in the streets since it cools down the hot weather especially for the hot regions. Similarly, street furniture and signage are effective elements that need to be included along the streets

- Urban magnets

Urban magnets are the one which makes the city center more attractive especially the people within and outside the city and/or the investors and tourists around different places and eventually helps to boost life within the center. Therefore facilities like parking and apartment are among important elements that need to be incorporated into the area where seems to be inactive.

2.2.4 Port Pirie SA, Australia

2.2.4.1 Description:

Port Pirie is among populous city in South Australia, located 223 km from Adelaide and there is a seaport on the east coast of the Spencer Gulf. It is chosen because they succeeded in making CBD vibrant from being dormant.

Port Pirie Regional Council plans in - 2016

- Street with better footpaths, trees & vegetation
- Storm water drainage
- Multi-purpose stadium
- Better place to shop
- Boosting the image of the city

According to Regional population growth Australia 2014-2015, the population is estimated to be 14,247 and has total area, 0.82 km² at the CBD (wikipedia.org/wiki/Port_Pirie).



Fig.2.37 Port Pirie CBD.
Source: Google Map 2019.

2.2.4.2 Analysis

▪ Route and Pathways

Roads/streets within CBD are wide enough to incorporate pedestrians and vehicle, and also the streets provide on-street car parking which allows the center to be more attractive, visible and accessible for all time. Since it provides alternative parking, a lot of people are interested to visit the center. The streets were similarly designed with full of signage, road separation and street furniture where pedestrians move friendly.

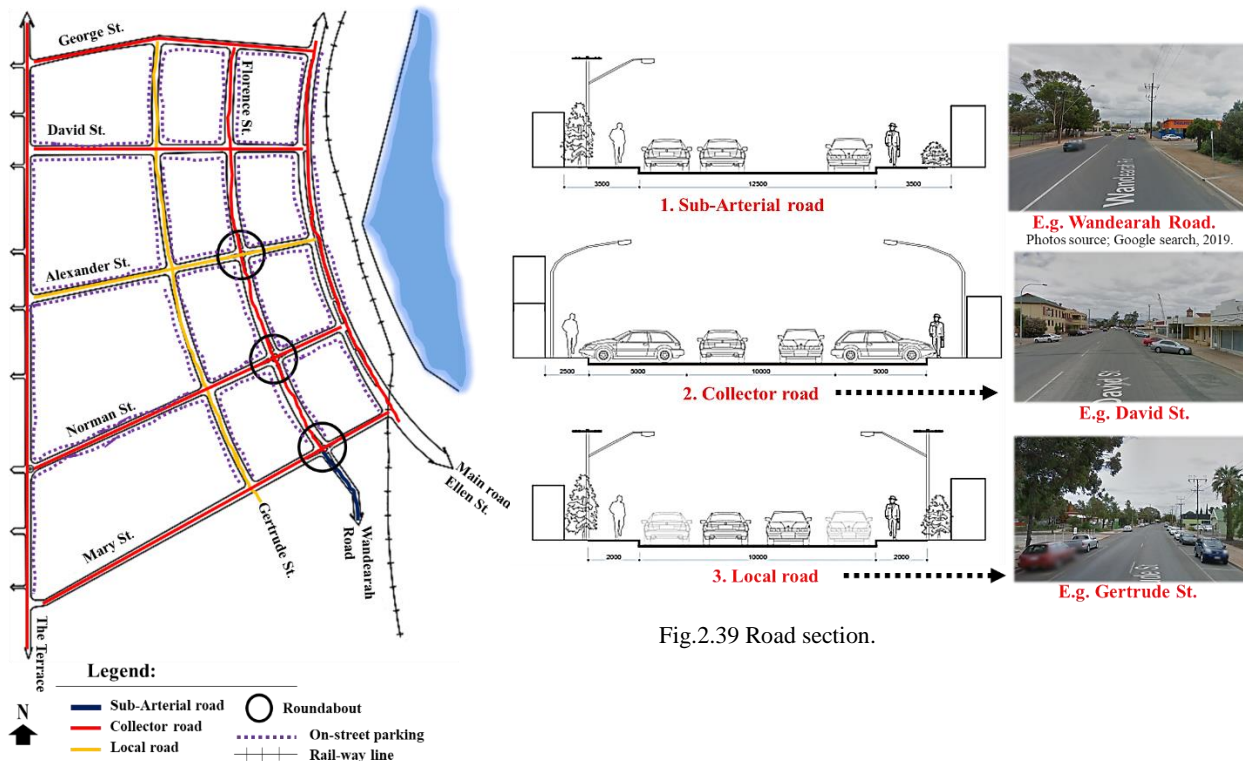


Fig.2.38 Routes & Pathways at CBD.

Fig.2.39 Road section.

The streets were covered by the avenue of trees which increase life as well as gives shades within the city. The drainages are well planned and covered that gives the surface water off the area while the pedestrian ways are paved and dry that makes the path friendly to users.

▪ **Nodes**

Legibility defined at different level within CBD, especially at;

- Street level, where each street has its different feel.
- Building form, which creates different character.
- The streets are wide with treated footpath, light and trees which give life and strength.
- Strong nodes, which have greater concentration of activities, especially on Alexander Street.

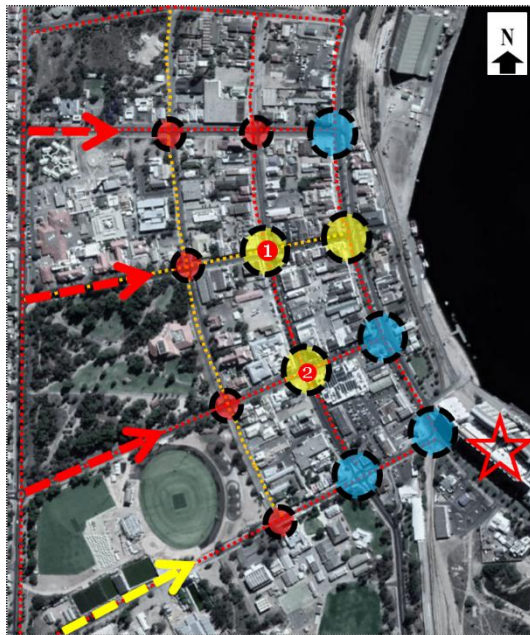


Fig.2.40 Nodes showing the linkage.

- Legend:**
- Major Node - Strong
 - Major Node - Weak
 - Minor Node
 - Landmark
 - View line/vista- Ends with avenue of trees
 - View line/vista- Ends with large concrete silos as main land mark within CBD



Alexander St.



Norman St.

Fig.2.41 Nodes showing activities.
Google search, 2019

▪ **Vista, skyline & Landmark**

Many streets give good view, while entering the CBD. The streets are full of retail shops and ended with the avenue of trees which also are positive thing to be adapted.



Fig.2.42 View and vista at the CBD.

The Concrete silos at the end of the street define a view along this street and act as a landmark for the entire CBD which gives a sense at a particular area.

▪ **Urban magnets**

The regional council has tried to input the new activities and they also reinforced the existing elements these all is to make the city center more vibrant and lively for the all-time. New shopping facilities and parking have been introduced in the city center to attract more people and moreover, some activities like parks and retail shops have been maintained to strengthen the life within the city center.

○ **Memorial Park & Northern festival center;**

The park is accessible to all parts of the center, with well-designed seating, playing facilities and pavilion to make the park active and enjoyable.

○ **Retail core.**

A commercial hub is active, which is connected to all part within the CBD. The hub is vibrant, accessible and connected all the time.

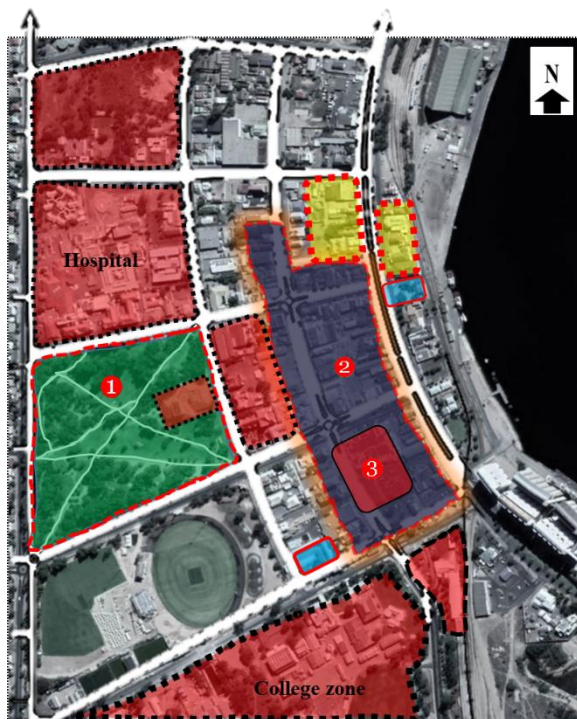


Fig.2.43 Port Pirie CBD map showing urban magnets.

Legend:

- Government/Health/Institutional
- Historical/Heritage buildings
- Hotel buildings



Memorial Park & Northern festival



Retail core



Shopping mall

This shopping center is among big center within the CBD which is well accessible and offer a huge parking.

- **Historical (Heritage & Cultural).**

Historical buildings are kept and maintained in a good way as are well visible with their original character.



Fig.2.44 Heritage buildings at Ellen St.

- **People's activities**

People are attracted to the CBB mostly for shopping, leisure, office and other government issues.

Where most places were designed based on people’s interest and allow massive circulation.

- **Built & open space relationship**

- ✓ Built up area approx. 62.2%
- ✓ Open space area approx. 37.8%

The CBD emphasized with wide roads, which both sides have on-street car parking and enough pedestrian walk-ways. Park and sports ground all these give the center enough open space for the people to enjoy while walking around the CBD.

- **Street furniture and signage**

The street furniture and signage were designed and placed well with the city center where users are enjoying when walking within the CBD.

- Seating
- Trash cans
- Bollards
- Direction signs and street names were given in and around the CBD area, which increases the legibility.



Fig.2.45 Street furniture and signage
Source: Google street view.

2.2.4.3 Conclusion

- Roads & streets

More roads, pedestrian walk ways and alternative parking are necessary to be provided within CBD to enhance circulation and attracts more people. The streets should be able to accommodate large amount of pedestrians and vehicle at par, which also can be emphasized by streets light and shops.

- Vista, skyline & Landmark

Vista should be considered in designing to emphasize and gives sense to a place, this will give strength and help the place to be remarkable.

- Urban magnets

Urban magnets are well-connected within the CBD, which makes them active and recognized.

Likewise, the distribution of the urban magnet should be distributed equally within the CBD and needs to be connected to each other to emphasize and make them active all the time.

- People's activities

The design must consider people's activities from built to open space level, so as to attract more people to the CBD.

- Built & open space relationship

The city center should incorporate more open space for interaction with each other, which will make the center more active and will attract more people to pay a visit for either enjoyment or other private activities.

- Street furniture and signage

The streets and major nodes should be strengthened by good design of street furniture as well as the signage should be provided to a visible space so as it can be seen clearly by users of the street.

2.2.5 Norrmalm, Stockholm-Sweden

2.2.5.1 Description:

Hötorgs city is an office center in downtown Stockholm with retail premises in the lower floors. The first construction phase was when skyscraper no. 1 by the architect David Helldén was built in 1953. Lower Norrmalm project by David Hellden presents the image of the city as a pleasant place for people to be and his project defined as a fine interweaving of buildings of different periods in a city's life.

Projects which were invented to Norrmalm;

- The project built on top of a subway and growing out of a complexity of movement systems.
- Large sunken pedestrian plaza furnished with a triangular black and white floor pattern.
- A wide flight of stairs leading up to the pedestrian street Drottninggatan.
- Concert Hall by architect Ivar Tengbom and Fountain at the roundabout centered on a glass obelisk by Carl Milles as a land mark.
- Five tall towers, where first tower was designed by Hellden followed by other architects.

All these inputs make a happy conclusion within the city center.

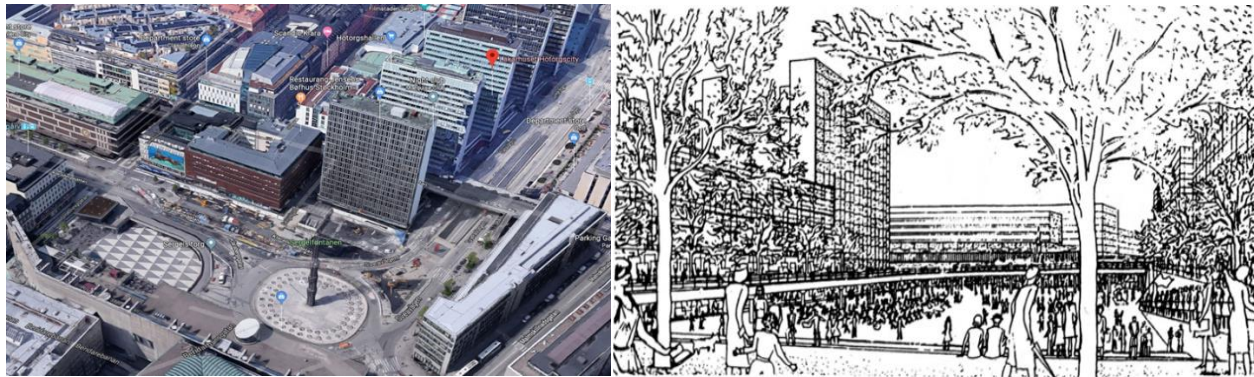


Fig.2.46 Hellden's drawing of Sergels Torg in Stockholm

2.2.5.2 Analysis

▪ Route & Pathways

The area is referred as the focal center for the movement system as connected by various means of movement.

- The sunken plaza intended to differentiate the pedestrian & vehicular movement.

- Different levels have been used for several activities and pedestrian bridges help in enhancing the connectivity within the area.



Fig.2.47 Sunken plaza and pedestrian bridge.

▪ People' activities

Different people gathered around the square (Sergels torg) designed by Hellden, for plenty reasons like,

- Shopping
- Relaxing
- Office
- Transportation

Where the space designed in such a way that gives interest to visit since the activities are near and connected visually and physically while can be reached by vehicle and pedestrian movement.

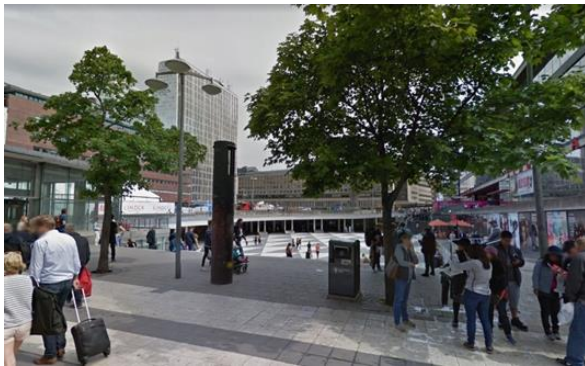


Fig.2.48 Interaction space at the upper level.

The center is well organized and attract people from different places and make the place more vital all the time.

- **Urban magnets**

The place designed to attract people, provide easy movements and gives more sense about the place. Major magnets that attract people were incorporated within the city center.

- A designed square by Hellden which furnished with trees and benches
- Shopping centers & retail shops at different levels, which accessible easily.
- Exhibitions, theatres & street performers at Sergel Torg.
- Restaurants, cafés at rooftops above the shops filled with trees & flowers
- Five tall towers which provide different services & give good view at the city.

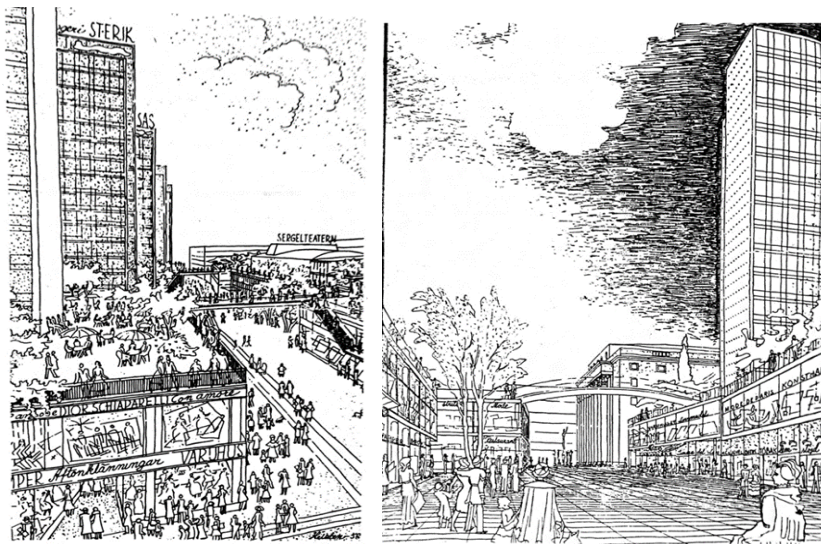


Fig.2.49 Multi-level services at city center.

2.2.5.3 Conclusion

Route & Pathways

Multi-levels movement seems to be fit for the area where there is a preference of pedestrian movements, so the techniques are to distinguish the vehicle and pedestrian path by which will reduce accident and enhance better movement. Therefore the dedicated area for non-vehicle movements the pedestrian pathways should be well emphasized and well connected to several other activities around the area so as to attract more pedestrian and to allow more interaction.

People's activities

The city center can be more effective once different people's activities are involved, this will help to activate the existing area and become more vibrant.

Urban magnets

The active urban magnets like shopping malls, restaurants, cafes, shops, office, etc. are necessary to be incorporated within a dead space so as to make it active since these activities involve a large number of people and are among activities that liked most at the city center.

