

INFORMALIZATION AND MANAGEMENT OF STREET USE IN
DOWNTOWN NAIROBI.

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DECLARATION

I declare that this thesis is my original work and has not been submitted in any university or any other institution for award of any degree.

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DEDICATION

I dedicate this work to my mother, Sabina Adhiambo Ondu (*Nyarkusa*).

ACKNOWLEDGEMENT

My uttermost gratitude goes to the almighty God for enabling me to finish this project.

It is with sincere gratitude that I acknowledge all the people who had a stake in the success of this project. Much appreciation goes to my supervisors, Prof. K' Akumu and Dr. Oyaro whose insights kept me on the right path, my research assistants, Brian and Agnes for dedicating their time towards achieving this course, and to my colleague and friend, Evans Maiyo for pushing me to finish this thesis.

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ABSTRACT

Kenyan urban centres are experiencing exponential transformation from the proliferation of informal activities. Most literature has noted that informality is a result of rapid urbanization which is not accompanied by proportionate economic growth. Lack of formal employment has therefore, triggered the mushrooming of informal activities in almost all the vacant spaces within the urban area. These informal activities accommodate the skilled, semi-skilled and unskilled and therefore, are the life-stream of many low-income city dwellers; they provide homes, sources of livelihood, and facilitate affordable transportation modes and therefore are important part of the economy. However, while these activities are an integral part of many households, their spatial significance and impact to the well-being of the city has not been established. This study focuses on the two informal activities (bus termini and vending) that affect the general use of Tom Mboya Street as a case study. It assesses the nature of the informal activities, the causes and effects of informalization of street use with the aim of recommending management strategies for integrating them within the city scape and at the same time ensuring the effective street use.

Through the analysis of various global best practices/ responses and the Kenyan policies and legal responses to informal enterprises, this study identifies legal exclusion of the informal enterprises as the main hindrances to the spatial integration of these activities. Other factors include lack of political good will, weak urban governance, weak policy framework, and the incapacity of urban planning and management institutions to address the issues of informality. The main recommendations from this study were aimed at providing legal spatial guidelines for effective management of informal business activities as well as improving the quality of the services they provide. These recommendations included short term measures such as creating an enabling environment for informal businesses (regulated licensing fees and recognition of informal activities as important part of the economy), proposing alternative appropriate locations for these activities within downtown and where they minimally affect the effective flow of traffic along the streets as well as introducing amenities that improve their operations. Long-term measures included the preparation of development/ redevelopment plan for the town that include designated areas for informal activities which can only be achieved through extensive consultations with all the stakeholders, especially the informal business operators. The study also recommends mainstreaming informal business activities in spatial planning and design of urban plans.

Key terms: *Streets, Informality, spatial and urbanization*

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LIST OF ACRONYMS

EACC - Ethics and Anti-Corruption Commission
GDP – Gross Domestic Product
GOK - Government of Kenya
IEA – International Economic Society
ILO – International Labour Organization
KEPSA - Kenya Private Sector Alliance
KNBS – Kenya National Bureau of Statistics
KURA - Kenya Urban Roads Authority
MoTI - Ministry of Transport and Infrastructure
MSEs – Micro and Small Enterprises
NCBD – Nairobi Central Business District
NCC - Nairobi City County
NCCG - Nairobi City County Government
NISCOF – Nairobi Informal Sector Confederation
NIUPLAN – Nairobi Integrated Urban Plan
NMT - Non-Motorized Transport
NTSA – National Transport and Safety Authority
PSV - Public Service Vehicle
SACCOs - Savings and Credit Cooperative Organizations
SPSS - Statistical Package for Social Sciences
UN – United Nations
WIEGO – Women in Informal Employment Globalizing and Organizing
YEDF - Youth Enterprise Development funds.

CHAPTER ONE: INTRODUCTION

1.1 Overview

Statistics show that there has been an increase in the world's urban population and Kenya urban centers are unexceptional. The Kenyan urban population is approximately 27% (in 2016) with an urbanization growth rate of approximately 4.3% per annum and when projected to 2050, about 50% of her population will be urban (World Bank, 2016). The increase in urbanization shows that it is not only fuelled by economic, political and social factors but also *in-situ urbanization* - absorption of small centres in the path of growth of the big centres (Hope K. S., 2012). Rural - urban migration in Kenya is mainly facilitated by the need for better economic/ employment opportunities and social factors such as better educational, health facilities and closeness to government services (pull factors), hardships associated with rural areas such as internal conflicts (war), cultural factors, drought and famine, floods, political instabilities (push factors) (Hope, 1998).

Notably, most of these migrants may be poor or lack requisite skills for formal employment similarly the rate of formal job creation does not match the rate of urbanization (Anyamba, 2006), therefore, they end up causing urbanization of poverty (Piel, 1997). Equally, urbanization of poverty is viewed as a situation where the poor urbanize faster than the non-poor (Ravallion, 2002). Nevertheless, urbanization plays a pivotal role in the economic (growth of finance and human capital) and social fabric of nations by providing opportunities for employment, education, and health services thus encourage empowerment and poverty reduction. On the other hand, the challenges posed by urbanization include urban sprawl, uneven property development in carrying capacity and infrastructure availability, and congestion (Ibid), unhealthy economy, poor transportation and infrastructure, inadequate access to education, poor housing provision and affordability, insecurity, high rate of pollution, climate change, and poor governance among others (National League of Cities, 2014). As a result, the cities have become centres of chaos.

Statistics show that city governments - especially of the third world nations are unable to provide adequate formal employments for their population, therefore, a greater percentage of the population lives in abject poverty and are continually devising new survival techniques, namely holding two jobs, engaging in informal business and formal employment or purely engaging in informality as sources of livelihood. The term "informality" was coined by Hart in 1970 during his study on informal employment in Ghana (Hart, 1973). This definition was later modified by the International Labour Organization (ILO) to refer to "all remunerative work (self-employment and wage-employment) that is not recognized, regulated or protected by the existing legal and regulatory framework and include non-remunerative work undertaken in an income-producing enterprise" (International Labour Organization, 1972).

It is estimated that 43% of the Sub-Saharan Africa urban population live below the poverty line (UN, 2010) and 60% of urban residents live in slum dwellings. The informal sector offers diverse employment avenues depending on the interest of the entrepreneur, the amount of capital and the profitability of the activity. It has been established that because of its ability

to accommodate everyone in the society, more than half of the urban dwellers in developing world live and depend on the informal sector for their survival (Ananya, 2004). In Kenyan urban areas, for example, the informality includes but not limited to the following categories; the informal economy/ market (informal buying and selling of goods and services), informal transport sector and informal settlements. Studies done by the Rockefeller Foundation shows that the informal economy in developing world accounts for about 40% of the GDP, more than 25% of the city dwellers live in the informal settlements and they provide mobility for up to 60% of the urban populace (De La Pena, 2013).

Informal activities in urban areas are mainly located on prime undeveloped parcels of land such as undeveloped road, railway and pipeline reserves, power way-leaves, public parks, market spaces, deferred lands, and public parking areas among others where many people interact (Brown and Lloyd-Jones, 2002). Due to their unplanned nature, they have caused conflicting interests in the use of these urban spaces. The unprecedented growth of informality manifests itself in terms of social injustices, congestion, environmental degradation, and poor economic developments, etc. (Farajella, et al., 2017). This has therefore raised various concerns for the urban authorities, non-governmental organizations and practitioners in urban planning and management (Brown, 2006). These concerns among others include the inefficiency in access, circulation, and utilization of formal spaces and places triggered by the informalities. It is therefore imperative to note that for efficient and secure cities to exist, there must be a coherent balance between various needs, including; the social, economic and environmental factors.