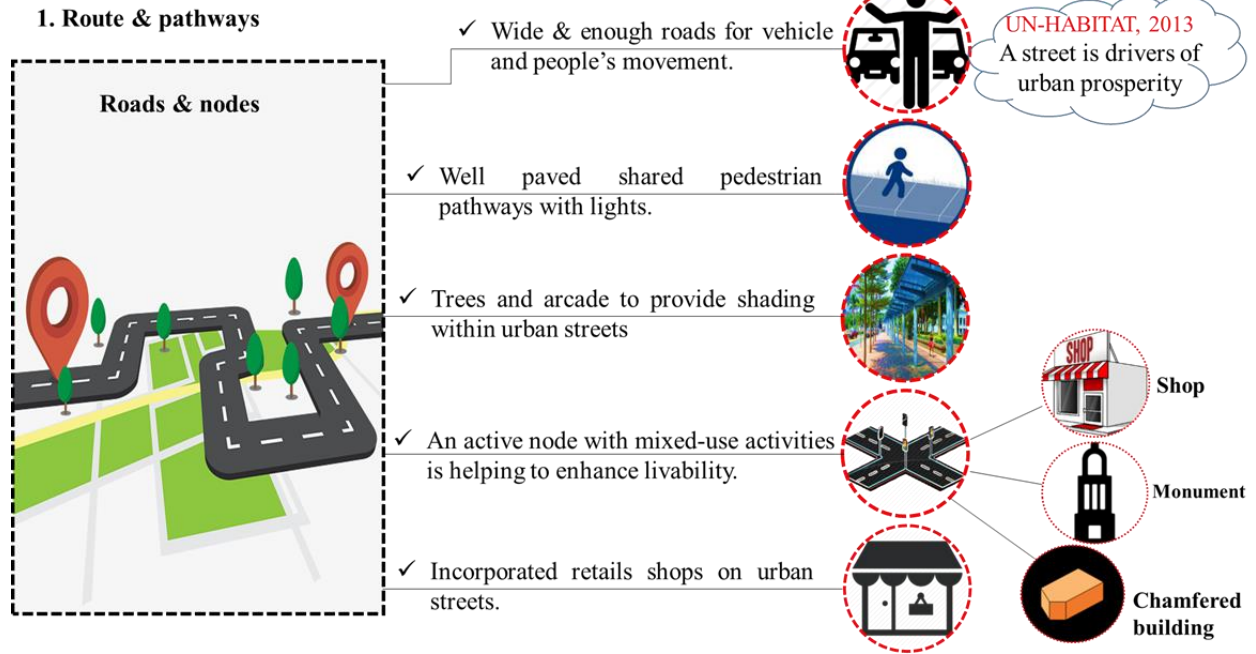
2.2.5.6 Comparative Analysis for all five case examples.

Parameters	Windhoek CBD, Namibia	Johannesburg CBD, South Africa	Nairobi CBD, Kenya	Port Pirie SA, Australia	Norrmalm, Stockholm-Sweden
Route & Pathways	Active wide roads with pedestrian-friendly streets ✓ Strong and weak nodes	Increased security and cleanness along the streets	Trees plantation and increased in signage	Active wide roads at retail streets with pedestrian-friendly and on-road parking ✓ Strong and weak nodes	Multi-level streets to distinguish pedestrians and vehicles
Form, shape & Pattern	Maintained rectangular building shape and streetscape.	-	-	Uniform shape & pattern that maintain the shape of the CBD	-
People's activities	Active activities along the streets.	Active activities along the streets.	-	Active activities along the streets.	Active activities along the streets.
Built & Open space relationship	Enough open space & well connected	Greening and renovation of existing open space	-	Enough open space & well connected	Creation of an Urban plaza
Urban Magnets	New magnets and pedestrian connection among magnets	Activation of Urban magnets and business promotion	New urban magnets were incorporated.	Emphasized magnets and connection of pedestrians and vehicles	Connection of magnets with pedestrian bridges and plaza
Vista, Skyline & Landmark	Maintained view & vistas along the streets. Landmarks are well observed and recognized.	-	-	Few landmarks are observed around the CBD	A good maintained views in and out the central area. Five tall towers and Obelisk are well observed as landmarks.
Historic Buildings	Historical buildings are well maintained and conserved at the inner city	Restoration of the old buildings at the city center.	-	Historical buildings are well maintained and conserved at the inner city	-
Parks	Parks are well accessible and connected to a different places	Parks got renewed, more activities and connection to the parks.	-	Parks are well accessible and connected to a different places	-
Street Furniture & Signage	Furnishing are well distributed along the streets and open space	-	Pedestrian guiding rail and more signage were emphasized	Less street furniture but signage are more.	Seating and signage are more at the center.

Table 2.1 Case examples Comparative analysis

Source: Author

2.2.5.7 CONCLUSION ON FIVE CASE EXAMPLES

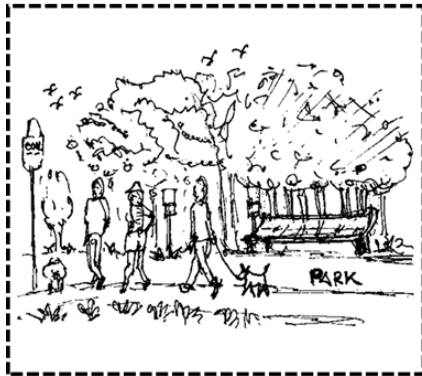


2. Form, shape & pattern

Rectangular shape with glass patterns seems to be a major form of the CBD's buildings. New construction should maintain the existing pattern to maintain the street character.

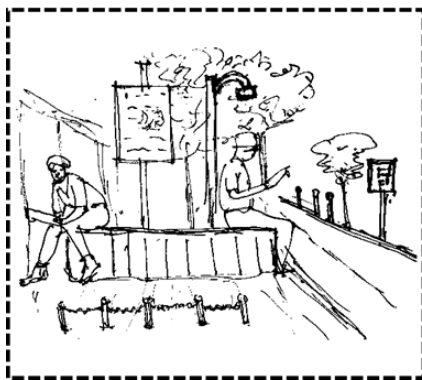


4. Parks



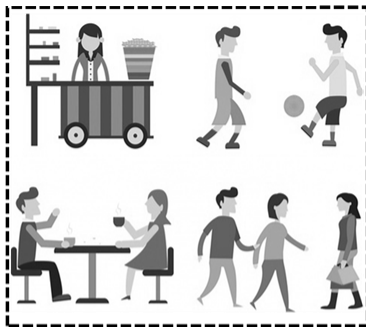
- ❑ Design a park which is accessible & with supporting facilities to make the park active.
- ❑ Connecting park with other active urban magnets to keep the park alive.

5. Street furniture &

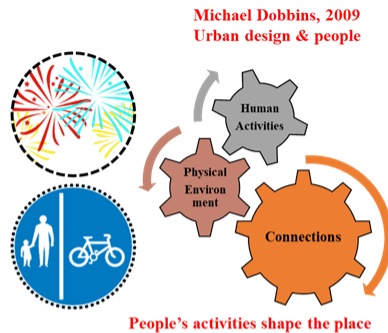


- Provision of street furniture & signage to the open space to emphasize and boost life in CBD
- Street furniture and signage should be accessible and seen clearly

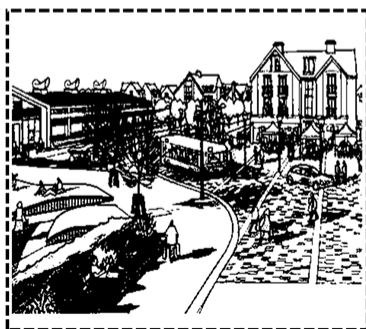
6. People's activities



- Designed environment based on people's activities especially on,
 - ❑ Pedestrian walk-ways, that can accommodate festivals & other activities within the CBD.
 - ❑ Priority design for pedestrian streets than vehicles to motivate pedestrians.



7. Built and open space relationship



- More open space to be provided & emphasized to attract people.

Open space supports human health & recreation in the city, subsequently should be considered as possible.

▪ According to UN-Habitat research - 2013.

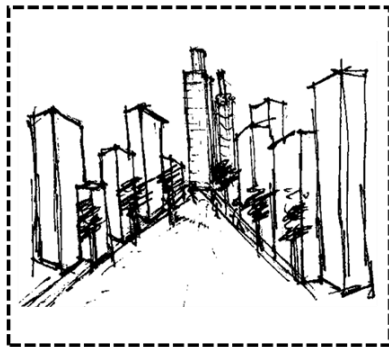
Open space should be at **45-50** percent of a city's land area of which 30-35% occupied by streets & **15-20%** open space. If less than 30 may creates big congestion problems.

Built & open space together gives a sense of place

Paul.D. Spreiregen

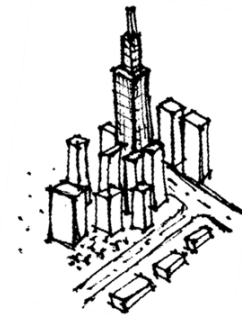


8. Vista, skyline & landmark



- A city has to maintain its view and vista of it and from it.
- To maintain building setback lines & heights to respect the skyline.
- Landmarks are to be emphasized to increase the sense of place.
 - ✓ It can be large or small landmark.

Views are the precious assets of the city.
Paul D. Spreiregen



9. Historic building



- To preserve and maintain historical & heritage buildings
- To maintain its visibility and to be free from obstacles.

All these attract people to visit and pay attention within the CBD.



Source: Author, 2019

CHAPTER 3: CASE APPLICATIONS

Mbeya city (CBD):

3.1 Description

Mbeya is a city located in southwest Tanzania. Mbeya is the first large urban settlement encountered when traveling overland from the neighboring nation of Zambia. In 2006 it was transformed and termed as Mbeya City Council.

The town occupies an area of 214.ha and out of this area, 150.ha is the central area of the municipality (CBD).

According to the 2012 National census, the total population was,

	Mbeya Region	%	Mbeya Town	%	CBD	Growth rate
Population	2,707,410		385,278		6,980	4% per annum
Females	1,409,672	52.1%	202,658	52.6%	3,592	
Males	1,297,738	47.9%	182,620	47.4%	3,388	
Av. Household size					4.0	

Table 3.1 Mbeya city Population data

Source: 2012 National Bureau of Statistics, Tanzania

Name	Status	Population Census 1988-08-27	Population Census 2002-08-01	Population Census 2012-08-26
Mbeya City	City	151,881	265,586	385,279

Table 3.2 Mbeya city Population comparative

Source: 2012 National Bureau of Statistics, Tanzania



Fig.3.1 Maps location for case application

Mbeya city is considered to be heading the Southern Highland Region which is the part of Tanzania including (Rukwa, Iringa, Njombe, and Ruvuma) since Mbeya contribute more than 7.44% into the national income (GDP) that holding a third position national-wide (National Bureau Statistics, 2012). The economy of Mbeya is based on both Mining, Agriculture, Livestock, Tourism, Commerce and Manufacturing. Mbeya city also is a zone for different representative companies, Government and non-government organization all these made city center more important to be considered in any development and make it grow strong.

3.2 City level study

3.2.1 Survey and Analysis

Mbeya city is connected through roads, train, and airport which makes the city to be among the fast-growing cities in Tanzania while the CBD is connected with two roads from Tanzam high way (A 104).



Fig.3.2 CBD with its nearby towns

Number 1, 2 and 3 represent nearby towns to the CBD which considered to be active and vibrant than the CBD, even after government working hours this is due to the availability of reliable transport and the proximity of urban magnets including shopping centers, markets\shops, recreational activities, and other important activities which seems to be attractive to the people in and around the city.

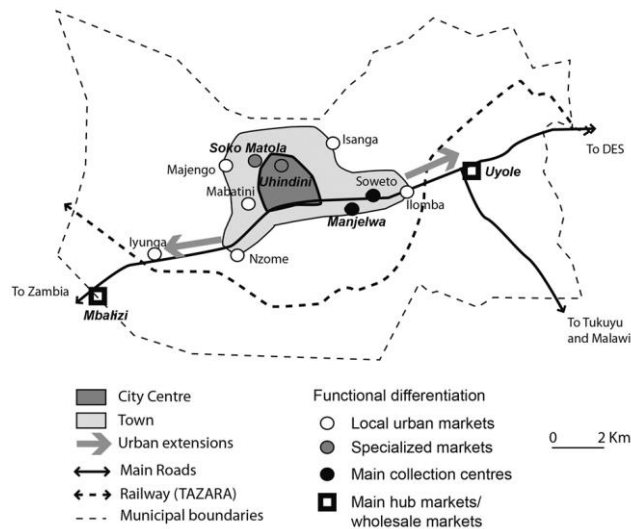


Fig.3.3 City map showing markets availability within the town

One of the town (number 1) near to CBD as seen in fig. 3.2 which is more vibrant than the CBD, the town doesn't have an urban design quality but appears to have activities and services which perform in a regular way and make the town to work smoothly. All these make this town to be attractive to the investors and people near and around the city to pay a visit for a different purpose.



Fig.3.4 Town (Mwanjelwa & Kabwe) nearby CBD

People's activities around these towns

- Commercial activities
- Social clubs
- Social halls
- Hotels
- Hospital
- Banks & offices



Fig.3.5 Office buildings, shopping centers and markets

Node 1

Active node, circulated with mixes use activities make the place more active day & night, pedestrian ways are incorporated with business activities while street light and signage were provided accordingly.

Node 2

Active node, surrounded with business activities, pedestrian way are well defined too that make an easy movement.



Fig.3.6 Node 1 and 2 showing people's activities

3.2.2 Conclusion

The important techniques that have found and helped these towns to be vibrant all time are concluded as follows;

Connectivity among the magnets, all the magnets found in these towns are appeared to be very close that makes them easier to access, therefore the attractive magnets should be provided in such a way that each should be connected to one another.

Proximity and distribution of activities, the activities within the center should be well distributed through its continuity of activities and should be close to one another.

The movement within the center should be easy that allows pedestrian and vehicle movement with free difficult circumstances.

The availability of public transport should be considered as much than private transport to help easier accessibility and to overcome traffic problems.

3. 3 Site level study

3.3.1 Description

Mbeya city was selected as a site for case application, specifically CBD area. The city is among top three cities reading to contributing to national income.

Despite the city contribute a high source of income and having all government services, but still, the city center is dormant especially after government working hours 3:30 pm.

The center is dependable for all government services that makes people to visit the center, but not only for government issues but also for other individual purposes. The condition within the city center remains empty soon after government working hours which often appears evening.

The following are some important government services available within the city center,

- Post office, Police post, Fire station, Tz. Revenue authority offices, Hospital, City council offices,
- Regional Library, Bus stand
- Courts, Migration offices, Banks and Public funds offices, etc.

3.3.2 Mbeya city center delineation.

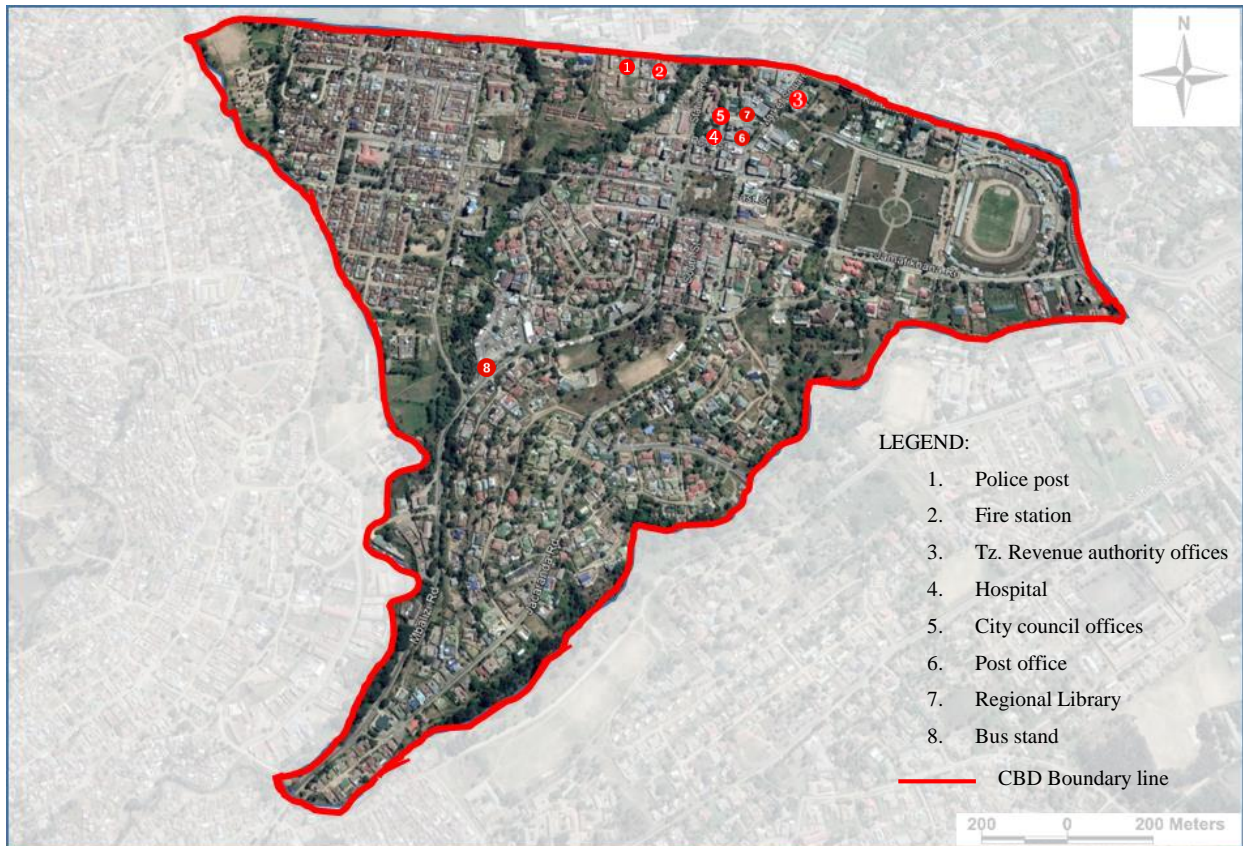


Fig.3.7 Mbeya city enter delineation



Fig.3.8 Government services at CBD

The important services are included both within and at CBD’s peripheral which serves as a whole service within the CBD. But some important social gathering spaces include both indoor and outdoor are seems to be very lack at the CBD.

3.3.3 Survey and analysis

3.3.3.1 Weather

The region lies between latitude 7° & 9°31' south of the Equator and between longitude 32° & 35° east of Greenwich. The city sits at the base of Loleza Mountain in the northern part.

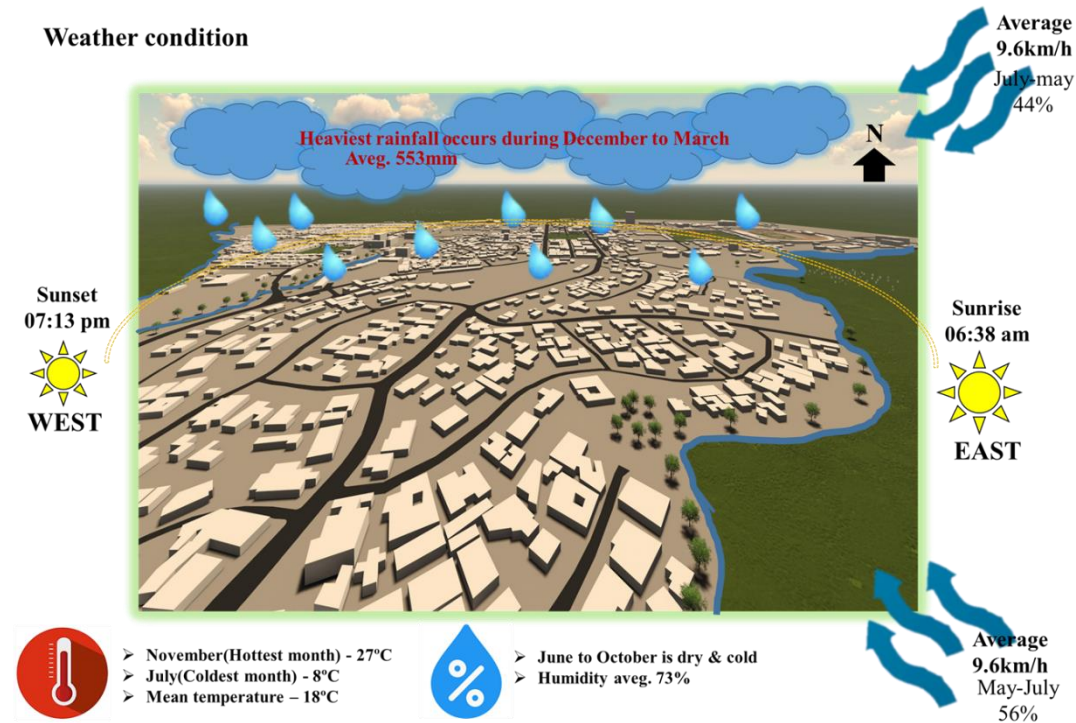


Fig.3.9 Mbeya city Weather analysis

3.3.3.2 Site boundaries and neighbors

The center is of low to medium-high rise buildings which are concentrated at the center see fig. 3.10 and bounded with Uzunguni ward by Karume road and Independence Ave in northern part toward the mountain area which no further development are taken part see fig. 3.33 where also other important services like offices and Referral hospital situated.

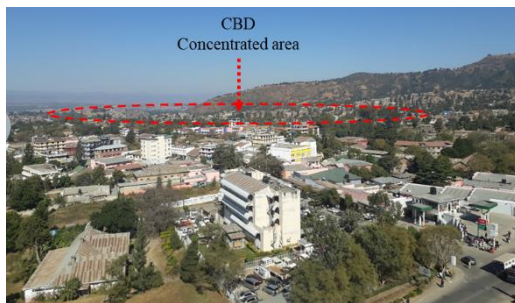


Fig.3.10 The picture shows core center.



Fig.3.11 The picture shows boundary of the CBD on the northern part

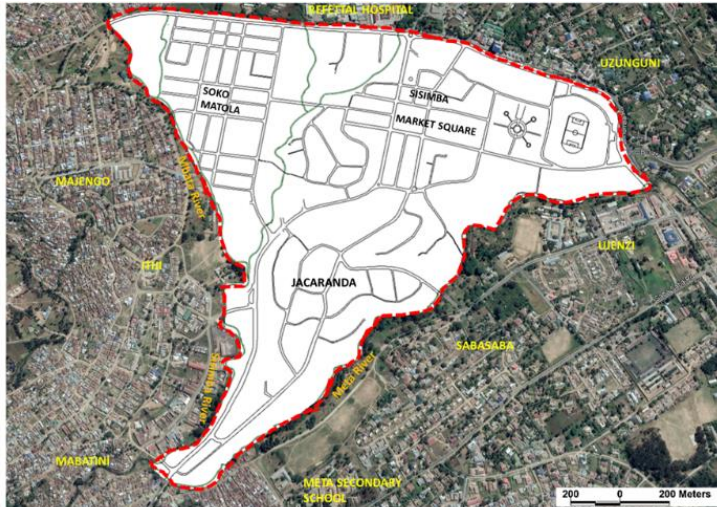


Fig.3.12 Site boundary & neighbors.

The CBD is bounded with several different wards on all side as it is seen in fig. 3.12 where all neighbors are benefitted from the services provided by the CBD. But the CBD lacks some social gathering and interactive activities that will bring them together to the CBD.

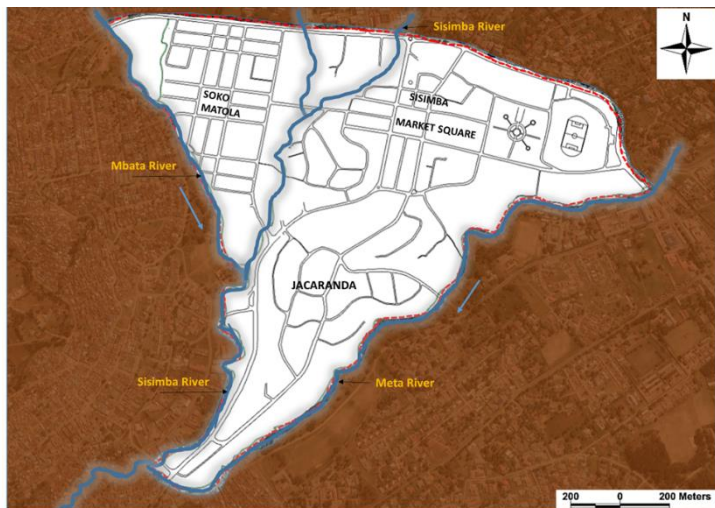


Fig.3.13 CBD River channels.

The CBD has several river channels closing the center and some define the boundaries line to the eastern and western part as it is seen in fig. 3.13. But none of these channels have been utilized for a better way that will attract people and other activities to happen.

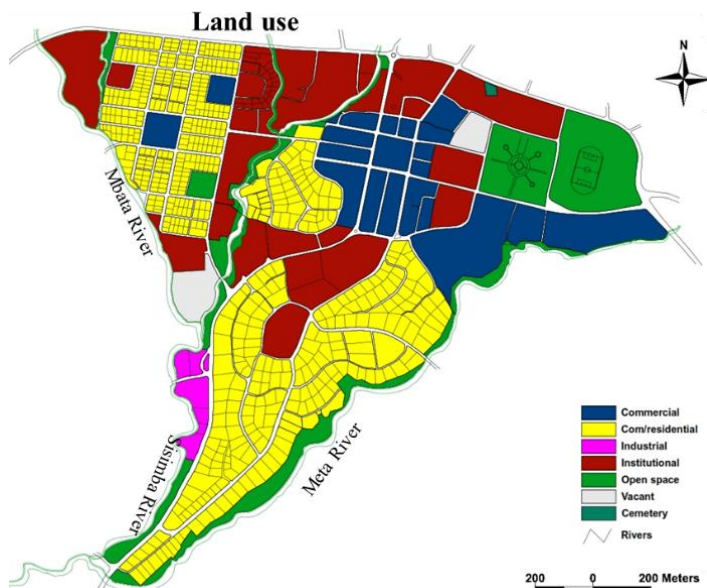


Fig.3.14 CBD Land use.

The land used has been developed by Mbeya municipal council as a review of 2003 which shows a land use activities on a particular area as it is seen in fig. 3.14.

3.3.3.3 Route and Pathways

The accessibility from outside toward the city center is connected by the Arterial road (Karume road) and collector road (Mbalizi road).

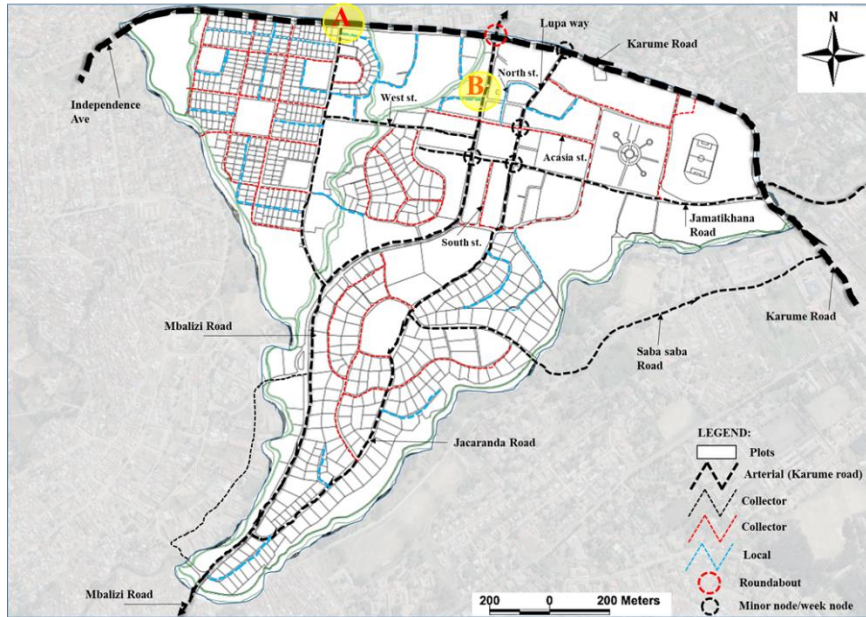


Fig.3.15 CBD existing road networks

Observations

- Narrow roads
- No defined pedestrian path
- No enough signage and
- No enough street light

Karume and Mbalizi road are the major routes for the internal city’s min buses and only Mbalizi road is used for the buses from other different cities.

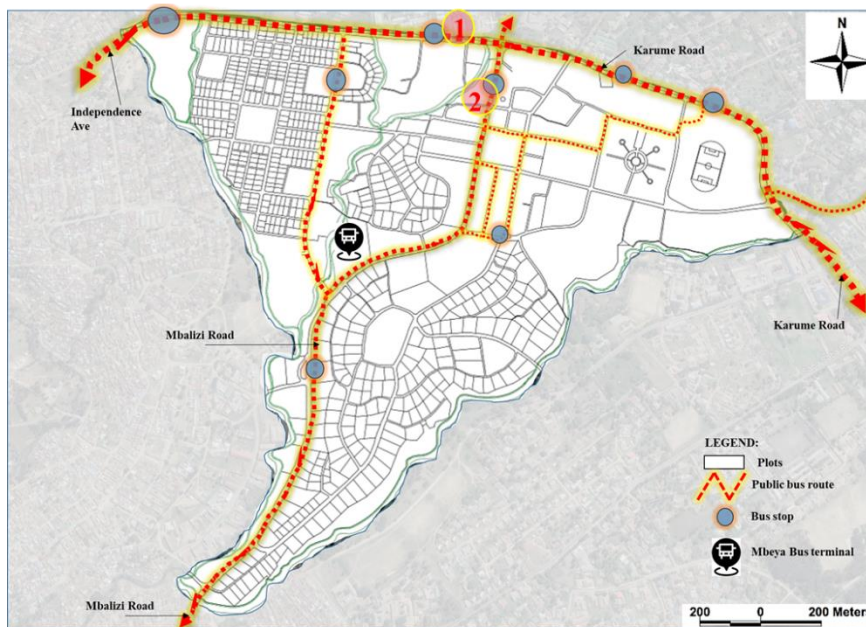


Fig.3.16 CBD public bus routes and stops

Observations

- Bus stops are not well defined
- No passenger shelter
- Insufficient bus stop



The pictures show the existing road condition refer figures above

a) Karume road is the road which makes a boundary line at the north side of the CBD.



Observations

- The road has few street lights
- Absence separator & levels between pedestrian & carriageway
- Lack of Safety for pedestrians
- Inadequate of road signs
- Insufficient trees for shading
- Inadequate street furniture



Fig.3.17 Karume road – (Arterial)

b) Lupa way is the main commercial road crossing the CBD from south to north which is most important to be considered.



Observations

- Lack of parking
- Informal parking
- No dedicated pedestrian ways.
- No dedicated arcade on shops corridor.
- Lack of enough shops & restaurants

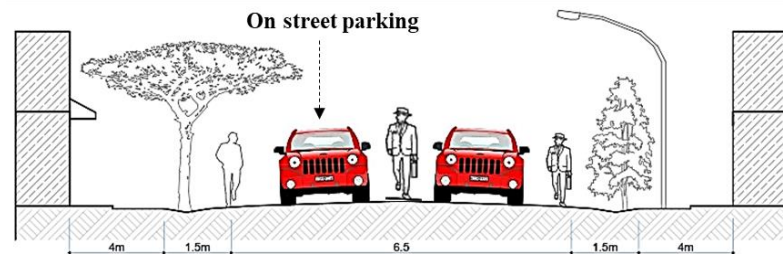


Fig.3.18 Rupa-way (Collector), with only one way

c) Mbalizi road is the collector road that connecting the CBD from the southern part which delivers traffic from and away from the CBD.



Fig.3.19 Mbalizi road – (Collector)

Observations

- No street lights
- Uncovered ditches
- No safety for pedestrians

3.3.3.4 Nodes

The CBD has some minor nodes through Mbalizi road and Lupa way which is incorporated with some few commercial activities but none of them is active neither day nor night time this resulted due to lack of other gathering and interactive activities around and nearby the node.

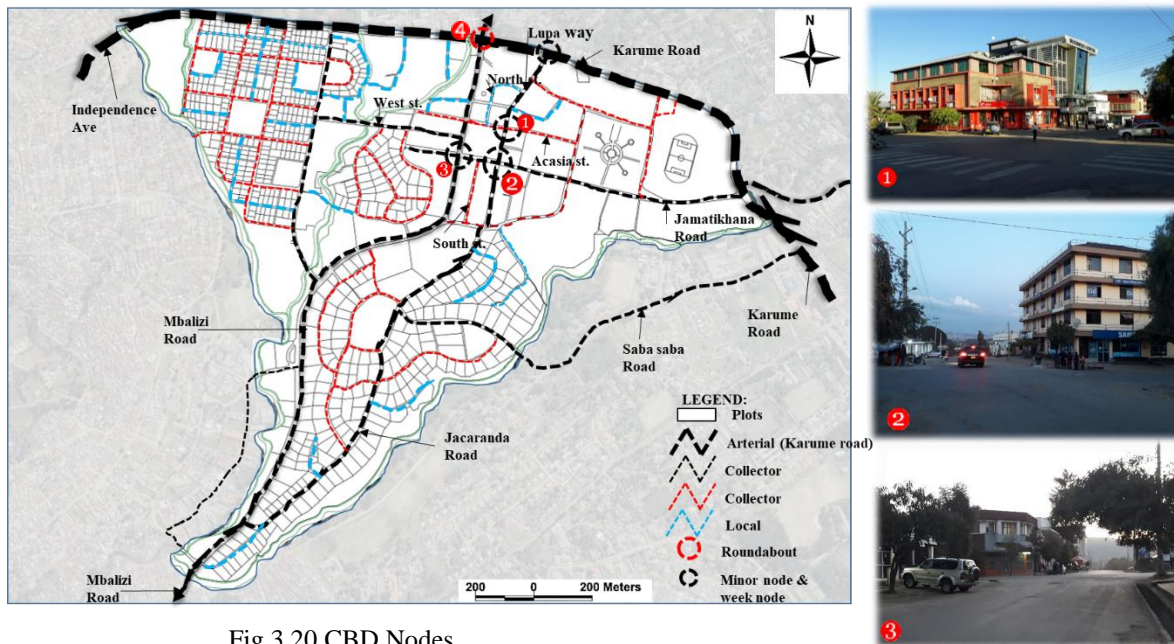


Fig.3.20 CBD Nodes



Fig.3.21 Nodes/roundabout

Observations

- Lack of activities around it.
- Lack of street furniture
- Lack of street lights
- Lack of pedestrian security
- Lack of enough signage

The issue of pedestrian movement and security within CBD’s pathways are not well designed to provide a conducive environment for pedestrian and vehicle movement, this observed when having a questionnaire to the people who reside within and outside the CBD as follows,

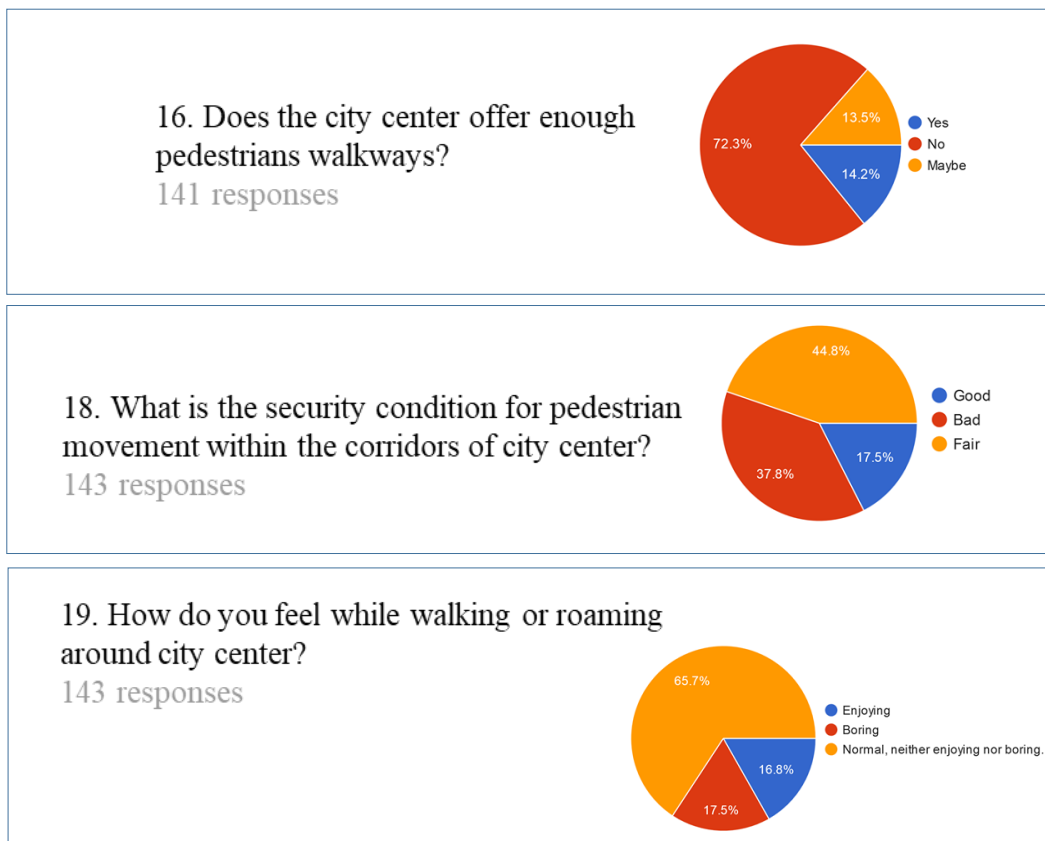


Fig.3.22 Pedestrian experience in pathways

3.3.3.5 Form, shape & pattern.

The attractiveness of any city center depends with different reasons and mostly can be of form, shape, and pattern of its central core where this is the most place to be liked by investors, foreigners, and people around the city.



Fig.3.23 Building form and shape

Observations

- The overall layout shape of the CBD is both rectilinear & linear shape.
- The buildings are of a rectangular shape and are of a low to medium rise building.
- Mixed both glass and solid wall façade with an uneven texture.

3.3.3.6 People’s activities.

The place always needs people in order to be active, therefore for the city center to be involved the people’s activities should be well considered starting the distribution and organizing the activities within the center. The different activities make the place more vibrant but should be a connection visually and physical among them so as achieve the functionally and flow of people within the center.

The study shows that most of activities cut off at evening when government hours in over, this can be revealed on the survey questionnaire below.