This study focuses on informality within urban streets. Urban streets occupy approximately 30-40% of the total urban land (Manual for Streets, 2013). They play a vital role in determining the structure and functionality of the city. They enhance mobility and accessibility of various parts of the city as well as providing active public spaces for social, cultural and economic interactions (UN Habitat, 2012). According to Jane Jacobs, other purposes of the streets besides providing passage for vehicles, pedestrians and goods, the pedestrian walkways also provide passage for infrastructures such as electric lines, telecommunication power lines, sewer, and stormwater drainage channels and forms part of the lungs of the cities (Jacobs, 1961). Unfortunately, other land uses have cropped within the streets which include street vending, informal buses/matatu terminals and settlements for street families.

Based on the multi-functionality of streets, reorganization and management of its operations are essential to ensure effective accessibility and usage. It assesses the informal uses of the streets within Nairobi Downtown (a case study of Tom Mboya Street) to establish an understanding of its functionality, thereby, enabling the researcher to unpack the challenges and beneficial aspects of the informality and recommend strategies for addressing the challenges and lead to effective and functional street use.

1.2 Statement of the Problem

Cities in the developing world are experiencing rapid urbanization as well as tremendous growth in urban developments. This, to some extent, has crippled the functionality of urban

areas as cities' growth has occurred without any definite urban development structure (Oyugi & K'Akumu, 2007). Moreover, urban management policies and institutions cannot adequately and efficiently provide basic urban services. As a result, the urban challenges have manifested in the form of congestion, environmental degradation/ high pollution levels, increased rates of violence, poor residential environment, high levels of unemployment and widening inequality gap between the poor and the rich, and informal economy among others. It is noteworthy that drastic management measures have to be undertaken to curb these massive challenges especially in Kenya where the traditional planning approaches have failed (Oyugi & K'Akumu, 2007).

As rapid urbanization continued to take place, employment in the formal sector has been ever dwindling. In the early days of independence, African governments' including Kenya was the leading formal sector in employment and therefore was viewed as the key engine of growth. These jobs were deemed as 'secure' in terms of tenure, social security and offer attractive terms and conditions. However, overall employment (both government and private) has been declining ever since. According to the KNBS (2016), the rate of unemployment in Kenya has risen from a paltry 12.7% to 40.2% between the years 2006 and 2016 with Nairobi City accommodating about 30% of the unemployed. In addition, the cost of establishing a formal business in Kenya is quite high. According to the press release by the EACC in 2018¹, corruption has raised the cost of doing business in Kenya by 10% and for procuring contracts by 25%. This has, therefore, pushed young entrepreneurs to look for alternative means of evading such expenses. Despite the high rate of unemployment in the country, the informal sector which naturally absorbs the unemployed is being smothered by urban planning and management regulations, business licensing regulations, and poor supportive infrastructure.

It is in the informal economy that the informal matatu transport/ terminus and street vending fall under. Street vending activities are small individual or family businesses operating on illegal parcels of land (Mutegi, 1998) while matatus/informal public transport are an intermediary form of transportation in Kenya (Awino, 1998). All these activities occur within spaces and places. These spaces are however limited within urban areas thus the government through its regulations/policies has accorded the right of use to the formal sector. Within the city centre, there are no designated operation areas for the informal sector. It is worth noting that some spaces might be available outside the CBD, but are not a favourable environment for the informal sector to thrive.

Due to lack of spaces for the operation of informal traders in the CBD, the vendors occupy streets, pavements, and frontage of buildings within Nairobi downtown while the public transport vehicles pick and drop off passengers spontaneously within the road carriageways; they also form temporary parking spaces on the shoulders of such roads. These informal activities, therefore, poses many challenges to the recognized uses of the street space. Some of these problems include sprawl issues, unpleasant temporary structures, incongruent land uses, building alterations, open spaces transformations, and land degradation.

¹<https://www.the-star.co.ke/news/2018-07-18-cost-of-doing-business-up-by-10-due-to-graft/>

It is a fact that matatu informal termini and street vending are normally located close to each other thus obstructing the efficient flow and circulation of vehicular and pedestrian traffic along the streets. Where the informalities operate next to shops or buildings frontages, their products normally obstruct access to such premises at the same time in case their goods are similar to those in the formal shops, they are preferred to those in the shops because they are cheap thus reduces sales for formal businesses. The two land-use activities are therefore viewed as undesirable space activities (Agwa, 2014) as they are characterized by the proliferation of worksites or intensification in the use of locations in the informal sector (Rukmana, 2007). These activities are not uncommon in the downtown streets of Nairobi; they have continued to invade and rob the town of its identity and function.

From an environmental perspective, the streets experience environmental degradation in places where these activities are rampant. This is manifested in the form of heaps of garbage within the road carriageways and the pedestrian walkways causing discomfort in the use of these roads - poor hygiene and aesthetics. Congestion caused by slow movement of vehicles also concentrates Smoke, Carbon dioxide, Carbon-monoxide, and related vehicular emissions thus polluting the city. Moreover, noise pollution cannot be overlooked especially at peak hours of the day when workers are leaving workplaces for home. This is prime time for informal operations in the streets as they target passers-by.

The County authorities in coordination with the police have made attempts to address the informal trading activities by constantly conducting crackdowns on the informal operators who do not have proper operation licenses. These crackdowns take the form of confiscation of merchandise, arrests of individuals/ matatus, man-hunt and beating of the operators.

Past initiatives taken by the government to improve the informal sector include the recommendation made by Daniel Arap Moi in 1986 from his visit to Kamukunji Juakali - Nairobi, Kenya. There was also the allocation of plots for the permanent relocation of vendors, namely; Kariakor, City Park, Nyayo Stadium, Muthurwa, and riverside bus/matatu stops which the operators considered unfit for business. Even though there are informal traders in these locations, most of them have retreated to the streets where they can get closer to the target market. Moreover, the incorporation of the sector into the National Industrial Policy and Planning of 1986 – 1992 had a great impact on boosting the informal economy. Sessional Paper No. 1 of 1986 on "*Economic Management for Renewed Growth*" gave a positive dimension to the informal economy by substituting its name with the "Juakali" sector thus aiding to create a healthy legal and regulatory climate for the informal sector activities (ICEG. 1999: 4). In 1989, a policy paper entitled "*A Strategy for Small Enterprise Development in Kenya: Towards the year 2000*" was formulated by the government to create an enabling environment for the informal sector by providing a favourable environment for investment and providing promotional programs for growing the enterprise culture. Sessional Paper No 2 of 1992 on "*Small Enterprise and Jua Kali Development in Kenya*" where the agenda for action was defined covering a period of 12 to 24 months in those areas considered crucial for the promotion of the informal sector; under the *Agenda for Early Action*, thorough assessment of policies were

undertaken where the government identified the strategies and programs that would enhance the growth in the sector.

In the transportation sector, the Ministry of Transportation and Infrastructure (MoTI) has been providing policies, legislation and institutions to govern it. This includes the National Transportation and Safety Authority (NTSA) which has the mandate to license the PSVs and transportation services and NCCG which has the mandate to provide adequate public parking/ PSV termini. However, the public parking/ terminal areas provided are either inadequate, poorly located, lack requisite support facilities or are not well managed. In addition, other preliminary effort of the government to manage the traffic congestion within NCBD has proven futile. These initiatives include deterring public transport vehicles from entering NCBD without clear operational guidelines on the implementation of the initiative. The matatus are, therefore, provided and regulated by the private sector which is not accountable to the public in any way; the matatus pick/drop passengers anywhere on the street, the Matatus Park randomly on street shoulders/ pedestrian walkways hampering the overall flow of traffic. On the other hand, it seems that the planning and management of street vending have been left in the hands of individual regulators. The vendors locate themselves in strategic areas of the streets suitable for their businesses. The main problem, therefore, is how to achieve effective strategies for managing the activities of the informal sector with minimal infringement onto the right of others to carry out their operations.