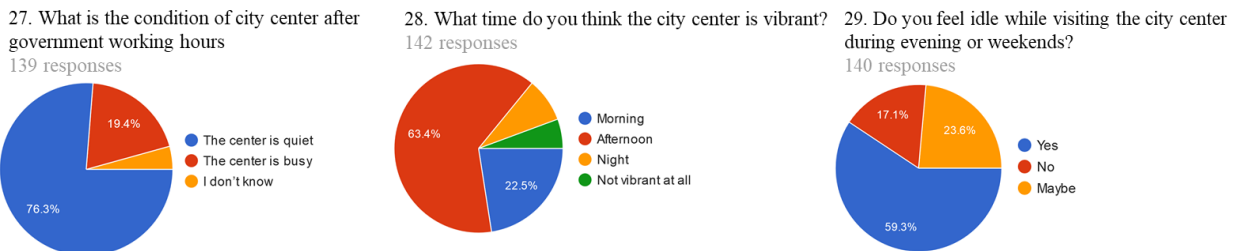


Fig.3.23 Condition of activities

The above reasons made the city center so empty and dull due to inactive activities available especially evening and night time.



Fig.3.24 Different activities at the CBD

Observations

- Undefined pedestrian walkways
- Lack of gathering spaces
- Lack of night activities.
- Lack of parking facilities.

3.3.3.7 Built & open space relationship

The CBD has few open spaces, and moreover, most of them are not well accessible and not designed well; since people are not interested to go in and leave the space dangerous and unused.

- Built up area approx. 80.3%
- Open space area approx. 19.7%



Fig.3.25 CBD buildable and open space



Observations

- Not designed well for people to get attracted
- Lack of accessibility
- No street lights.
- Lack of playing facilities.



Fig.3.26 Unused Open space

Interaction open spaces within the city center are the big issues since many open spaces were left undersigned and not inclusive for the people to get involved with. This also suggested by many people during the questionnaire survey to the people around the CBD as people suggested as follows.

23. Does the city center offer sufficient open space/parks?
142 responses

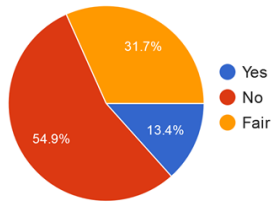


Fig.3.27 Responses on open space

This shows that the city center apart from having the open spaces but the defined and dedicated interaction spaces are still the major problem that is why more people suggesting to provide enough open spaces at the city center.

3.3.3.8 Urban magnets

The attractiveness and vibrancy of city center for many cities depend on the active urban magnets which include both recreational and business activities. These magnets help on thriving the center with an attractive environment which obviously will increase people in the CBD.



1. Post office
2. City council office
3. Revenue authority office(TRA)
4. Police station
5. Social hall
6. Bank
7. Bus stand
8. Market

Fig.3.28 CBD existing major magnets

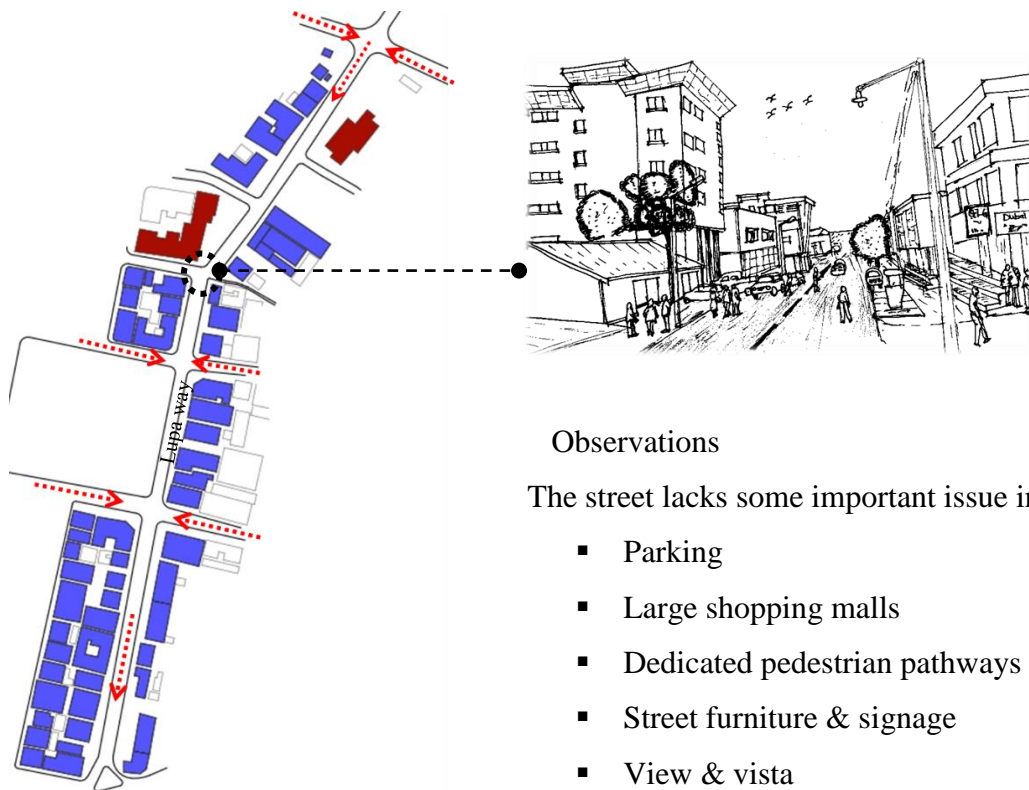
Observations

Those above are some magnets which routinely let people pay a visit to the CBD since most are the government services, but some other magnets which are further interactive and attractive were not designed and incorporated include;

- Parks
- Malls, museum & theatres
- Entertainment & recreational buildings

These important magnets are among the basic magnets that make the flow of people from a different place toward the center which helps to bring people together and make the place active and vibrant.

The street activities are also important on bringing the vibrancy in the city center, example the Lupa way is a major street at the CBD and is a commercial backbone street where all major shops and offices are along this street.



Observations

The street lacks some important issue including;

- Parking
- Large shopping malls
- Dedicated pedestrian pathways
- Street furniture & signage
- View & vista

Fig.3.29 Lupa way as Commercial Street

From the questionnaire survey, the study shows that many people around the CBD experience some serious problems regarding the social gathering spaces and space for recreational where also the government agreed the center being dormant and having luckiness of social community activities. The following are some evidence of surveyed questions for both professional and unprofessional and the results were as shown below.

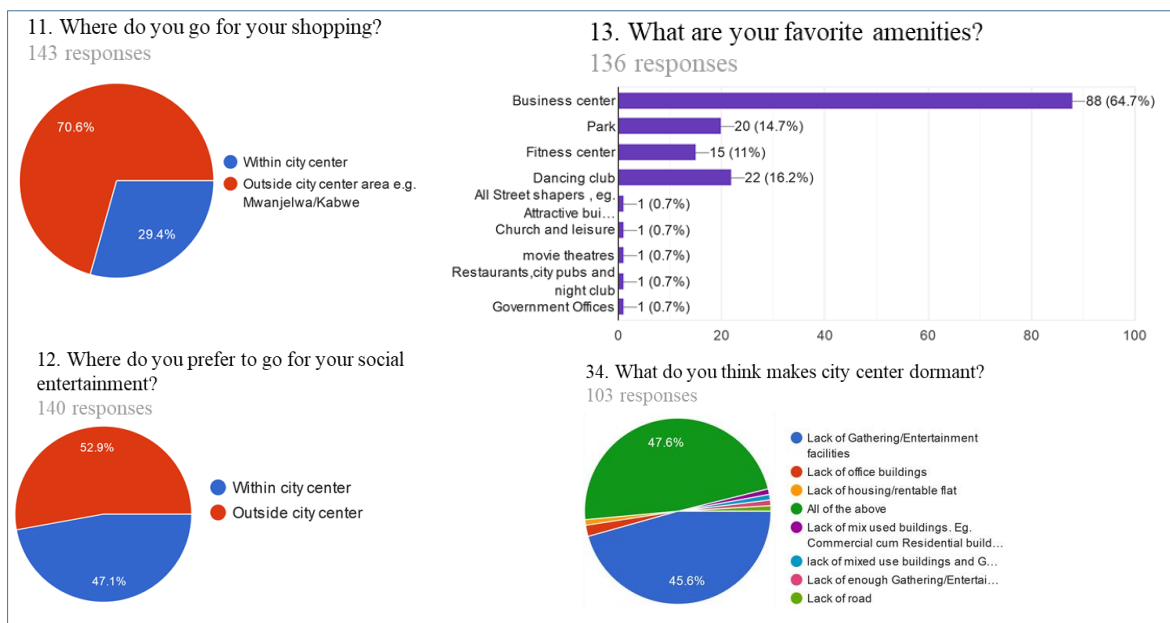


Fig.3.30 The response toward urban magnets

Furthermore, the survey went more to see what people thoughts about what it lucks and what are necessary to be included in design so as to improve the environment and achieve the problem of the city center being dormant.

33. If agreed, does it need improvements regarding urban design?
106 responses

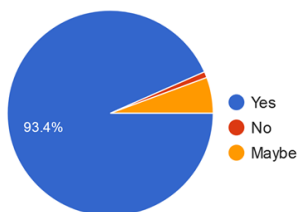


Fig.3.31 Responses on need for improvements

5. What is your opinion that should be done to make city center more active all day? 95 responses

These are people’s suggestions regarding the urban magnets that will help to boost livability in the city center

- Entertainment & leisure facilities
- Parking spaces
- Sports facilities
- Office buildings
- Shopping malls
- Infrastructure improvement
- Mixed use activities
- Improvement of Accessibility
- Hotel, restaurant & Guest house
- Museum & zoo park
- Pedestrian ways & streets
- Street artworks
- Provision of street furniture & signage
- Provision of landmarks

3.3.3.9 Vista, skyline & landmark

The good city is always emphasized by the character of the streets where orientation and arrangement of buildings are dramatically unveiled views and vistas within the center while the landmarks are there to strengthen the legibility of the center itself. But these all might be different when the planning and guidelines are not well observed during the implementation.



Fig.3.32 view and vistas

8. If yes, what image do you get while approaching or entering to the city center?
142 responses

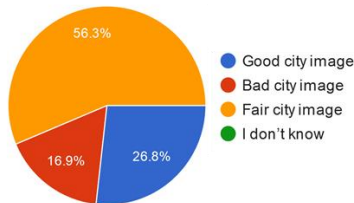


Fig.3.33 City image people’s view

Observations

- Views & landmarks are blocked with trees and some new structures which make the place awkward.
- The image within the city center is also affected by several factors including building orientation, unorganized activities and even new structures within the center. This leads to many people not understand or getting a good image while moving on the streets, and this was reviewed with a lot of people in the questionnaire on fig. 3.31

3.3.3.10 Historical buildings.

Every city center has its unique character usually from a different perspective and one of them is building style and character, this behavior must be maintained and observed in the center so as to retain and strengthen the existing character.



Fig.3.34 Historical buildings

Observations

- Some few old buildings are not well-recognized as they left without maintenance.

3.3.3.11 Park

Every city needs open spaces and green spaces so as the city to run while help the city to breathe and allow easy flow of movement which also gives space for interaction. This activities may help to make the space much involved and active.

The Mbeya city center has only one central park of which the park does not functionally work since many people in and around the center are not interested to use the space.



Fig.3.35 City park at the CBD

Observations

The park experience the following problems

- Lack of connectivity
- Lack of trees
- Lack of recreation facilities
- No lights
- Lack of furniture
- No involvement of Activities

This existing park also does not have visual and physical linkage between other nearby activities which could help to make the park recognized and involved by the people, so this situation cause the park to be empty and inactive.

3.3.3.12 Street furniture & signage

The city's streets need furnishing and signage in order to run, the place without enough signage will become difficult to move or orient around and eventually will make an unpleasant place.



Fig.3.36 Lupa way street appearance

Observations

The city center has some few,

- Street furniture
- Signage

Most of the streets within the city center have insufficient signage which losses the legibility of the place and left the streets undefined.

3.3.4 Land use structure.

3.3.4.1 The existing planned zones

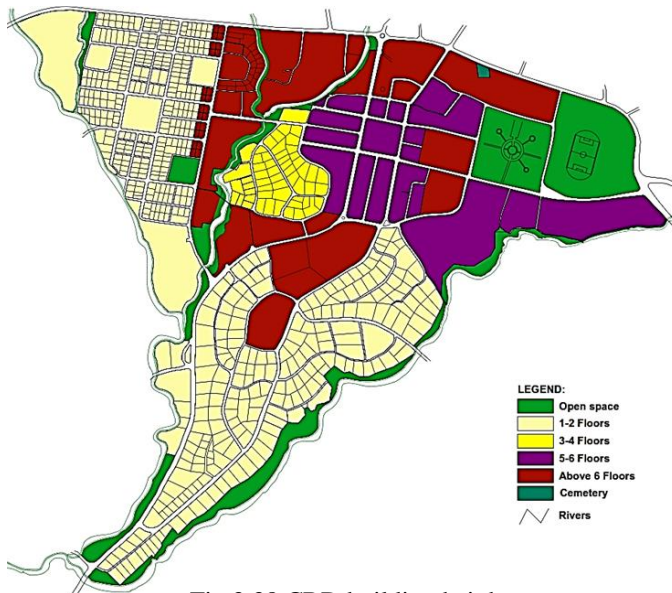
Mbeya municipal council prepared different zones depending on their land use character where six zones have been created and each zones have some development condition and limit.



1. Institutional activities (above 6 storeys)
2. Commercial cum residential (1 – 2 storeys)
3. Commercial activities (5 – 6 storeys)
4. Commercial cum residential (1 – 2 storeys)
5. Commercial activities (5 – 6 storeys)
Residential on western part (3 – 4 storey)
6. For Institutional activities (6 storey and above)

Fig.3.37 CBD planned zones

3.3.4.2 Building height



The building heights have been developed depends on land use, where from the core area the buildings were planned to be six to the above story and gradually decrease when moved away from the core area which defines the character of the CBD.

Fig.3.38 CBD building height

3.3.4.2 Building Ownership

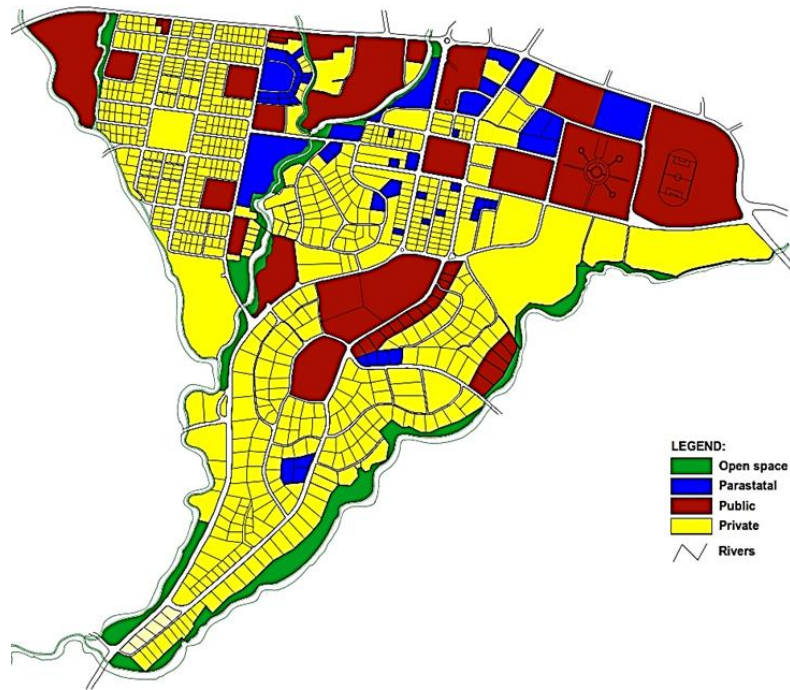


Fig.3.39 CBD building ownership

Most buildings in the city center are owned privately followed by government and parastatals, this will help during the intervention to see on how designing is going to affect the land ownership by which will require compensation and temporary accommodation especially during the implementation stage.

3.3.4.3 Building condition

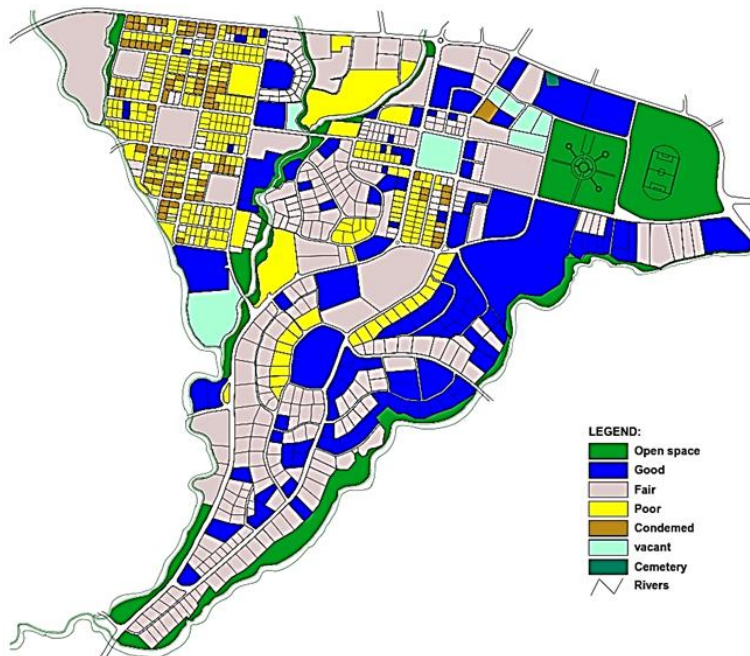


Fig.3.40 CBD building condition

Generally, many of buildings in the city center are old since were built a long time and most of them were built of mud bricks which they are not under maintenance especially at the west side and even at the center area. This condition will help to acquire space to intervene for whatever possible.

3.3.5 CBD general performance

3.3.5.1 Near catchment areas

The CBD is surrounded by wards as nearby catchment areas which are almost depend to CBD area for their daily needs.

- The people who are staying to these wards sometimes are forced to move outside the CBD to search for extra services which seem unavailable to the CBD.
- These all areas also depend on CBD for small business, like vending, and other services for generating their daily income.

These catchment areas will be the one which going to benefit first for both services and job opportunities created after rejuvenation, hence rejuvenation process will be a good tool to increase income for people who reside nearby the CBD see fig 3.38.