1.3 Research Questions

1. What is the nature of street space informalities within downtown Nairobi?
2. What are the causes and impacts of the informalization of street use within Nairobi downtown?
3. What are the management strategies for effective street use within Nairobi downtown?

1.4 Objectives of the research

1. To establish the nature of street space informalities within downtown Nairobi.
2. To analyse the causes and impacts of the informalization of street use within Nairobi downtown.
3. To propose management strategies for effective street use within Nairobi downtown.

1.5 Assumptions of the Study

This study is based on the following assumptions:

1. Spatial planning and management are guided by planning policies and legal frameworks.
2. There are many factors that contribute to the growth of the informal economy within the Nairobi Central Business District.

1.6 Justification of the Study

As mentioned above, streets play a pivotal role in the structuring of urban spaces as well as providing access to these spaces. However, their efficient use is being tampered with by the informal activities that are infringing on them. Although the informal sector is a major source of employment and mode of travel for many Kenyan city dwellers, appropriate considerations have not been accorded to it. Approaches to deal with the informality have been biased towards demolition, prohibition and restriction of the informal economy outside the CBD as measures of reducing congestion within the city which are normally short-lived. Moreover, most of the proposals are not well thought out or fully implemented.

This research explores a holistic approach towards the complex issues surrounding informality. The focus of the study will be the informal transport/ matatu terminus and street vending along Tom Mboya Street, their interrelationships and extra-relationship with formal businesses and space use among others. This is aimed at finding strategies for efficient street use management within downtown Nairobi.

1.7 Scope of the Study

1.7.1 Theoretical Scope

The city of Nairobi as a contemporary metropolis faces many life-threatening challenges, namely; environmental degradation, high levels of pollution, public health issues as well as aesthetic issues. The closest reason for these concerns is the informal activities (informal matatu transport and vending) within the town. In as much a number of these uses are registered by both the city-county government and the NTSA, their position as significant sources of income within cities have not been held with esteem. They are often harassed by NCC officials and police on patrol, there has been constantly pushing and shoving of vendors as they flee to save their lives from arrest and goods being confiscated.

The long-running problems have been worsened by the absence of policies governing the informal activities and where they exist, the policies are not well implemented. There is also the lack of a platform where the plight of the informal sector can be discussed and addressed appropriately. To appreciate the informal economy as a sector that has contributed greatly to the development of the economy by providing jobs for the city dwellers, this study will provide an understanding of various theories and approaches that have been advanced towards the development of the informal sector, the theories of the spatial location of markets, factors propelling the growth of the sector in Kenya as well as the policies and legal framework regulating the informal sector growth and development.

The study focuses on the informal street use within Nairobi downtown. It looks into the conflicts that have arisen concerning the utilization and ownership of street space, the development pattern of informal activities and the process of urban interventions towards the control of these spaces.

1.7.2 Geographical Scope

This research will be undertaken along Tom Mboya Street, downtown Nairobi. Tom Mboya Street is located in the central sub-county of Nairobi which is at 1°17'S 36°49'E / 1.283°S 36.817°E and lies at an elevation of 1795m above sea level. It is about 1km long with a width of approximately 21m. This street is lined with mixed-use premises on both sides, namely; commercial, residential and light industries. Main roads within the neighbourhood include Moi Avenue and River Road running to the South and North of the street respectively. Other roads that connect to Tom Mboya Street include; Latema Road, Luthuli Avenue, Accra Road and Ronald Ngala to the North, City hall Way, Harambee Avenue and Kenyatta Avenue to the South, and Haile Selassie Avenue forms a T-Junction with Tom Mboya Street to the Southeast.

This study focuses on the identification of the different informal activities occurring on the street and their implications on street use with the aim to propose management strategies for enhancing street operations within Nairobi downtown. This study will target the informal operators as the key stakeholders; Traffic police, City-County of Nairobi officers, NTSA and the Matatu SACCOs as Key informants who have a stake in the management of street use within the city.

1.7.3 Organization of the Study

The study will be organized into various chapters:

Chapter 1: Introduction which includes the problem statement, research purpose, research questions and objectives, justification and significance of the study, and the scope of the study;

Chapter 2: Literature review, which will look into other studies done by scholars on the same subject and the theoretic and legal framework, identifying key institutions of concern and others who have a stake/ interest in the study subject, and a review of case studies and best practices of similar projects;

Chapter 3: Methodology of the study – it guided the research study. It comprises the research design, the sampling framework and sample size concerning the target population. It also provided data collection tools, techniques, data analysis and presentation tools.

Chapter 4: Findings of the study - This involves a detailed outline of the study finding as guided by the study objectives. It will further synthesize the data findings, pointing out the trends that confirm or disapproves the hypothesis, assumptions, and theories in the literature review.

Chapter 5: Summary, conclusion, and recommendations. This chapter presents the summary of the data findings, outlining the emerging issues based on the analysis of the literature review, the fieldwork and objectives of the research. In conclusion, this chapter will help achieve objective 3 – It also provides the concluding statements and providing areas of further studies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Overview

This chapter discusses the informal economy by presenting the complexity in the use of public open spaces, a case study of street use. This chapter presents the concept of informality – definition of the informal sector and theories that underpin the informal sector; characteristics of the informal sector, and the factors contributing to the growth/ persistence of the informal sector. It also discusses the impacts of the sector on the formal uses of the streets. Moreover, it gives a review of relevant Kenyan government legislation and policies on informal sector and relevant Case Studies geared towards enhancing the urban informal economy.

2.2 The Concept of Informality

2.2.1 Definition of Informal sector

Several studies have been advanced towards informality; these include the causes of the informal economy, the size, and composition of the informal economy, the growth of informal and formal economies, poverty and equality among others. Amidst all these studies, the definition of the sector has been ambiguous because it comprises a range of activities that vary in size, nature, and legal position.

In an attempt to describe the term “informality”, researchers have described its character rather than defining what it is (Mutegi, 1998). This description began with the differentiation between the formal and informal economy given by Hart in 1970 while studying informal employment in Ghana (Hart, 1973). He distinguished between the informal and formal sectors built on the type of work and the degree of rationalization and recruitment of labour – the poor urban folks engaged in paltry entrepreneurship as a substitute for the scarce wage employment in the formal sector. This definition was later modified by the International Labour Organization (ILO) to refer to “all remunerative work (self-employment and wage-employment) that is not recognized, regulated or protected by the existing legal framework” (International Labour Organization, 1972).

Further definition, identifies the informal sector as being composed of enterprises with growing market demands that depict high or low-income elastic demand (ILO, 2002). ILO classifies this sector into three main segments as follows;

- i. Enterprises with the potential of becoming a significant contributor to the national economy and take up informal economic activities because of their potential for generating growth or wealth. These enterprises can be linked to organized and emerging national or international markets;
- ii. Individuals or households take up informal activities for survival purposes. Factors attracting these individuals include relative ease of entry, reliance on local resources, and minimum capital investment requirements;
- iii. Individuals that devote part-time to informal activities while working elsewhere, because of the incidence of low and irregular salaries.

2.2.2 Characteristics of the Informal Sector

Informality has a myriad of attributes; the most vivid are the heterogeneous and dynamic nature – it comprises of many activities which can change and adapt to meet people’s needs in a reduced or non-bureaucratic manner. Meier and Rauch in their Journal article - Leading Issues in Economic Development, differentiated the characteristics of the informal and formal sectors as discussed below (Meier & Rauch, 2000).

The informal sector is characterised by the ease of entry, depends on the local resource, most of them are owned and operated by the family, the operations are small scale, and the operation skills are acquired outside the formal sector – training schools, and is composed of an unregulated and competitive market. While the formal sector is characterised by difficulty in entry/ starting, frequently relies on imported resources, there is always corporate proprietorship, operates on a large scale, it is capital intensive and relies on imported technology, operation skills are acquired formally, and operates under-protected market (governed by tariffs, quotas and trade licenses).

In addition, the informal economy is composed of either informal self-employed or informal wage employment (Chen, 2012). Characteristics of the informal self-employed include employers in informal enterprises, own-account workers in informal enterprises, cumulatively comprise of contributions from family workers (in informal and formal enterprises), and they are members of the informal producers (where it exists). On the other hand, in informal wage employment, employees have no social protection by the formal or informal enterprises or as paid domestic workers by household. These informal wage employees include employees of informal enterprises, temporary or part-time workers, paid domestic workers, contract workers, unregistered or undeclared workers, industrial workers (also called homeworkers), and Casual or day labourers.

2.3 The Nature of Informal Economy in Kenyan

The informal economy is very diverse and dynamic in terms of occupational groups and activities. Primarily, the sector comprises domestic workers, street vendors, home-based producers, transport workers, informal employees as well as waste pickers. Similarly, these workers are affected by various issues including poor access to social protection and lack of adequate labour protection, low and unstable average earnings and majorly comprised of low-income class citizens who live in areas with inadequate basic services (United Nations Human Settlements Programme, 2016). In addition, the kind of commodities on sale changes with season and time. For instance, if it is a season for mango harvest, most of these traders will engage in the sale of mangoes, while if it is a rainy season most of the proprietors will engage in the sale of umbrellas or sweaters and trench coats among others.

The informal economy in Kenya is believed to have evolved from the traditional market/ sector. This sector was dominant in the rural areas where the poor folk engaged in small business activities as a means of income. The expansion of this sector began in the 1950s when the poor folks began to migrate into urban areas where they were unable to acquire formal employment due to the lack of education and technical skills required in such jobs.

The inadequate means of support, therefore, forced them to embrace their traditional/informal source of livelihood, however, within the urban areas where they had settled; a process that was termed as “Urbanization of Poverty” (Piel, 1997). The face of the sector also changed from purely a source of subsistence agricultural livelihood to a vibrant profitable and efficient enterprise (International Labour Organization, 1972) involving the sale of goods found in large stores within the cities (Hope K. R., 2014) but at a cheaper price.

From other studies, the extensive growth of the informal sector was caused by the growing rate of unemployment and underemployment especially in the formal sector, poverty leading to high demand for low-cost goods and services, and failures of policy and institutional framework to manage the growing informality. For instance, the dwindling rate for the growth of the formal employment sector has rendered many urban dwellers jobless. The recent economic survey of 2015 postulates that the total number of employees in the informal and formal sectors increased to 14.3 million in 2014 from 13.5 million in 2013, and of the total 799, 700 fresh jobs created, the informal sector provided about 82.7% % of the total employment which was equivalent to about 700, 000 jobs.

The informal sector has shifted from being pronounced in urban areas to being recognized as a national economy in terms of scope (including all areas of economic activities of rural and urban areas) of production, employment and income generation (Africa Centre for People Institutions and Society, 2018). This is facilitated by the informal transportation sector that has increased its geographical coverage; they link rural and urban areas through the provision of cheap and faster means of ferrying people, goods, and services between the two locations. Furthermore, studies indicate that this sector thrives in un-inhabited public spaces include streets, public squares, markets, open spaces and parks, and the private/public spaces where the general public is not restricted from access (Makworo, 2012). It is also observed that the informal activities within Nairobi tend to locate in close near each other. For example, the informal activities under study are found to coexist near each other; the vendors always locate their businesses near the matatu informal bus termini to take advantage of the pedestrians/passengers using the informal matatus. The informal economy does not operate in total isolation; it has a linkage with the formal economy. Many informal operators source their raw materials from formal firms or supply finished goods to them. This interrelationship exists either directly or through intermediaries (Chen, 2016).

Moreover, the Kenyan informal sector has evolved because the Kenyan economic growth has not been at parity with the rate of inflation. Among the current characteristic of the informal economy is evidenced by the increased participation of women who had been historically marginalized by patriarchal ideologies (Kinyanjui, 2014). In 1994/2000, the informal sector as a percentage of informal employment in non-agricultural employment was 72% with women constituting 83% of compared to 59% for men similarly, in the same year the percentage of Self-employment in non-agricultural informal employment and Wage employment in non-agricultural informal employment was 42% and 58% of which the percentage of women to men involved were 33% and 56% and 64% and 47% respectively (ILO, 2002). More recent studies show that more women are involved in informal business than men at 88% against 72% respectively (IBRD & World Bank, 2007). However, the

informal transportation sector remains a male-dominated industry; this is because of the aggressive and alienated nature of the job. The alienation is in terms of how they have no control over their means of labour and how the owners are highly exploitative. Mutongi also emphasizes that this industry is not suitable for Women because of the frequent harassment of both the female passengers and female matatu workers, calling them prostitutes among other forms of derogatory language (Mutongi, 2006).

(Bowen et al. 2009), in his study of the Management of Small and Medium Businesses in Nairobi, noted that traditionally the informal sector was a domain of relatively low educated individuals. However, this has ceased to be the case with the sector blending both the unskilled/ skilled and educated/ uneducated individuals. Packard poses that in as much as individuals with negligible education are the main operators in the informal employment, some of the learned elite either choose to be self-employed in the informal economy (Packard, 2007) or individuals who have lost jobs in the formal sector (Bigsten, Kimuyu, & Lundvall, 2004). Obare affirmed this position in his study that revealed that approximately 50% of workers in the informal economy had a secondary school certificate, 12.5% were highly qualified and 37.5% were grouped as lowly qualified (Obare, 2015).

The use of technology such as the internet and telephony/ mobile has also changed the face of doing business in Kenya and the informal economy has not been an exception. It was observed that the Kenyan Small and Medium Enterprises exhibit the highest percentage in using mobile phones for communication and transacting money services as compared to other countries such as Ethiopian MSEs (6.4 %) who uses mobile phones to transact businesses (World Bank, 2016).

2.4 Growth of the Informal Sector in Nairobi

As mentioned above, the city of Nairobi began as a colonial urban Centre along the Uganda railway. The main reason for the construction of the railway line was to facilitate transportation of resources to the East coast for transportation to London and facilitate the stay of the British colonial authority in Kenya. Nairobi, therefore, served as Britain's administrative, transportation and commercial center due to its strategic location suitable for the sale of resources. By the time the railway construction was over (1901), a number of European settlers, Asians and Christian Missionaries had settled in the Nairobi. The three groups socialized with the Africans to serve the colonial masters through wage labour, apprenticeship, education, and alienation of land. The grabbing of African land forced many Africans to migrate to the White settlers' farms. The African immigrant acquired artisanal work from the government departments and mission schools. The African immigrant who could not secure wage labor in the White Settler's farms opted to vend, prostitution, and brewing of illicit liquor.

At the end of World War II, the Britons became desperate for more labor, agricultural resources, and finance and therefore, the British recruited more Africans into the war and allowed for a few manufacturing industries to be developed in Nairobi. This war also attracted more Africans to Nairobi in search of wage employment of which many of them turned to the informal sector due to the lack of required skills needed for formal employment.

The number of informal workers was doubled by the demobilization of the African soldiers. Eventually, Nairobi was overpopulated with the unemployed labor force and therefore, many of them joined the informal economy while others engaged in petty offenses such as theft and prostitution.

At independence, the ban on African migration was lifted which spurred massive immigration of many Africans (elite and illiterate) into the major Kenyan towns and especially Nairobi City. The policies formulated by independent Kenya favored the Learned Natives and Western Investors were able to acquire employment in the public offices as well as land, however, the illiterates were alienated and landless therefore they resorted to employment in the informal sector. As more Africans opted for vending instead of wage labor, the activity started to be controlled and restricted on the sale of fruits and vegetables, however, the number kept on growing (Charmes, 1999) and this led the First president to recognize its importance which spurred up the development of new markets.