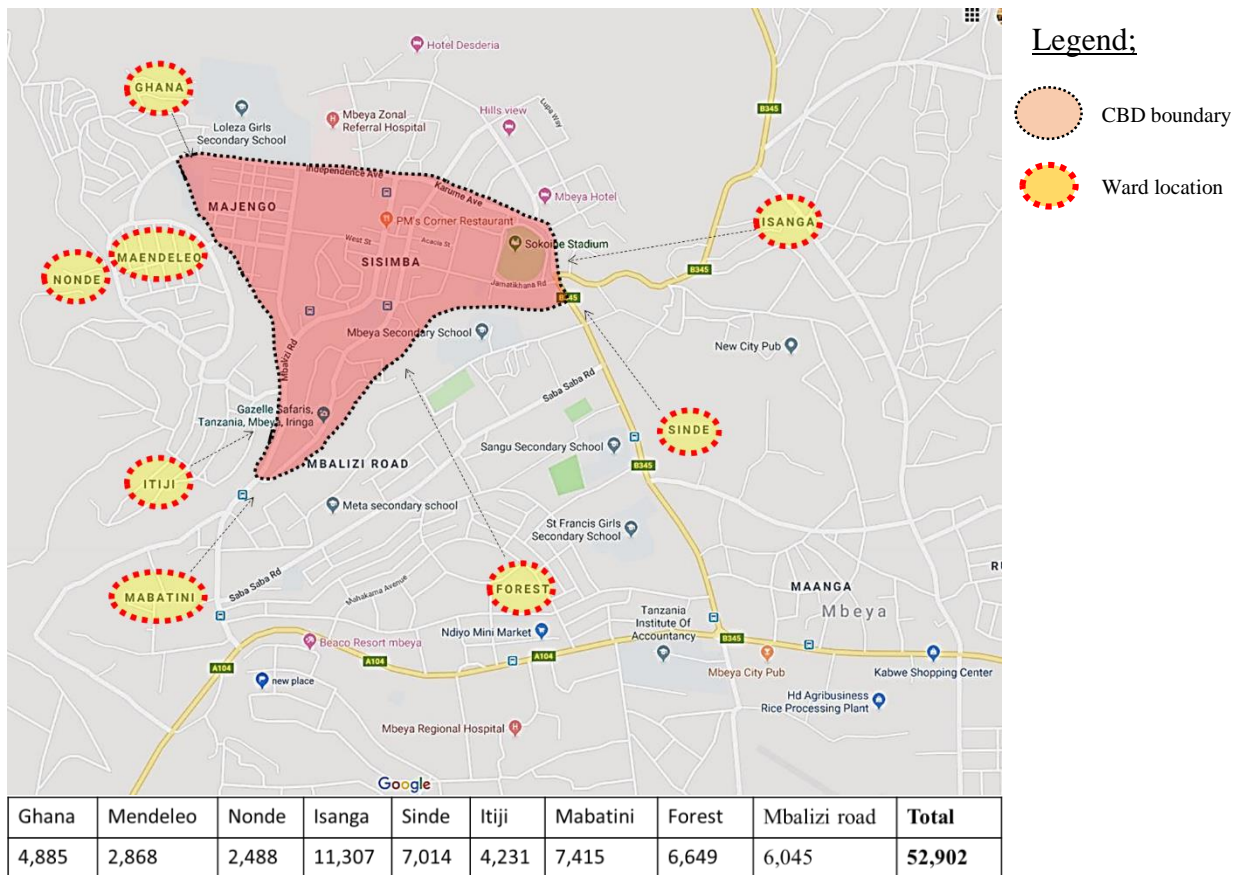


Fig.3.41 Catchment areas and population map

3.3.5.2 Night appearance & condition

The city center is almost empty at night time due to some shortage of social and business activities running out through this time (*Time taken, started 7:00pm. At Rupa way street*).



Fig.3.42 Streets night appearance

Observation;

- No live activities
- No enough street light
- No enough signs and digital advertisement holdings

3.3.5.3 Existing Daily activities versus time

The following are the performance of running activities versus time within the CBD, which shows how is affecting the livability, especially after government working hours.

S/n	Presence Magnet activities	Running time							
		6:00am Morning	7:30am	3:30pm Evening	04:00pm	06:00pm	12:00am Mid-night	24hrs	
1	Government service type I. Example, ▪ Post office ▪ Revenue authority ▪ Banks ▪ Regional & City council office ▪ Courts		→						
2	Government service type II Example, ▪ Hospital ▪ Police post ▪ Fire station		→						
3	Parastatal/ Private offices		→						
4	Bus terminal	→							
5	Market, min-market & shops		→						
6	Hotels, & Guest house	→							
7	Restaurants & Food stalls		→						

Table 3.3 Existing activities versus time
Source: Author 2019

3.3.5.4 Expected Daily activities versus time

The following are the expected activities which will thrive the CBD and extend the vibrancy more than what it exists.

S/n	Magnet activities to increase spending time & vibrancy to the CBD	Running time						
		6:00am Morning	7:30am	3:30pm Evening	04:00pm	06:00pm	12:00am Mid-night	24hrs
1	Shopping malls							
2	Street shops, pedestrian mall & kiosks							
3	Park & Gardens							
4	Affordable office buildings							
5	Movie theatres & Multipurpose halls							
6	Dancing/Nights clubs							
7	Fitness centers							
8	Restaurants & Food stalls							
9	On street & off street parking							

Table 3.4 Expected activities versus time
Source: Author 2019

3.3.5.5 Dedicated price rate for land value in Mbeya city center,

S/n	Area	Use	Min. price(Tsh.)/sqm	USD/sqm	Max.price(Tsh.)/sqm	USD/ sqm
1	CBD	Residential	200,000	85.31	500,000	213.28
2		Com/Residential	220,000	93.84	550,000	234.61
3		Commercial	280,000	119.44	700,000	298.59
4		Institution	200,000	85.31	500,000	213.28
5		Service trade	140,000	59.72	420,000	179.16

Table 3.5 CBD Land value
Source: Tanzania-CBD, 2018

3.3.6 Need for CBD Rejuvenation.

In 2003 Mbeya municipal council prepared a master plan with the aim of developing the city center for seek of checking the physical, social and economic deterioration in order to create a livable environment (Mbeya municipal council, 2003).

The master plan was made with the force of rapid urban changes and the condition of existing buildings within the CBD, where most buildings condition are alarming of which the surveyed shows 85% the buildings are not structurally sound that need major replacement.

In 2018 the City municipal council called for investors on City park development regarding sports and recreational activities that to be offered.

These all were done in the level of urban planning, so there are need to go for urban design where the livability and economy will be achieved.

3.3.6.1 Tourism scenario in the southern part.

In southern Tanzania the tourism sector attracts more than a million visitors per year and contribute more than 13% of gross domestic product (GDP).

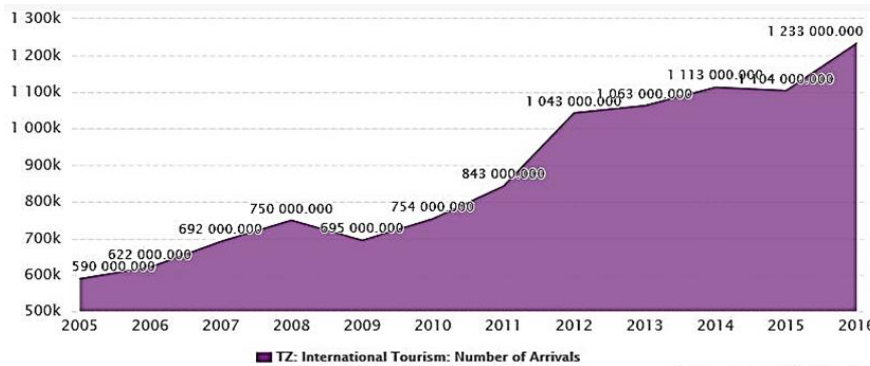


Table 3.6 Number of Tourist in Southern

This means the city needs some good environment to welcome tourists that would enjoy while moving around the center, thus comes to make better and attractive place which may also increase capital within the center.

3.3.6.2 Economic scenario of the city

Major economic and employment activities in the CBD include Industrial, Commercial, Trade, Market Agricultural and livestock activities. The study shows that 37.1% of households have at least one family member engaged in business activities.

The data shows that 2.9% of interviewed households obtained an income of 76 USD while 20% earn income by formal employment ranging (76-530 USD). 5.7% Paid more than 750USD. And other more people earn income from business activities with growth profit ranging from 227-455USD per month (By Tanzania strategic cities project – Mbeya city, 2009)

These all show the importance of how the people in and around the CBD they can stabilize more their income status and how they can manage to live in the city.

3.3.7 Conclusion of Case application

- **Route & pathways**

- 1) Pedestrian walkways should be well defined & enhanced
- 2) Street light, signage & street furniture are to be enforced to articulate & enhance the streets.
- 3) Shading for pedestrian should be provided.
- 4) On-street parking should be formally defined.
- 5) Mixed use activities to be designed & incorporated along the street.

Nodes should be emphasized with mixed use activities & give priority to pedestrians walk.

- **People's activities.**

- 1) Different people's mixed use activities should be provided.
- 2) Streets & space around the CBD should favor & encourage movement of pedestrians.
- 3) Control of unorganized activities.

- **Built & open space relationship.**

- 1) More open space should be provided & well designed to attract people.
- 2) Connectivity & relationship between major activities and open spaces.

- **Urban magnets**

- 1) Accessibility & connectivity between magnets should be emphasized & given more priority to pedestrian movement.
- 2) Strong magnets like, shopping malls, parks & other social facilities should be provided & emphasized.

- **Form, shape & pattern**

- 1) There must be a control & restriction on new construction to maintain streetscape.

- **Vista, skyline & landmarks**

- 1) Since many roads are straight, vista must be enhanced by new design.
- 2) Landmarks should be emphasized and easily recognized within the CBD.

- **Park**

- 1) The existing park needs to be redesigned to connect & attract more people & be active all the time.

- **Street furniture & signage**

- 2) Provision of street furniture and signage, while existing signage needs to be emphasized.

- **Historical buildings.**

- 3) Historical buildings which seem to be stable should be maintained and well conserved to maintain the character and identity of the city.

3.3.8 Design guidelines

- **Route & Pathways**

- ✓ To widen the roads by providing amenities for pedestrians so it can enhance movement especially (Karume, Rupa and Mbalizi road)
- ✓ To develop the sidewalk (pedestrian walk) by providing elements that are attractive to the pedestrian (include stores with a display window, landscaped open space, pedestrian levels & guides).

- ✓ To provide a pedestrian mall to enhance the use of the park and mall (Post St. will be transformed into a pedestrian mall)
- ✓ To provide adequate road facilities (including Lighting, signage and street furniture) to enhance outdoor activities.

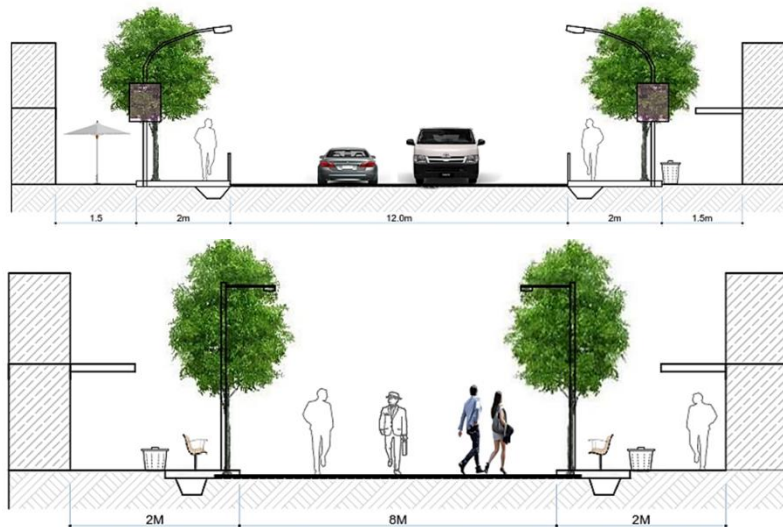


Fig.3.43 Pedestrian mall road section
Source: Author, 2019

- ✓ To plant new trees & provide arcade along the streets to enhance the pedestrian experience
- ✓ To provide adequate supportive facilities for users include on-street parking, off-street parking, bus stops and street vendors.

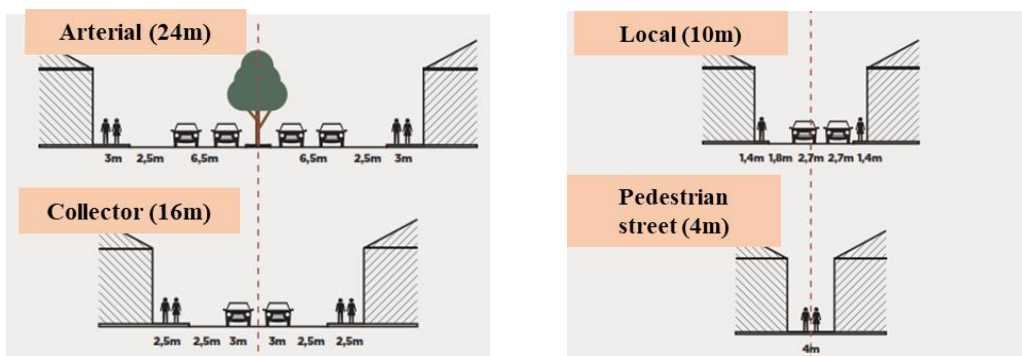


Fig.3.44 Road type and size
Source: Mbeya urban planning guides

○ **Node**

- ✓ To develop and incorporate the nodes with mixed-use activities & provide adequate space for pedestrian movement which will be comfortable for the user group.
- ✓ To provide the nodes with all required signage, lights and protective facilities for users.

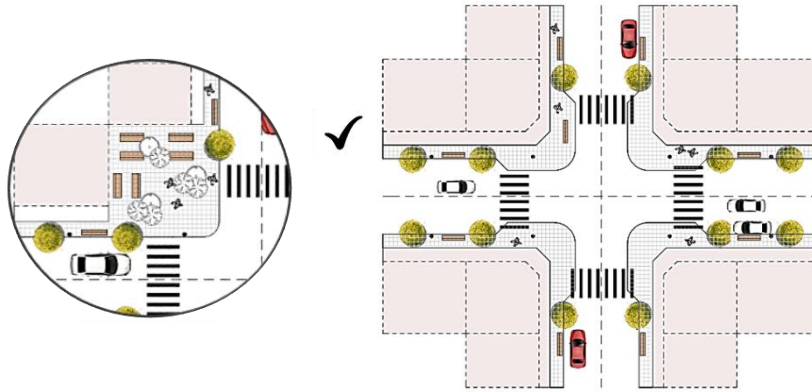


Fig.3.45 Node design
Source: Author

○ **Form, shape & pattern**

- ✓ To develop & maintain rectangular form and elements for existing commercial and office buildings
- ✓ To maintain a building scale & streetscape that can be understood by pedestrians.



Fig.3.46 Parapet height
Source: Author

○ **People's activities**

- ✓ To incorporate mixed-use activities in day & night time that will attract people.
- ✓ To strengthen pedestrian walkway towards different work areas.

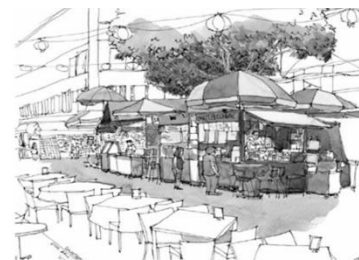


Fig.3.47 Mixed use people's activities
Source: Author

○ **Built & open space relationship**

- ✓ To consider the ratio between built & open space, that open space will act as a catalyst to activeness.
- ✓ To create urban plazas in the open spaces that can create attraction & enjoyment.
- ✓ To create & strengthen accessibility towards undeveloped open space to maximize the potential for their activeness

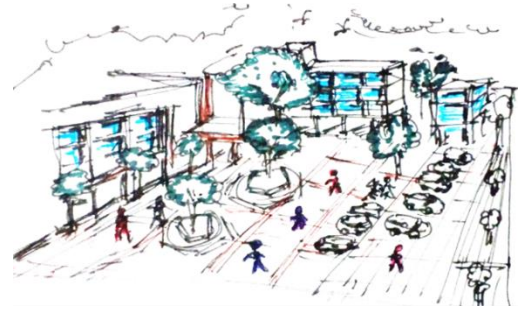
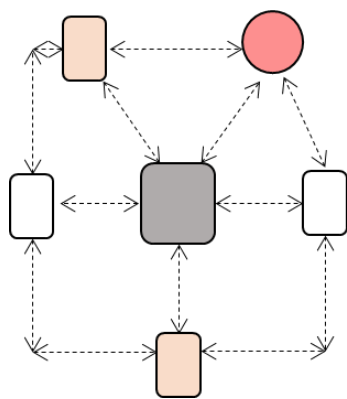


Fig.3.48 Urban plaza
Source: Author

○ **Urban magnets**

- ✓ To design and provide mixed-use activities (include parks, malls, theatre, office buildings, apartments, & halls) to enhance the activeness
- ✓ To establish activities that go beyond work time(including night clubs, restaurants, street stalls, fitness centers, hotel & guest house, plazas) which will attract people after works.
- ✓ To enhance pedestrian & vehicle connectivity among the magnets
- ✓ To maintain the proximity of the services & activities
- ✓ To provide adequate underground & multi-story parking, & ground floor or front part should incorporate retail or office to minimize visual impacts; visual buffer can be used for surface parking.



Connecting new & existing magnets and having visual linkage between them

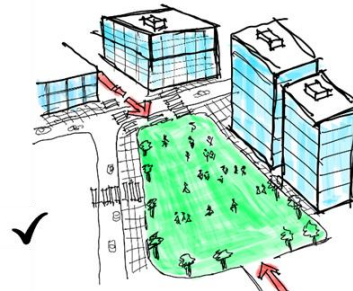


Fig.3.49 Urban magnets and connection
Source: Author

○ **Vista, skyline & landmark**

- ✓ To minimize the visual impact created by the unplanted trees and other structures.
- ✓ To strengthen the existing and create new landmark, views & vistas wherever applicable.



Fig.3.50 street views and vistas
Source: Author

○ **Historical buildings**

- ✓ To maintain and conserve the existing historical buildings to enhance the value of the buildings.

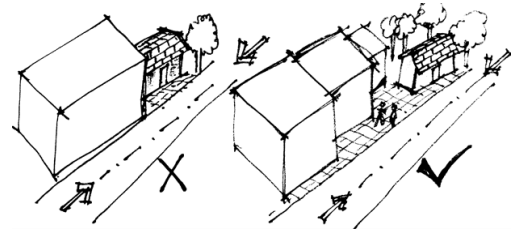


Fig.3.51 Protection of historical structure
Source: Author

○ **Parks**

- ✓ To design high quality park with necessary facilities to attract people.
- ✓ To establish & enhance the connectivity towards other area and incorporate with activities includes retail shops (City Park near Sokoine stadium)



Fig.3.52 City park connections
Source: Author

○ **Street furniture & signage**

- ✓ To provide street furniture in public open space to enhance the pedestrian experience
- ✓ To design & provide signage which will be visible without being an obstacles.



Fig.3.53 Provision of street furniture
Source: Winter and Company, 2000

3.3.9 Identification of intervened site

From the case application study which is CBD area, the important sites have been selected which have to be intervened for the new design implementation which will boost the life within the center and the city as a whole.