Following the first president's death, his predecessor continued with the policies that favored the elites and the western investors. During this time, inflation was high and Kenya were performing dismally at the international market and the international politics took a new turn. The political adjustments led the multilateral and bilateral donors to embark on enforcing new rules before giving aid. This led to the introduction of the Structural Adjustment Programmes (SAPs) on Kenya among other Sub-Saharan countries. The SAPs recommended the reduction of government expenditure as a way of reducing their dominant role in the economy, privatization of the state sectors to reduce spending in the economy. This led to the loss of many jobs by the citizens; consequently, it caused the enlargement of the informal sector.

The informal sector also gained recognition through the support of President Moi who recognized the significance of the Juakali sector to the creation of employment opportunities in the face of economic crisis. Since then, the number of street operators is increasing however; it lacks formal recognition by the governing authority. For instance, according to the Nairobi city council licensing superintendent, there were about 30,000 vendors in Nairobi City's space in 1984, although the media maintained that it was 45,000 or more despite these enormous numbers the city council issue only 5,000 licenses a year. Currently, Kenyan vendors are estimated to be approximately 416,294. This accounted for 5.2% of the non-agricultural labor force of which women were 3.9 % (Charmes, 1999).

2.5 Importance of Informal Sector

Although informality has major detrimental effects on fauna and flora, it also has many advantages, especially to the economy. Below are some of the major advantages of informal activities among others:

First and foremost, informality in urban areas has become a vital player in the economic development of world cities. In his study of "the prospects of the informal manufacturing sector in terms of growth and dynamism in India", Mukherjee notes that this sector is the current engine of economic growth and thus a key player in boosting the economy of various

countries (Mukherjee, 2003). The Kenyan economy, for example, has been lagging in creating new jobs for the growing population thus the informal sector has become the sink and therefore, a source of revenue for both the workers and the government.

The informal sector is also important in the production of goods and services. It, therefore, contribute greatly to the Gross Added Value of many economies especially in Sub-Saharan Africa where it accounts for more than 50% of the income (ILO, 2012). It, therefore, not only serves the low-class economy segment but also contributes to some of the goods and services consumed by the well-to-do households. This sector also accounts for one of the strategies used by the poor of society to try to raise their living standards and thus play a key role in poverty reduction.

The sector facilitates mobility within and outside the city; Most of the public means of travel (which are partially or fully regulated by the government) are irregular, non-existence and unreliable and therefore, have proven to hamper movement. In this case, the informal transport operators have been providing an alternative means of travel.

2.6 Siting of Informal Economy

Informal business activities have been in existence for a long time. The location of these activities is dependent on the profit margins that can be accrued in such areas; locations with higher profit margins are preferred over areas with lower profit margins. These locations include the traditional African markets and the informal economy in urban areas. Studies done on these markets show that they exhibit similar characteristics among them including a high level of disorganization, unusual smells, and insecurities.

2.6.1 Traditional African Market.

The traditional African society developed markets in association with groups/individuals within the village, their geographic locations and time of operations depended entirely on communal factors such as cultural practices. This is still a common practice in African rural societies. However, within the African cities, the scenario relatively different because of the vast human population and diverse needs (dynamic need, towns as important sites of social, economic and political processes).

This market was operated periodically; the sellers and buyers converge on a given location each day, every second or minute. According to the study done by Fagerlund and Smith, the daily markets may include peaking of activities depending on the schedule (Fagerlund & Smith, 1970) thus the complementary nature of the temporal space and locations. There was also the uniform-spacing hypothesis which recognized that markets are space competitive thus, they located where there were many buyers; the neighbourhoods (Fagerlund & Smith, 1970).

In the study done by Fagerlund and Smith in Ghana, they noted three main hierarchies of the traditional market. First, the village square market facilitated the exchange of goods between the peasant farmers and the consumers: they were the first order markets. The second-order markets were brought about by the differentiation of trade brought about by group exchange

causing the rise of interlocking markets. Finally, there was the long-distance trade that depended on specialist trading communities such as the Agbagwe fair created by Arochuku traders upon the arrival of the Portuguese traders on their seaboard.

The study done on traditional markets in Africa by Good revealed that, unlike their counterparts, the traditional market was a chaotic sight; a high level of disorganization, unusual smells, and wares, composed of professional traders, con men and poor children (Good, 1973). This study, therefore, reveals a familiar façade that has been inherited from the past and incorporated in many contemporary cities of developing nations.

2.6.2 Land use conflict: Locating the Informal Sector Economic Activities in Urban Areas.

The location of urban commercial areas is determined by the need for the commodities as well as the availability of resources to support such needs. These resources among others may include the geographic location of the resources, the final consumers and transportation medium; therefore, the commercial areas can only thrive through the existence of Spatio-temporal connections. It shows that all the places where people find their livelihood must be centrally located - physically and timely access.

The location of business activities is not taken by businessmen and women alone but borne of the general public. In Kenya through the physical planning regulations areas are located for various land uses, including commercial, industrial, residential, educational, public areas, educational, recreational and infrastructure. However, with the informal sector, the government has been unable to fully determine and manage its location. The informal sector considers locating in places that are proximal to the formal working areas or homes, to maintain the socio-economic linkages (Magambe, 1975). It is, therefore, imperative to note that when planning for the informal economy, the interrelationship between the formal and informal economy should be closely considered (Robert, 1978:1).

Generally, within the CBD, the informal activities are located in proximity to each other and on unoccupied parcels of land which are highly exposed to large human conglomeration such as pedestrians and passengers/ motorists (Mitullah, 2003). This is because they are economically marginalized and are not eligible/ have no right to land ownership. They, therefore, encroach on public open spaces which include: streets carriageways, parks, pavements, close to shopping centres and corners of streets & roads (Mitullah, 2005). In addition, they settle spontaneously and therefore have no permanent structures/ location, they have no secure lease of tenure and can be relocated at any time (Kinyanjui N., 2010) but in some cases, the traders make local arrangements with the owners of the neighbouring yards, while most share with friends and others may be allocated space by the Local Authorities at a fee (Mitullah, 2005).

However, for the location of the informal bus termini, consent has to be granted by the Nairobi County Government (Otieno, 1991). The criteria used to locate these bus termini include ad hoc factors such as; availability of open spaces along with the road reserves, main traffic magnet/ attraction points, non-interference with efficient flow of traffic, and minimum walking distance from the main activity zones – can be easily accessed through walking.

In as much as these factors were good, they failed to address the challenges associated with traffic and therefore, there is a need for a planning and management regulation for siting termini within the city. The determinants of locating the bus termini and design factors should be considered.

2.7 Drivers and Persistence of Informality in Kenyan Cities.

The growth of the Kenyan informal economy has been resilient over the years, this has been attributed to various factors as postulated by different researchers. United Nations, for example, attributed it to the socio-economic and political factors that have led to mass urbanization (UN, 2007), while other researchers claim that poverty is the major cause of informality within cities coupled with the high rate of rural-urban migration, high birth rate, and unemployment. Some of the major factors are discussed below:

a. Urbanization

The emergence of urban informality in Kenya began soon after the settlement of the White settlers, the Asians and Christian Missionaries. During World War I, these three groups socialized with the Africans through the provision of wage labour, apprenticeship, and western education which was a service to the colonial system. Furthermore, the alienation of African land by White settlers forced them to migrate to the White settlers' farms (urban centres – Nairobi and other towns) in search of wage employment. Africans who were unable to acquire wage employment within the towns turned to informal employment which grew further after World War II when African soldiers were demobilized and the African squatters evicted from the white settlers' farms after the mechanization of farming.