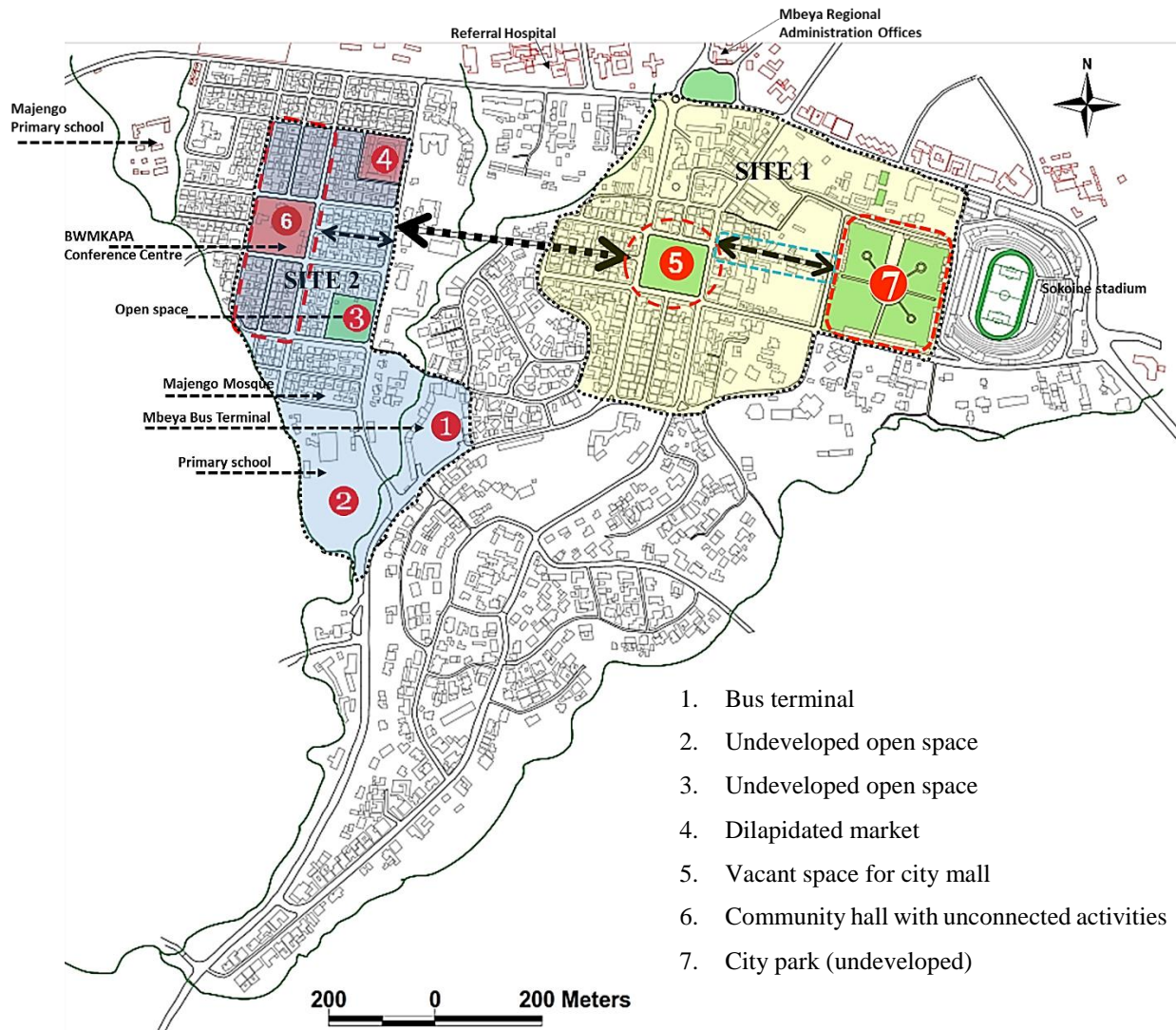


Fig.3.54 Intervened areas master plan

Intervened site one & Design proposal

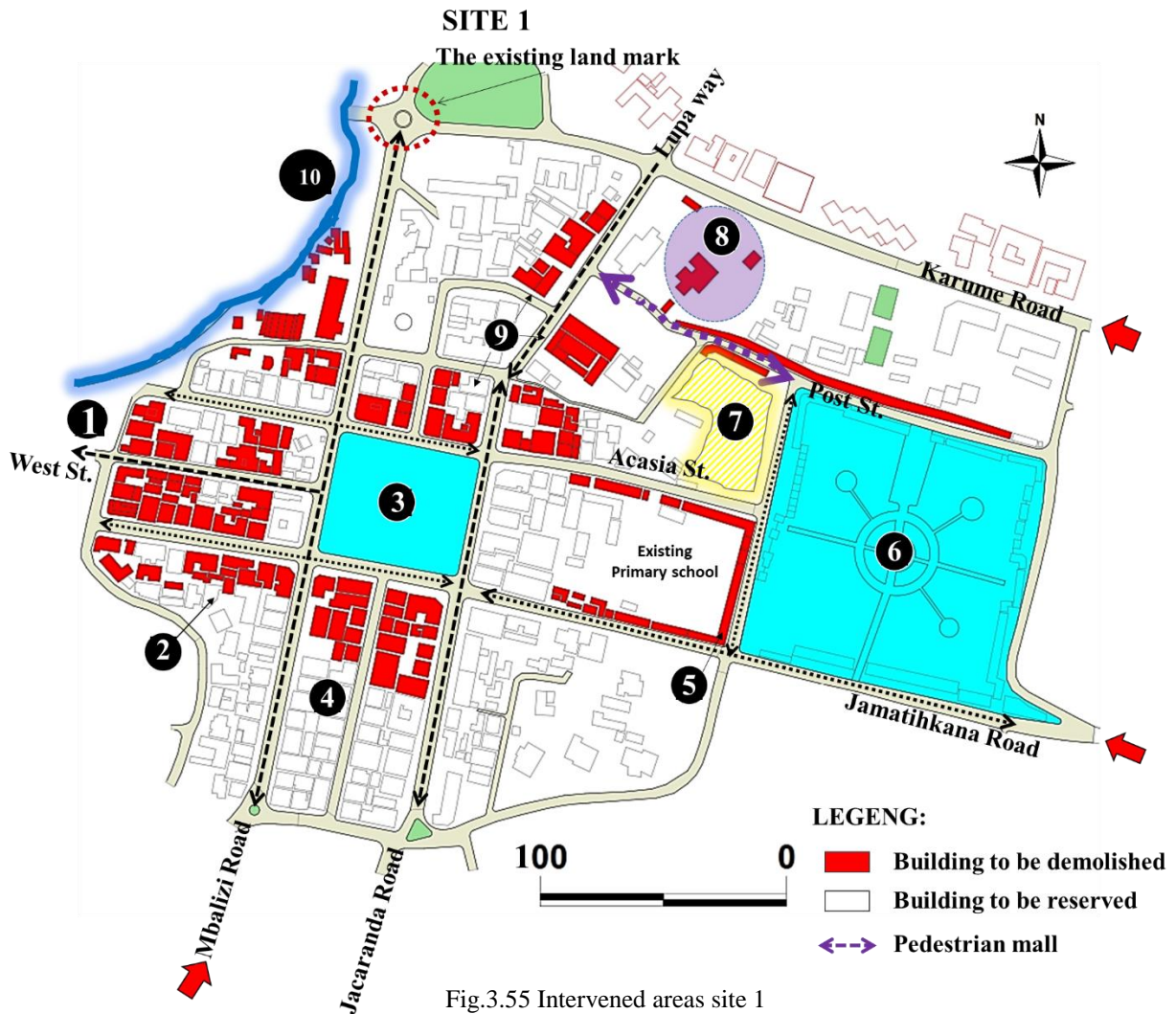


Fig.3.55 Intervened areas site 1

Activities to be included.

- One big shopping mall
- At least 2 multipurpose halls
- At least 2 moving theatres
- At least 2 dancing clubs
- Fitness center
- Enough parking
- One big park & gardens
- Enough retail shops
- Enough office buildings
- Affordable apartments

1. Commercial

- 6 storied buildings which will serve;
- Retail shops at ground floor
 - Offices for the other floors.

3. Shopping mall.

- 5 storied buildings which will serve;
- Parking at basement
 - Stores, shops etc.
 - Movie Theaters
 - Restaurants, etc.

2. Commercial/residential

- 6 storied buildings which will serve;
- Retail shops at ground floor
 - Apartment for the other floors.

4. Commercial

- 6 storied buildings which will serve;
- Retail shops at ground floor
 - Offices for the other floors.

5. Commercial/retail shops

2 storied buildings which will serve;

- Retail shops, Public toilets at ground and first floor.

7. Multi story parking

The parking will serve both park and other office & commercial buildings

9. Commercial

6 storied buildings which will serve;

- Retail shops at ground floor
- Offices for the other floors.

10. Recreation zones

The area will provide a good garden near river channel which will be connected to a new proposed city museum.

6. City Park

Park with surrounded mixed use activities.

- Park will be connected with pedestrian mall toward the mall and Commercial Street in Rupa way.

8. Clubs zones

2 storied buildings which will serve;

- Night dancing club at basement and other club at ground.
- Parking on surface level which will be buffered with trees.
- Restaurants & bars at first floor.

Intervened site two & Design proposal

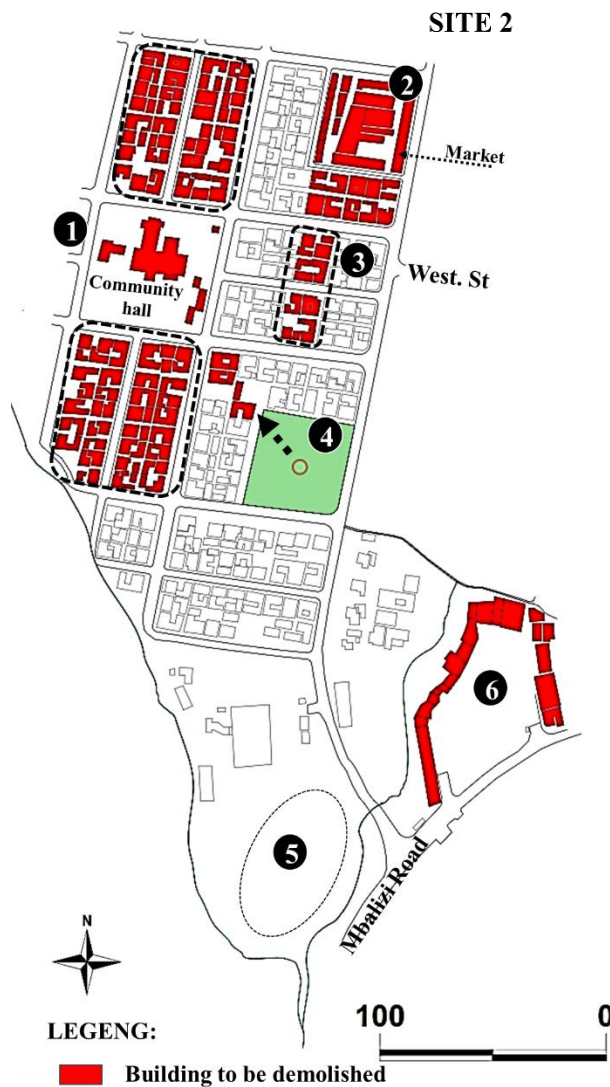


Fig.3.56 Intervened areas site 2

1). 1.18 Ha for Halls & 2.76Ha for Apartments

Action to be taken

- To redevelop the area by providing enough social halls, apartment, parking and connectivity among the activities
- To define pedestrian ways with lights and signage.

2). 0.69 Ha for MARKET

Action to be taken

- To redevelop a good market by giving necessary facilities.

3). To be demolished for interaction space

Action to be taken

- The buildings should be demolished and accommodated to a new proposed apartments and the space left will be developed for garden (interaction space).

4). Undeveloped open space

Action to be taken

- To rejuvenate the area by designing interaction open space which will be connected to nearby activities.

5). 1.63 Ha (Vacant space (owned by government

Action to be taken

- Upper part of this area should be dedicated for apartment which will be constructed to evacuate dwellers of destroyed houses from number 1, which will be constructed in phase wise.
- The lower part will be dedicated for garden (accessible garden).

5). 1.46 Ha (Bus Terminal)

Action to be taken

- To redevelop a space by making new better bus terminal with necessary facilities
- To separate min-bus from regional buses, which will be accommodated outside the terminal, new proposed bus stop will accommodate the mini-buses near to bus terminal.

Road networks & nodes

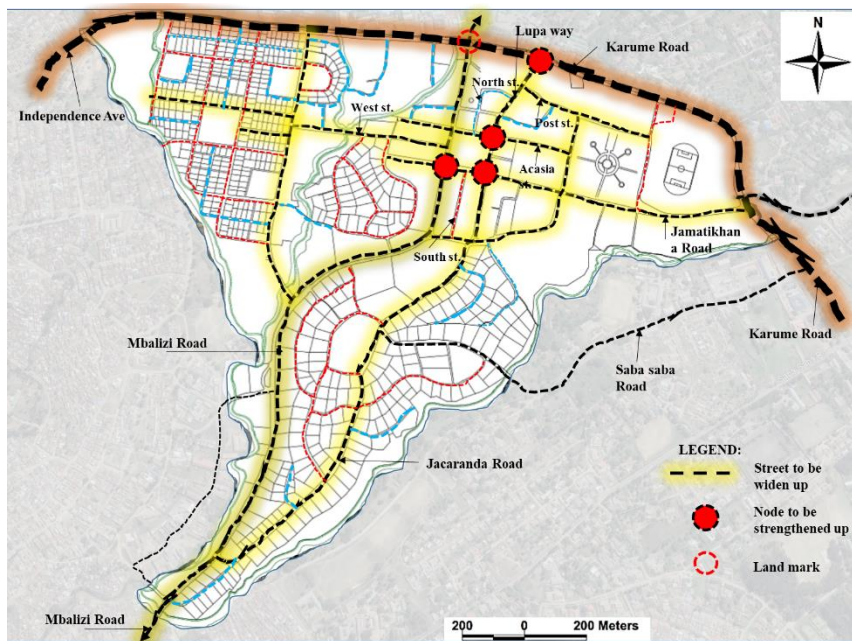


Fig.3.57 Roads networks to be maintained

Arterial road (Karume to Independence road)

- ✓ The road needs to be improved to provide necessary facilities includes;

Wide road to a recommended size, Pedestrian walk-ways, Guide rail wherever possible, Shading Trees, Street lights, Signage, Street furniture

- ✓ The existing nodes need to be emphasized with vibrant mixed use activities.

Buses route and stoppages

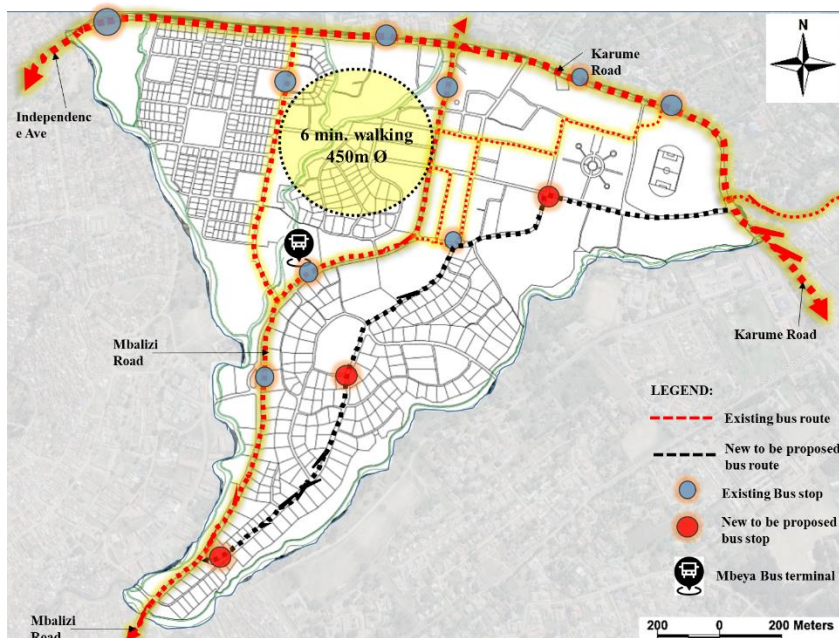


Fig.3.58 New bus route and stoppages

Route

- ✓ To support the existing bus routes, a new route will be proposed on southern part.

Which will serve the buses from Mwanjelwa to Mbalizi via CBD on Jacaranda road.

The new stoppage will be introduced regarding with distance & population and Passenger shelters to be made to ensure safety.

CHAPTER 4: DESIGN IMPLEMENTATION

CHAPTER 5: CONCLUSION

CHAPTER 5: Conclusion

In this chapter, the issues have been addressed particularly the urban issue which caused the CBD' dormant, furthermore, it has expressed the total contributions toward the work and giving the future application based in the area of reactivating the city center.

5.1 Issues

1. Lack of major potential urban activities after the government working hours
2. Insufficient mixed-use activities along the major streets within the central business district
3. Poor connectivity among the existing commercial and leisurely activities
4. Lack of supportive facilities and services along the streets and on recreational areas
5. Scarcity of land for new development activities for a large scale project like this needs enough land, therefore the land should be acquired by the government of either through funding and/or replacing of affected dwellers
6. Stakeholders, most large project is an issue especially of developing country like Tanzania, consequently different stakeholder may be involved including, government, NGO's and/or even donors.

5.2 Contribution

The main focus of this thesis basically was focused in the,

1. Studying the CBD and its urban qualities which reveals the unique character of the CBD itself
2. Identifying the problems which rendered the CBD from being dormant compared to other towns
3. Investigating different possible activities that uplift development and attraction within the CBD at the same time steadying the capital income of the people and city as a whole
4. Designing a uniquely inclusive environment that attracts people and gives more sense nearly the place
5. Creating the environment that motivates people in and around the CBD while increasing spending time to the CBD

6. Identifying the undersigned open space within the CBD and developing in a better use for the people
7. Incorporating mixed-use activities with strong connectivity among the urban magnets
8. Developing a strategic framework to rejuvenate the area for improving the lives of people

5.3 Future application

This thesis has been done with the idea of studying the CBD and its urban qualities to identify the problems toward CBD's dormant so as to enrich development and attraction within and adjacent the CBD. Furthermore, will help to improve city's economic standard in the same way small projects have been done trying to improve the problems within the CBD but most were based on some infrastructure and none of them trying to thrive the CBD as a whole. In this matter, there is a great future application in making the CBD more unique and livable.

Due to the limitation of time gaps have been left for the future application;

1. The methodology and/or the process of studying the CBD and its urban qualities problems from an urban design perspective can be further studied to understand the urban growing impact towards activeness especially to the inner city and immediate surroundings.
2. The way the model of improvement is constructed in this thesis could be further improved or changed related to people's demand in order to create a better environment for the future and not only to the people but also the center as a whole.

Moreover, in this study more efforts have been made to make some design strategies and guidelines as a framework to develop the area. The other interesting part has also left which includes both environmental impact issues, connectivity among the surrounding towns and urban property and regeneration all these can be a field to take over.

Mbeya city considered as city which leading economically in southern regions but still has some several urban problem issues, in this thesis more efforts have been taken and implemented to improve the urban issues that fill the gap and eventually make a city center as a standard center, vibrant place and lively center where generally improve city's economically, socially and environmentally for better life.

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APPENDIX

A questionnaire

1. Your name.....
2. What is your gender?
 - Male
 - Female
3. What is your age range?
 - Below 18
 - 18-24
 - 25-35
 - 36-45
 - 46-55
 - 56 and above
4. What is your education level?
 - Primary school Education
 - Ordinary Secondary Education
 - Advanced Secondary Education
 - Professional/Vocational Certificate
 - Diploma
 - Bachelor Degree
 - Masters Degree
 - PhD
 - Others (Please mention)
5. Where do you live?
 - City center area
 - Outside City center area
6. Have you ever been to Mbeya city center?
 - Yes
 - No
 - Maybe
7. If yes, what image do you get while approaching or entering to the city center?
 - Good city image
 - Bad city image
 - Fair city image
 - I don't know
8. What makes you visit the city center regularly?
 - For Residence
 - For Works
 - For Shopping
 - For relaxing/Enjoyment
 - None of the above (Please mention)

9. What time do you like to visit the city center?
 - Morning
 - Afternoon
 - Evening
 - Night
 - Regularly
10. Where do you go for your shopping?
 - City center area
 - Outside city center area e.g. Mwanjelwa/Kabwe
11. Where do you prefer to go for your social entertainment?
 - City center area
 - Other area within Mbeya Region
12. What are your favorite amenities?
 - Business center
 - Park
 - Fitness center
 - Dancing club
 - None of the above, please mention.
13. Does the city center offer enough public transport?
 - Yes
 - No
 - Maybe
14. What kind of transport do you usually use to visit the city center?
 - Public transport
 - Private transport
 - By bicycle
 - By foot
15. Does the city center offer enough pedestrians walkways?
 - Yes
 - No
16. Is the city center safe for travel?
 - Yes
 - No
 - Maybe
17. What is the security condition for pedestrian movement within the corridors of city center?
 - Good
 - Fair
 - Bad
18. How do you feel while walking or roaming around city center?
 - Enjoying
 - Boring
 - Normal, neither enjoying nor boring.

19. Does the city center offer shopping malls?
 - Yes
 - No
 - I don't know
20. What is the availability of restaurants and street fast food?
 - Sufficient available
 - Available
 - Not available
 - Fair
21. Does the city center offer enough Hotels, Guest houses and Hostels?
 - Yes
 - No
 - Fair
22. Does the city center offer sufficient open space/parks?
 - Yes
 - No
 - Fair
23. Does the city center offer enough office buildings?
 - Yes
 - No
 - Fair
24. What is the availability of affordable housing within or near the city center?
 - Enough available
 - Fair available
 - Less available
 - Very less available
25. Is the city center congested?
 - Yes
 - No
 - Moderate
26. What is the condition of city center after government working hours?
 - The center is quiet
 - The center is busy
 - I don't know
27. What time do you think the city is vibrant?
 - Morning
 - Afternoon
 - Night
 - Not vibrant at all
28. Do you feel idle while visiting the city center during evening or weekends?
 - Yes
 - No
 - Maybe

29. Does the city center attract tourists?

- Yes
- No
- Maybe

30. What do you think is missing in city center that should be present?

Mention if possible.

For Professional, Like Architects, Urban Designers and Planners etc.

- i. Do you reside at Mbeya city center?
 - Yes
 - No
- ii. Do you agree that the city center is dormant especially after government working hours?
 - Agree
 - Disagree
 - I don't know
- iii. If agreed, does it needs improvements regarding urban design?
 - Yes
 - NO
 - Maybe
- iv. What do you think makes city center dormant?
 - Lack of Gathering/Entertainment facilities
 - Lack of office buildings
 - Lack of housing
 - All of the above
 - What else do you think from above (Please Mention?)
- v. Do you find city center as good enough for Administration, Business and other commercial activities?
 - Yes
 - No
 - Maybe
- vi. What is your opinion that should be done to make city center more active all day?
Please mention any
- vii. Can you rate the city center in terms of beauty, City image and function out of 10?

REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA.

Design Implementation

Master Plan



Proposed Landmark which defines an axis from shopping mall at Mbalizi road



Bird eye view site 1



Proposed Landmark at Lupa way which increases legibility



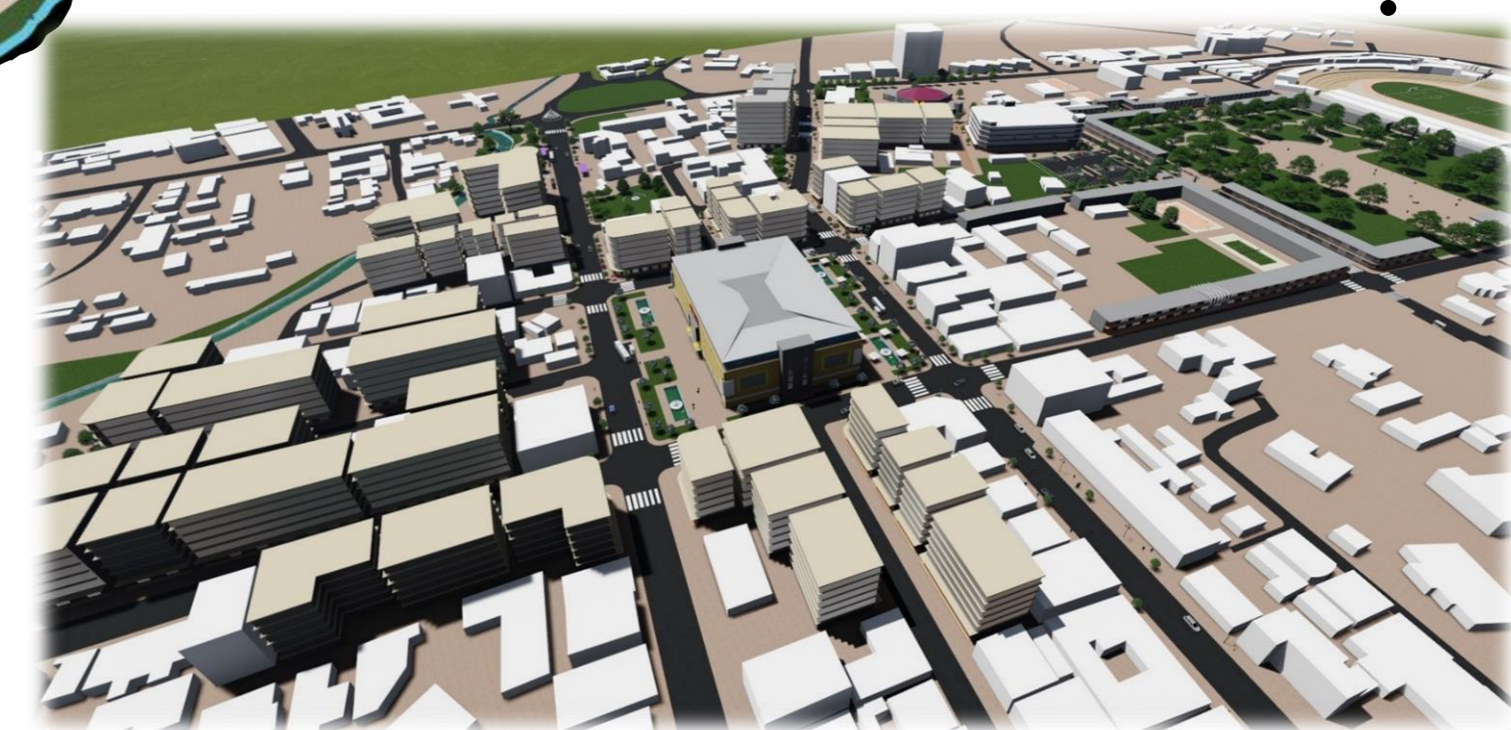
SITE 1

SITE 2

N1

N2

Bird eye view site 2

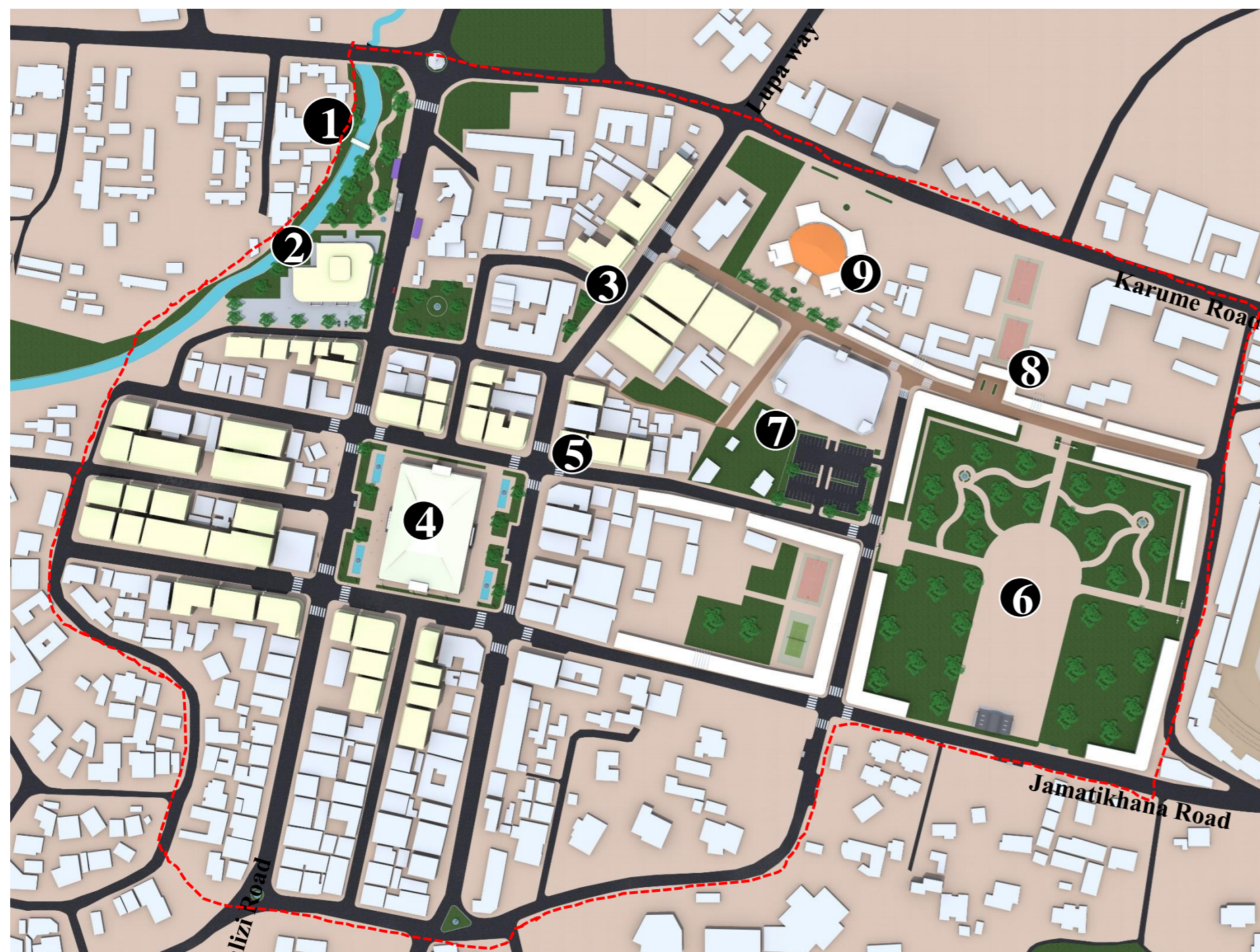


SCALE 1: 3000



REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA.

Master Plan (SITE 1)



SCALE 1: 1500

LEGEND:

1. Garden 1 near Proposed Museum
2. Museum
3. Interaction zone and commercial buildings
4. Mall
5. Commercial buildings
6. City Park
7. Parking
8. Pedestrian mall/street
9. Social clubs

✓ Gardens



Existing situation where open spaces are of no use



Unused open spaces developed as active public realm



Proposed new Museum which will be connected to Garden



Public amenities and furniture have been set to facilitate the pedestrians and tall hotel buildings at south part act as landmark and give good view at the garden

✓ Activities



Proposed interaction space between different activities And providing public amenities.



Existing situation at Lupa way.

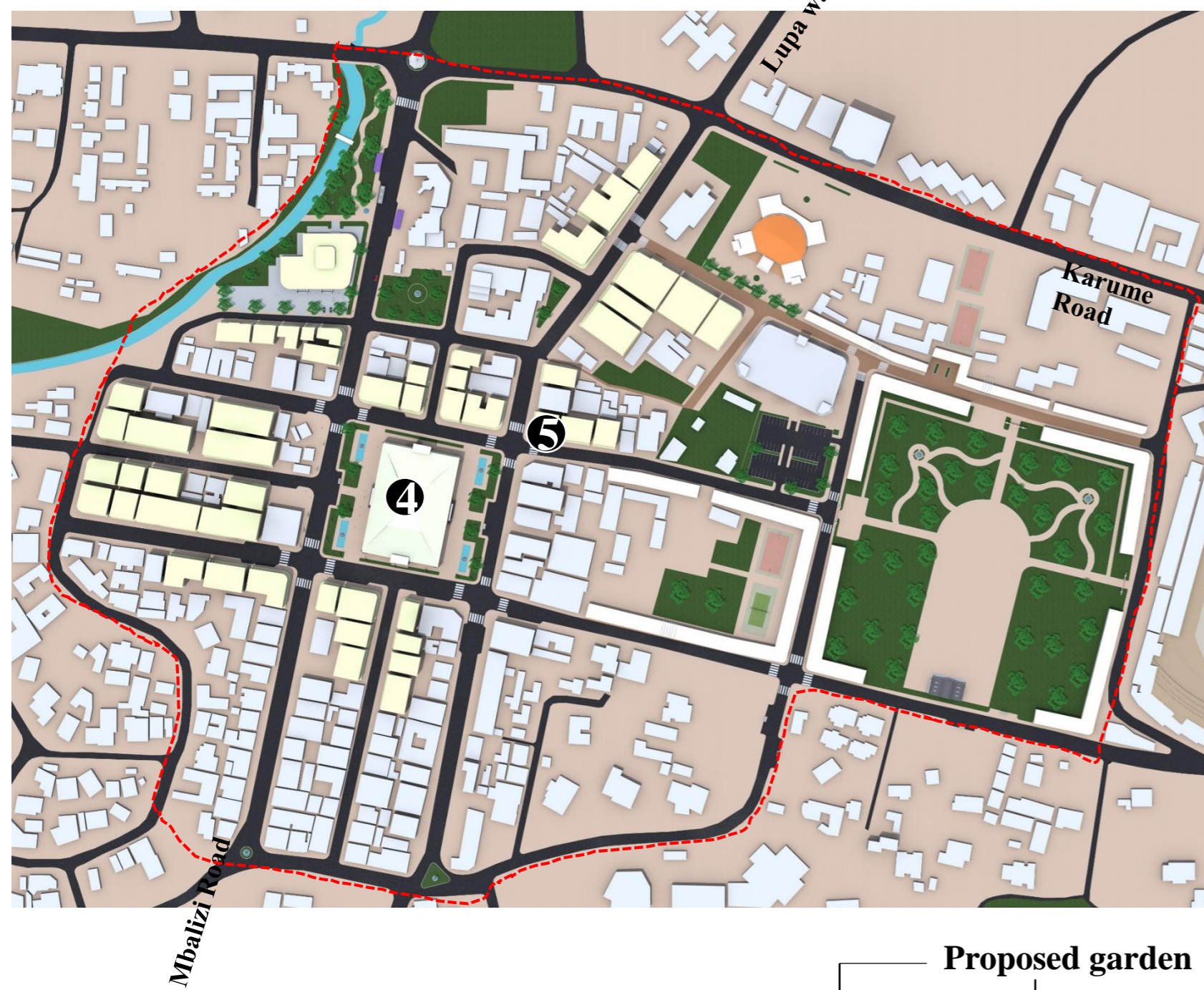


Proposed Commercial/office buildings at Lupa way, where ground floor will accommodate retail shops and upper floors will be for offices, the buildings set which provide good views at the end of the street.

REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA.

□ Design Implementation

Master Plan (SITE 1)



Existing situation toward vacant space at Mbalizi Road.

✓ Urban magnets



A proposed shopping mall surrounded by good open spaces with planted trees, seating, water bodies and other public amenities to facilitate users.



Connecting visually and physically between mall, garden at north and park at west which will increase flow of people toward the CBD



Before - at the vacant space left for City mall.