After independence, the population within towns tripled due to the lifting of the ban on African segregation spurring the high level of immigration and increased birth rate (Oyugi & K'Akumu, 2007). Owing to this rapid urbanization, it is projected that by the year 2030 approximately 61.5% of the total Kenyan population will be living in urban areas. The intensity of urbanization impacted greatly on cities such as Nairobi, Kisumu, Mombasa, and Nakuru. Nairobi city and the greater Nairobi Metropolitan region. Nairobi City, for instance, began as a small depot in 1900 within an area of 11 km² and grew to a population of 11, 000 residents within an area of 1, 813 hectares (Obudho, 1988) in 1906; to a population of 118,976 within an area of 78km² in 1948 and 270,000 people within an area of 684 km² in 1963 (Obudho, 1988). However, in 1963 the city's boundary stopped expanding but the population continued to grow; currently, the population stands at 3.2 million people (KNBS, 2009) accounting for approximately 8.1% of the total Kenyan population (Agwa, 2014).

Urbanization is directly linked to economic development within a city. Positive effects of urban growth include higher economic production, job prospects for the unemployed and underemployed, and improved lifestyles through better services (water, sewerage, hospital, and transportation among others). However, when the rate of urbanization is uncontrolled and uncoordinated it results in urban sprawl and other associated problems such as inadequate housing and access to public services and infrastructure, high level of poverty, income

inequality, low employment rates, growth of the informal economy, and degraded environment (Hope K. S., 2012).

As mentioned above, unemployment is a by-product of uncontrolled urbanization. It is estimated that as the rate of urbanization increases, formal employment opportunity decreases and thus the urban youth which forms the largest part of the population (60% of the total population) Kenya remain unemployed. It is estimated that only 24% of this population is formally employed leaving 76% unemployed and living in abject poverty (Thieme, 2010). Both the youth and women face barriers in the labour market due to lack of/ inadequate work experience/ required for formal employment. The only option for them is to engage in informal employment. Informal employment in urban areas is manifested through vending/ street trading, home-based enterprises, and informal transport. It is estimated that in Nairobi, the number of job opportunities is 1,813,000 with 1million informal jobs and 813,000 formal employment (Nairobi City County, 2014) and with the increase in population, the number of formal employment positions is projected to decrease.

b. Socio-economic and Political Factors

The Economy of every nation is estimated to be an aggregate of both formal and informal business activities. The formal economy has undergone a rapid transformation in the context of growth due to globalization. Globalization is an economic growth strategy meant at generating rapid and sustainable growth through macro-economic stability, however, African societies embraced this globalization without prior planning thus it has negatively affected their economy. Such effects include; the weakening of the economy (Manning, 1993), through inflationary pressures, the marginalization of the poor in the distribution of educational and health benefits and a reduction in employment (Mwenga & Ndulu, 1994). For instance, the privatization of state corporations in Kenya caused massive loss of job opportunities especially by the low-class citizens thus making them operate in the informal economy 'out of need rather than choice'.

The increased urban economic crisis in Kenya is, therefore, underemployment and unemployment which has caused intensive poverty among urban dwellers. In addition, poor remuneration informal employment has also caused the fall in real income thus many employees remain poor. Many households are/ have opted to diversify their income by engaging in multiple economic activities to move out of poverty and raise their economic standard (Owusu, 2001). Urban informal employment has been the major absorber of this diversification of income. Statistical estimations put the percentage of employment in this sector at approximately 82.7% of the total jobs with a growth rate of 17.22% per year (IEA Research Paper Series No.1/2010).

In addition, the lack of political goodwill of the government officials in improving the condition of the informal economy has made some people remain in this sector (UN Habitat, 2003). For instance, politicians are unwilling to find durable solutions to the informal sector plight, rather, they take advantage of this position to lobby for votes with empty promises of improving their working conditions (Murgor, 2016).

c. Employment Structure in the Informal Sector

The informal sector is diverse – an individual can hold multiple jobs at the same time. The sector is two-tier in character (Fields, 2005) an “upper-tier” and “lower-tier”. The “upper tier” is competitive i.e. encompasses those who voluntarily choose to be informal and may use it to complement income from the formal sector; the “lower tier” consists of individuals who cannot afford to be unemployed but have no hope to get ever in a formal job. Owusu argues that many country's economic crises have compelled all the social classes to engage in multiple economic activities; both the poor, working-class and the professional class (Owusu, 2001) this is because of the following reasons among others.

- i. Autonomy and flexible working hours and good prospects related to work status; one can work within their schedule as opposed to being employed, the operator/ workers thus enjoy comparative advantages in the informal economy than in the formal economy (Günther & Launov, 2012).
- ii. The evasiveness of the informal economy makes discovering and counteracting these activities cumbersome. Most of the informal activities operate outside the legal requirements of running businesses this sets the ability of them generating a higher income than in the formal economy.
- iii. An increase in subcontracting driven by globalization and economic liberalization has led to greater diversity in the forms of informal employment. This has led to an increased heterogeneity among informal proprietors, and growth in the number of those with advanced skills and higher capacity in productivity.
- iv. Unemployment: this is the inability of the formal economic sector to provide a sustainable number of employment opportunities for the available labour force. Because individuals have to find a source of livelihood/ cannot remain unemployed for a prolonged time, they are forced to venture into the informal sector even if the income is inadequate (Simone, 2004)

d. Institutional Drivers

According to Loayza, the informal sector is created when excessive taxes and regulations are imposed by the government who cannot enforce compliance. In his article, he explains that these regulations make entry into the formal economy unappealing by imposing high taxation in the form of license fees and registration requirements, labour and environmental regulations (Loayza, 1997). In addition, the government has been introducing ineffective, ill-advised, and macro-economic and social policies created without multilateral stakeholders' consultations without an existing implementation framework thus providing a thriving ground for the informal proprietors who thrive under anonymity (Murgor, 2016). In addition, some of the lawmakers engaging in informality themselves (Loayza, 1997).

Moreover, in Africa, economic units choose to be completely or partly informal depending on the cost and benefits of doing business. Operating a formal business especially in the developing countries requires a lot of effort; this may include the longer time incurred in the registration process and higher cost of registration, higher cost accrued in remaining and operating a formal business for example, in De Soto's study of manufacturing firms in Peru, he found out that in a sample of 50 small manufacturing firms, the costs of staying in business constitute an average of 348% of after-tax profit thereby 22% of such costs are due to taxes, higher public utility constitute 5% and 73% in regulations and bureaucratic requirements (De Soto H. , 1989). This has prompted many businessmen/ women to operate informally thereby evading such expenses.

In Kenya, the informal economy has evolved since colonial times. In the past, the significance of the informal economy was under-valued than in the current dispensation, it is constantly flourishing in Africa and Kenya in particular. In the past, the policies on the informal sector were repressive and highly controlled through heavy taxation (Robertson, 2002). Currently, most of the informal sector activities are thriving because of the enabling environment supported by favourable policies. Such changes included the enactment of the Kenyan Economic Recovery Strategy for Wealth Creation of 2003 which provided measures to improve revenue collection, rearrangement of expenditure and monetary policies. It paved the way for the development of Vision 2030 which is a blueprint for the long-term development of the Kenyan nation. The main objective of Vision 2030 is to transform Kenya into a newly industrialized, middle-income nation providing a high-quality life for its citizens.

2.8 Implications of the Informal Economy on the use of the Street.

Karuga (1993) argues that the process of urbanization is characterised by both population growth, expansion of industries, densification of land use and increase in socio-economic activities. In this setting, urbanisation has immensely changed the socio-economic (especially the informal activities) and land use along Tom Mboya Street.

These informal activities have attracted many motor vehicles, cyclists and non-motorised transport along the streets (especially Tom Mboya Street). These activities eventually attracted an agglomeration of pedestrians who came to board vehicles or buy goods. The increase in pedestrians within the street eventually attracted informal economic activities including the informal bus/ matatu terminus and the vending along the street. The main vending activities included the sale of fruits, clothing, shoes and household items, florists, shoe-shiners among others. They locate along the pedestrian walkways, frontages of buildings and alleys. These spaces are ideal for these businesses as they are 100% accessible to the target market.

2.9 Legal and Institutional framework Guiding Management of Spatial Economic Activities in Kenya.

Urban management is all about easing a situation and preventing it from future deterioration. This process is guided by various legal and policy documents and provisions. These include;

2.7.1 Legislative framework

a. Constitution of Kenya, 2010

It outlines the importance of every person in Kenya; every person has the right to a clean and healthy environment, which include the right to a sustainable/protected environment for the benefit of the present and future generations through legislative and other measures relating to the environment fulfilled. Article 43 section 1(b) gives every person the right to accessible and adequate housing and reasonable standards of sanitation. The informal activity sites do not meet the provisions of the constitution, this is manifested through the heaps of garbage, poor road and drainage conditions along and within the streets, high levels of pollution – noise and dust, congestion of the streets among others. There is a need, therefore, to come up with strategies for realizing this constitutional right for both the current and future generations.

b. County Government Act, 2012

It provides for the establishment of county authorities. These authorities are responsible for the formulation and regulation of economic, physical, social, environmental and spatial planning and management issues within their areas of jurisdiction. The act gives the county government the mandate for physical and land use planning and categorising areas where strategic measures can be undertaken. It is with the county government's physical and land use planning framework and zoning plans of cities/ towns that other land uses such as transportation and markets can be handled.

c. Urban Areas and Cities Act of 2011

This act was established to provide for the criteria for organization, administration, and governance of urban areas and cities. The Act establishes Management Boards of Cities and Municipalities to undertake formulation and approval of plans, policies, strategies and programs and setting of targets for delivery of services, formulation and execution of an integrated development plan and control of land use, land development, zoning and land subdivision, by private and public sectors for any purpose including commerce, industry, shopping markets and other employment centres, as well as residential areas. This, therefore, provides a platform for articulating issues arising from the informal business activities within all areas of the city be it commercial, industrial or residential towards finding long-lasting solutions.

d. The Physical and Land Use Planning Act, No 13 of 2019

This Act is the foundation of physical planning in Kenya. The physical planning act aims at developing a sound spatial framework for effective land use coexistence, through plan proposals that enhance easier access and sound physical developments that are coherently planned. It provides for the formulation of National, Regional and Local physical planning

guidelines, policies, and strategies. It further provides for the preparation of regional and local physical development plans in various sections.

e. Micro and Small Enterprises Act No.55 of 2012

The legislation was enacted to provide the management and regulatory framework for the informal sector and Micro and Small Enterprises and to address the promotion, development, and regulation. Its objectives include the provision of a supportive business environment, simplification of business development services; formalization and elevation of informal micro and small enterprises; encouraging an entrepreneurial culture and representative associations.

The Act led to the establishment of the Micro and Small Enterprises Authority which is domiciled in the Ministry of Industrialization and Enterprise Development. The authority was established to promote, develop and regulate the Micro and Small Enterprises Sector. The major players include; manufacturing, agri-business, trade, and services. Some of its function includes the following;

- a. Formulate and review policies and programs for micro and small enterprises
- b. Organize resources for the growth of the micro and small enterprises sector
- c. Promote access to markets by micro and small enterprises
- d. Promote innovation and development of products by micro and small enterprises
- e. Formulate capacity building programs for micro and small enterprises
- f. Promote the mainstreaming of youth, persons with disabilities and gender in all micro and small enterprises activities and programs

The MSE Act establishes a tribunal to settle disputes efficiently and the establishment of the Micro and Small Enterprise Development Fund to finance the promotion and development of MSEs, while also providing.

f. The Trade Licensing Act (Cap 409)

It is an act that was formulated to regulate business activities within cities, municipalities or townships through the administration of licenses. Preliminary debates with the business operator show that the small business operators are unable to pay the fees charged and therefore opt to operate informally by avoiding fees of the county governments.

g. City Bylaws

In regards to the informal sector, the City of Nairobi by-laws stipulate that no persons shall participate in any business at any premises within its jurisdiction unless such premises are allowed for the purpose. Any individual without a legal permit or vends in undesignated area risk having their goods confiscated. Throwing away and burning of any waste in an unsuitable place is an offence. Any duly authorized officer may scrutinize a residential dwelling or trade premise at any time. Dropping any type of waste on the street is a criminal

offense, and any individual operating a business must acquire/ pay for a business permit by the 31st March of the current trading year or may be guilty of an offence

2.7.2 Institutional framework

a. Government institutions.

The local government institutions are expected to offer technical facts, linkages between the small and large firms, development of policies and bylaws that provide standards and regulations on space provision, use and requirement, development of infrastructure and policies to plan for urbanization among others. Nevertheless, urban planning and management institutions have not taken into consideration the socio-spatial dynamics of the informal economy. In Nairobi for example, urban land use planning and management are under the mandate of Nairobi City County, however, the city lacks the capacity to manage the informal sector – this is due to poor implementation mechanism of the policies and laws of the city, poor working conditions (lack of vehicles, human labour as well as financial support), poor leadership structure (top-down approach). Moreover, over the years, the planning approaches that have been implemented have resulted in the demolition of the informal businesses along streets, harassment and destruction of goods or/ and life. However, in the 1980s Nairobi plans to set aside land for markets/ bus termini in Nairobi to cater for the informal sector activities (Muraya, 2004) and associated infrastructure and services.

The government institutions that deal with the informal sector are categorized into various ministries, namely Transportation agencies, industrialization, trade and labour, and environmental management agencies among others. Such institutions include the traffic police and the National Transport and Service Authority (NTSA) which has the mandate to register and license motor vehicles, conduct the inspection and certification of motor vehicles, regulate public service vehicles (PSVS) as well as advise the government on the national policy with regard to the transportation sector. The ministry of transportation has the obligation of managing the road transport sector in Kenya. Nairobi City County (NCC) also ensures that all vehicles are registered and operate under SACCOs and cooperatives, the vendors are licensed and their operating areas are favourable. These institutions are faced with inadequacies in terms of capacity to carry out their duties and coordination between the agencies causing the duplication of roles. They, therefore, face malpractice oversights in terms of integrating and implementing the development policies and laws.

b. Private Institutions

Private organizations are composed of financial institution, the formal economy, and advocacy services. The financial institutions include SACCOs, banks, and NGOs which provide financial services, training on financial utilization. The formal sector provides markets or supplies goods and services to the informal economy. Advocacy and lobbying for better working conditions and inclusion in the planning for economic development on behalf of the informal economy; in Nairobi, these associations include the SACCOs – Transportation Associations, Nairobi Central Business District Association (NCBDA), Nairobi Informal Sector Confederation (NISCOF), Kenya Private Sector Alliance (KEPSA) and The National Taxpayers Association.

c. Proprietor/ Users

These are the key persons involved in the day-to-day operation within the sector. They have negligible influence over their areas of operation. These operators include both private individuals and local managing bodies. This includes the matatu drivers and turn-boys, the vendors and street families.

d. Commuters/ Buyers

These are significant stakeholders in the informal economy. They are the end consumers of the informal operators' goods and services. They include the passengers and pedestrians on transit to workplaces, homes, business areas and or travelling for leisure. These users are more interested in safe travel, fair cost of travel, fair prices on goods, ease of access to goods and services among others.