Land mark which will be clearly observed

Proposed 6 storey commercial buildings

Well defined roads with pedestrians ways with all public amenities



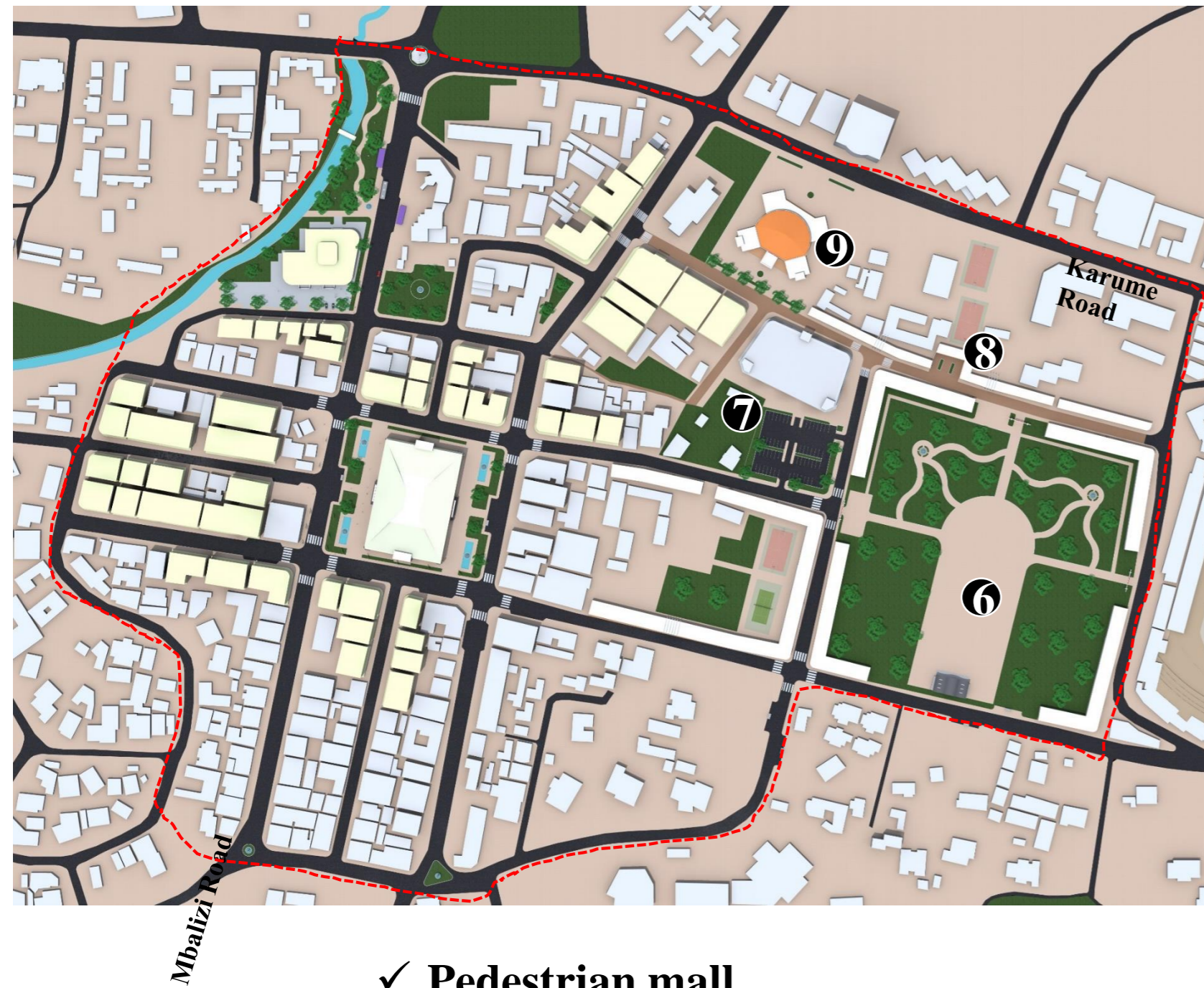
Bird eye view showing proposed active activities



The mall is surrounded by commercial buildings to attract investors and other business man at the center.

REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA.

Master Plan (SITE 1)



Existing situation at City park

- 6. City Park
- 7. Parking
- 8. Pedestrian mall/street
- 9. Social clubs



A proposed park will be connected to pedestrian mall, social clubs and parking will increase attractiveness and give vibrancy

✓ Magnets



Before



View of the Park from North side of pedestrian mall.

✓ Pedestrian mall



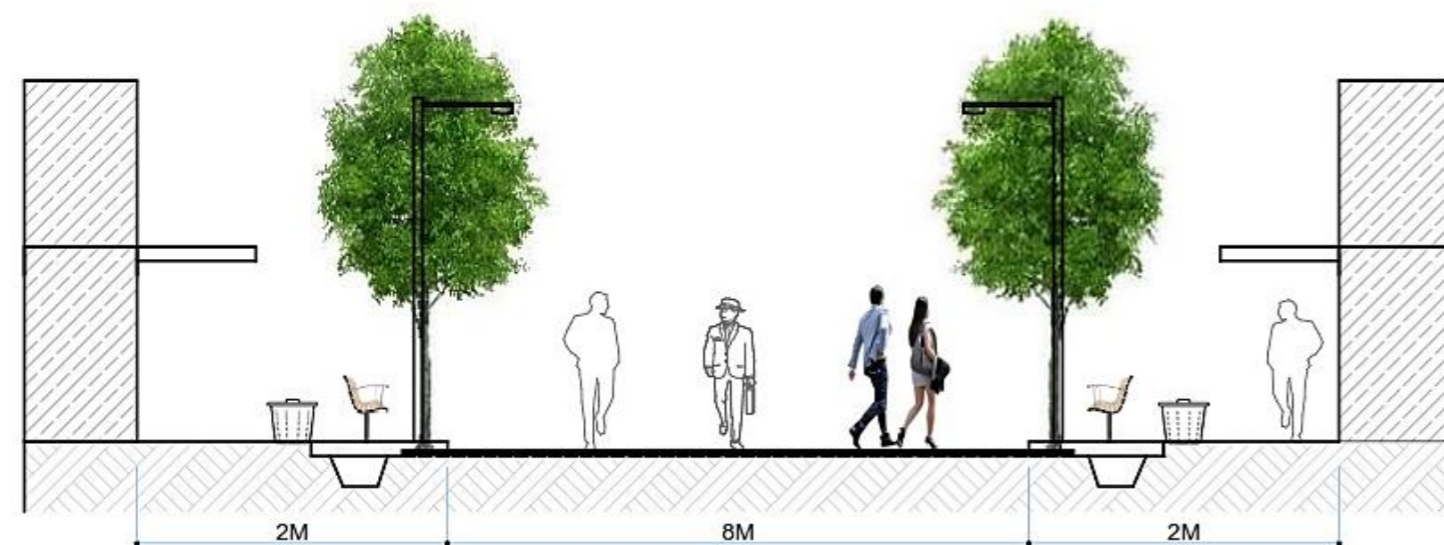
A proposed pedestrian mall/street at Post. St which will attract investors and customers from different areas and hence will increase the economy status



A proposed social club which will be accessible and connected to other activities



A proposed on surface and multi-storey parking



Section at Pedestrian street

REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA.

Master Plan (SITE 2)



LEGEND:

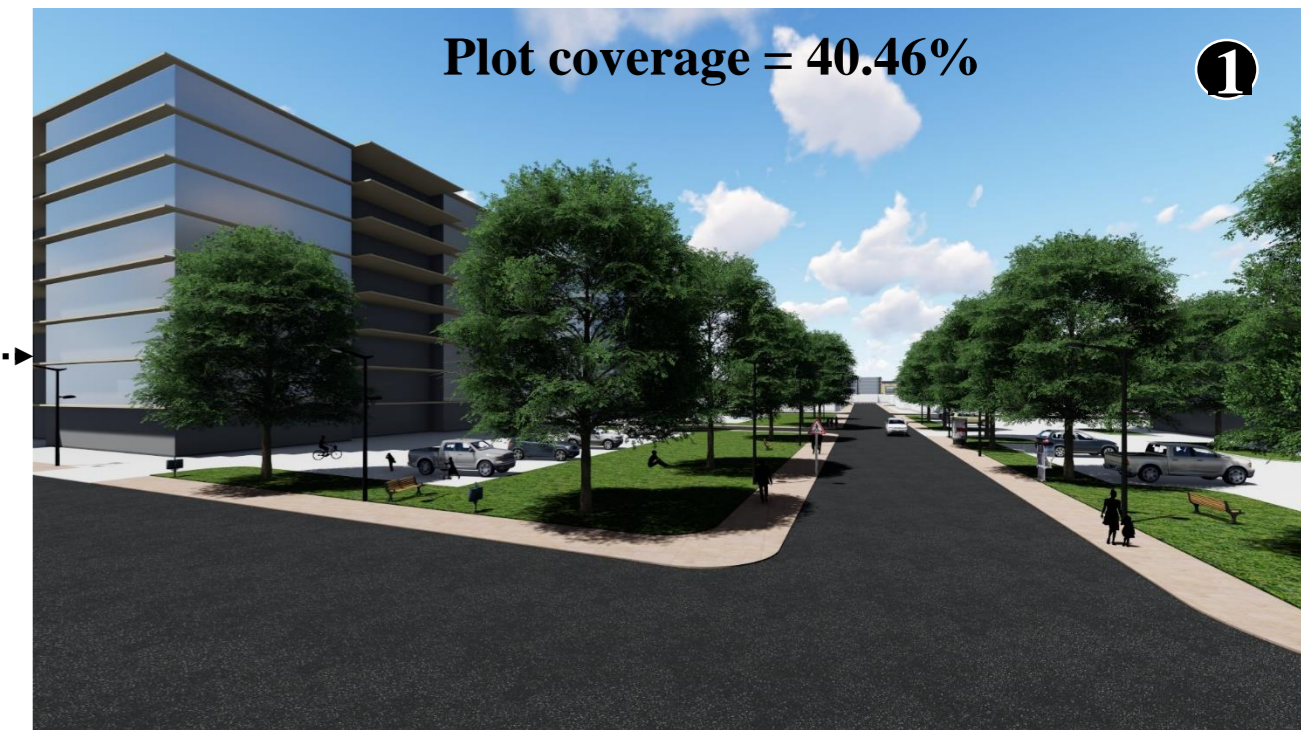
- 1. Apartments
- 2. Community halls
- 3. Market
- 4. Mini-Bus stand
- 5. Park
- 6. Garden
- 7. Bus Terminal



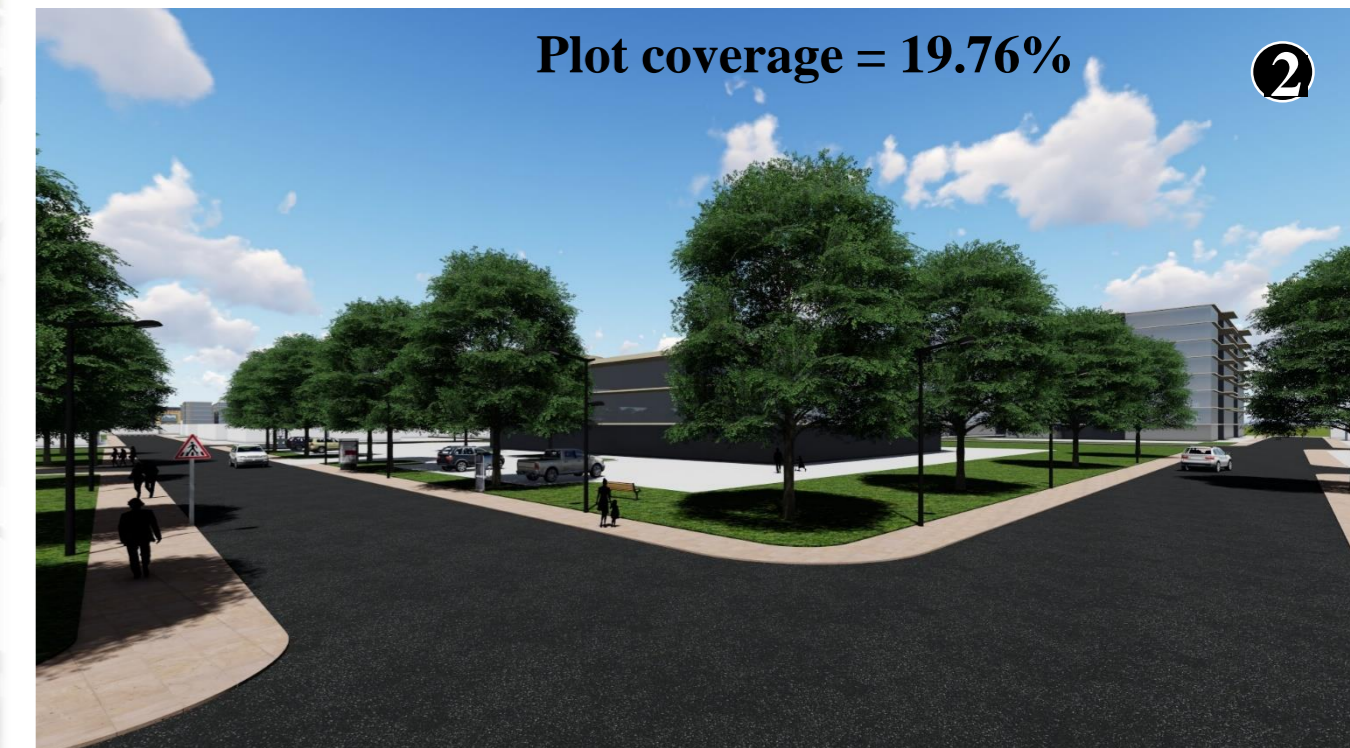
Community hall



Residential houses



- Proposed apartments with good open space by which will attract more people to stay at CBD.
- Planting of trees along side the roads give view and shading at the same time.



- Proposed 3 Storey community hall, which surrounded my good views of apartments and connected to the park



- Proposed Park which connects different activities that will be functional throughout the day

Social Development

Encouraging public interactive space while improving quality of living

Functional Development

To utilize the space for betterment that will attract people and link different spaces to give continuity flow of activities

Economic Development

Encouraging more investors to the CBD by which different opportunities will be increased. Moreover this will promote tourism by which the economy of individual and as whole will get stable.

REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA.

Master Plan (SITE 2)



LEGEND:

1. Apartments
2. Community halls
3. **Market**
4. **Mini-Bus stand**
5. Park
6. **Garden**
7. **Bus Terminal**



Existing situation at Market area

- Proposed 3 storey market which will give parking and will be connected to Mini-Bus stand and having well defined pedestrians ways



Existing situation at Bus terminal

- Proposed a mini-bus stand which will be connected to market, apartments and park.



- Proposed a Bus terminal which will offer more space for Buses, offices and good space for passengers which also will be connected to near by park at Mbalizi road



- Proposed Mini-Bus stop which will be outside bus terminal just to reduce chaos and congestion inside bus terminal



- Proposed Garden near the Bus terminal with a landmark to add value and giving sense of the place



Functional Aspect

- Axis strengthened
- Connection of different activities
- Classification of streets for Vehicle & pedestrians
- Incorporating parking facilities, signage and street furniture

Social Aspect

- Creation of more interaction zone/areas

Economical Aspect

- Strengthened of a major commercial hub of the CBD
- Creation of pedestrian mall & retail streets
- Promotion of investors & tourists due to the improvements

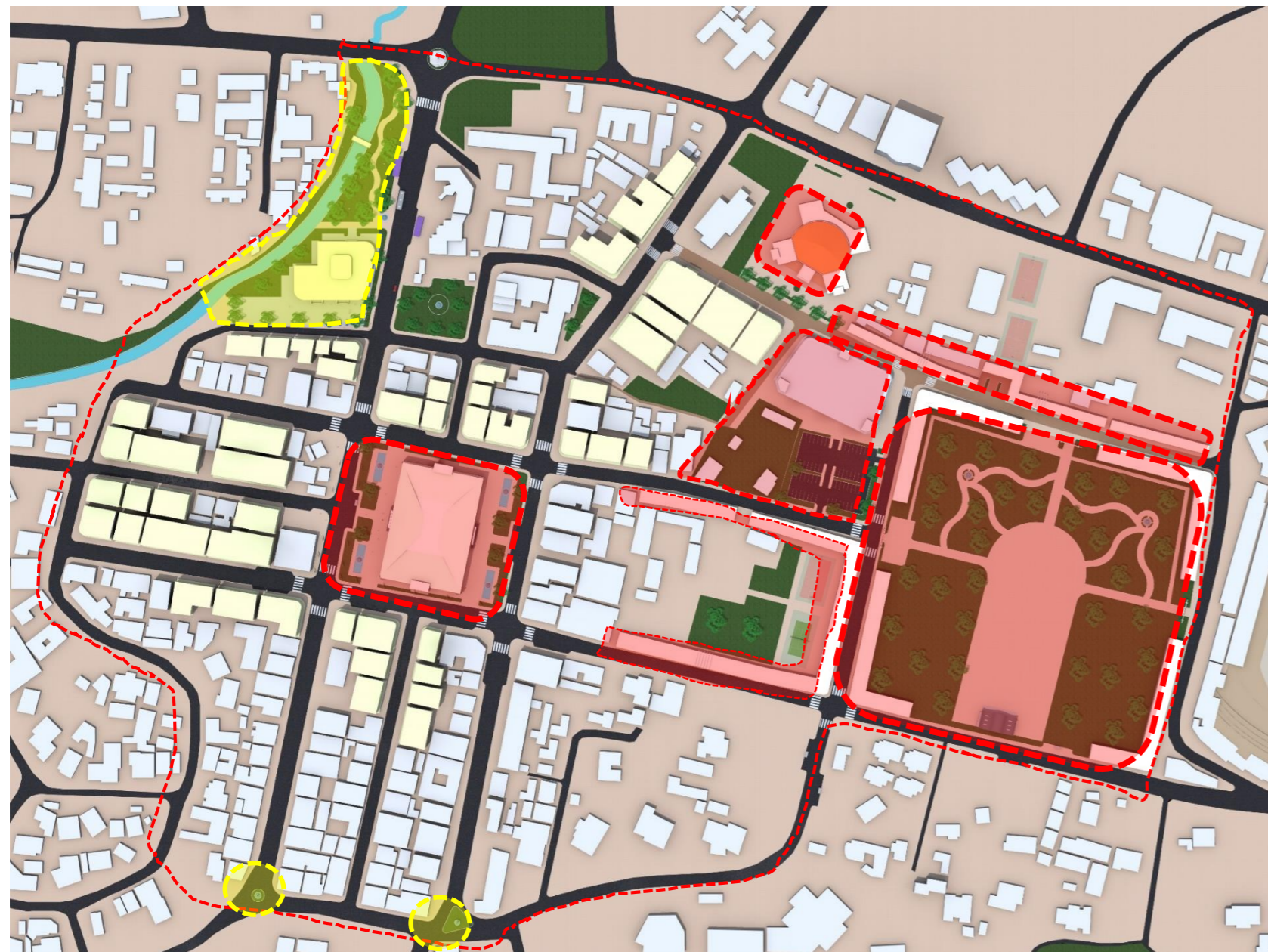
Environmental Aspect

- Giving more green zones, park and gardens
- Planting of trees along the roads
- Trash cans for waste collection

REJUVENATION OF CENTRAL BUSINESS DISTRICT OF MBEYA CITY, TANZANIA.

Implementation phase.

SITE 1



Phase I

GROUP 1

- City Mall
- City Park
- City Parking
- Social Clubs
- Retail shops
- Pedestrian Mall
- Road maintenance and services provision

Phase II

GROUP 2

- City Museum
- City Garden
- Interaction Spaces
- Landmarks

Phase III

GROUP 3

- Commercial buildings

Implementation phase.

SITE 2



Phase IV

GROUP 4

- Market
- Bus Terminal
- Evacuation Apartment
- Min-Bus stop
- Land mark

Phase V

GROUP 5

- Apartments
- Community halls
- Mini-Bus Stand
- Park
- Gardens
- Road services provision

Activities	Total Floor area (Sq.metre)
City Mall	22870
Social Clubs	6675
Multi-story Parking	15680
Retail Shops	18382
City Museum	2906
Commercial/Office buildings	109734
Bus Terminal Buildings	4121
Market	10323
Community Hall	6984
Apartment	112968

As per Tanzania AQRB the tentative construction cost are analyzed below;

Building Category	Construction cost - Rate per Sq.metre (In USD)
Commercial	391.27
Apartment	369.53
Recreational	239.11
Social services	467.35