2.10 Kenyan Response to Informal Sector

Management of the informal economy is not only to raise more revenue for the government but also to encourage efficiency in doing business, meet the minimum quality standard for health, labour and environment among others. As noted earlier, the informal sector has become a permanent part of the economy and therefore sustainable measures are required to manage its effects on the economy, environment, politics, and well-being of the society. A number of scholars have postulated that most of the ideas developed by the Kenyan government were to avert the colonial conditions at all levels – social, political, financial and economic. To achieve these conditions, a number of government reforms were established towards economic development in the country. Among these reforms include those that were/ are aimed towards the informal economy as discussed under the following sub-topics; Policy reforms, Legal framework, and Institutional framework.

a. Economic Growth Policies

These main milestones that encourage the growth and development of the informal sector included first and foremost the President Daniel Moi's visit of 1985 to the Kamukunji Jua Kali sector which spurred the national recognition of the informal economy and led to the development of policies to address key challenges that were affecting the operators. These reforms include the provision of operating sheds, the possibility of security of tenure on sheds by providing the sheds freely and issuing title deeds to the allottees, reorganization of the sector through the formation of Jua Kali SACCOS, subcontracting government tenders to the sector, and incorporating the sector into the National Industrial Policy and Planning. To reinforce the above proposals, there were other reforms that followed which are summarised in table 2.1 below.

Most of these policies were formulated to integrate the informal sector into the formal sector which is purely an economic perspective, however, it does not give any consideration to spatial perspective. In addition, integrating the two sectors has proven to be a challenge over time such that the informal sector has the tendency of not fitting into the established

regulations this thus calls for the identification and implementation of effective measures towards its regulation and management. There is also a missing link between the economic and spatial aspects of informality.

Document	Year	Summary
Sessional Paper No. 1	1986	Reforms on economic management for renewed growth that enhanced the informal economy business environment. It promoted the review of all policies, local authority by-laws and government regulations on informal economy activities with a view of abolishing unnecessary obstacles.
Government of Kenya Report	1989	Propositions for the development of Small Enterprises through reinforcing the Government commitments in Sessional Paper No. 1. Detail strategies were set for the removal of unnecessary regulations and legislations that were constraining the growth and development of the informal economy.
Sessional Paper No.2	1992	Small enterprise and Juakali development in Kenya – this encouraged the development of an enabling environment for the development of the informal economy.
Government Development Plan (1989 – 1993)		This plan established that the government will fast track the review of the regulations and by-laws that were inhibiting the growth and development of the informal economy.
Budget reforms	1993/94	It proposed the review of the Trade Licensing Act and encouraged the treasury to provide a lenient substitute licensing fee for the small enterprises
Small Enterprise Policy Implementation Programme (SEPIP)	1994	It provided a roadmap for the Government to propose a favourable policy framework for small enterprise development.
Small Scale and Juakali Enterprise Development Program		Completion of the government regulations and bylaws review and implementation of the amendments on the laws such as an enabling environment; credit for the MSEs; and Non-financial promotional programs.
The Seventh Development Plan (1994- 1998)		The government pledged to the continued support of small enterprises. This was done through the provision of economic, financial and regulatory policies that would encourage sustainable growth and development of the sector.
Sessional Paper No. 2	1996	The plan to transform/ make Kenya industrialized by the year 2020
The Eighth National Development Plan (1999- 2003)		It encouraged the growth and development of small enterprises through the proposition of the Cooperative Act to be developed with more orientation to trade, allowing cooperatives to operate competitively as the informal economy relies heavily on them for funding; review and strengthening the of Factories and Other Places of Work Act and the Public Health Act with regard to occupational health in the workplace with special attention and inclusion of the informal economy.
Budget reforms	1996/9	It encouraged the local authorities to consolidate the licenses into a single payment. The government to collaborate with the non-

	7	public organizations to promote the growth of the informal sector by solving the problems associated with the sector such as access to land, credit facilities, technology and information among others.
Sessional Paper No. 2	1997	The plan to transform/ make Kenya industrialized by the year 2020. This included the review of the Public Nuisance Act to make provisions for the informal sector
Economic Recovery Strategy for Wealth and Employment Creation	2003	The strategy was to spur the recovery of the economy through encouraging instantaneous economic growth measures such as improving revenue collection, rearrangement of expenditure, and monetary policy that encouraged economic growth without putting price stability into the threats, strengthening institutions of governance, renewal, and development of infrastructure.
Kenya Vision 2030	2007	<p>This is the country's economic development blueprint. The vision is anchored on three main pillars; economic, social and political pillars and anchored on the following foundations: macroeconomic stability; continuity in governance reforms; enhanced equity and wealth creation opportunities for the poor; infrastructure; energy; science, technology and innovation (STI); and reform; human resources development; security; and public sector reforms. It also aims at making the country a middle-income economy by 2030.</p> <p>In the transportation sector, the policy envisions a highly interconnected network through roads, railways, ports, airports, waterways, and telecommunications. It also encourages investments in the transportation industry with a view of improving efficiency and effectiveness of service delivery and enhancing revenue- earning capabilities. In as much as the provision of terminal facilities such as bus stops/stations are part of road development, the policy does not clearly outline it in its recommendations for transportation infrastructure.</p> <p>The economic pillar aims at giving the informal sector a level operation ground just as the formal economy. This will be realized through (i) training and giving credit; (ii) improving efficiency by reducing the number of players between the producer and the consumer; (iii) creating formal market outlets for small-scale operators who will then graduate from the informal sector; (iv) encouraging more investment in retail trade; (iv) developing an outreach programme to expand retail trade; and (v) developing training programmes to improve retail skills.</p>
Kenya National Trade Policy	2009	<p>It appreciates the importance of informal markets in economic development.</p> <p>It also recognizes the general challenges that face this sector such as inaccessibility and low-quality products, inadequate and sub serviced business/ working areas/ sites, inappropriate design of the spaces, and the temporary nature of space ownership among others.</p> <p>The policy aims at mainstreaming the informal business to formal through programs such as infrastructure development, market development, business skill improvement, and trade financing</p>

Table 1.1: Government Reforms to Promote Efficiency in the Informal Economy. (Source: (UN Habitat, 2006))

b. Urbanization Policies

The spatial planning in the independence Kenya was pioneered by the Sessional Paper No. 10 on African Socialism and its application to planning in Kenya of 1965. The main aim of this policy was to coordinate all aspects of planning, namely; economic planning, physical planning, social planning and fiscal planning (GOK, 1965). The policy also emphasized the need for decentralized planning functions at the provincial and district levels to ensure effective implementation of spatial and economic policies to improve development at the local level. The main intention was to consolidate all the economic mechanisms in both urban and rural settings.

In 1966-1970 there was the development of the first national development plan while the regional physical planning department developed plans for the provinces - Central Province in 1967, followed by Eastern in 1969, Nyanza 1970, Coast, North Eastern and finally, the Rift valley 1971 (Maleche, 1998). These provincial development plans led to the establishment of the Growth Centre Policy in the 1970-1974 National plan. Based on the Provincial regional Physical Plans, a National Spatial long-term policy view was developed under the Human Settlements in Kenya: A strategy for urban and Rural Development in 1978. The strategy provided a general outline for the management of the upcoming urban growth as well as the location of physical developments in rural and urban regions in order to develop an articulate system of human settlements (GOK, 1978). The emphasis was placed on the service and growth centre policies. The service center policy targeted at improving quality of life through the provision of basic services in the urban centre. The Growth Centre Policy focused on selected growth centres which were projected to spur development in the hinterland and lessen rural-urban migration into larger cities such as Nairobi, Kisumu and Mombasa (Musungu & Kimani, 2010).

c. National and Regional Development Policies

The National Development plan of 1963-1979 emphasized the concept of rural-urban balance, recognizing the role of urban areas in providing markets for farm produce from rural areas and supplying farm inputs to rural areas. Rural development was emphasized to reduce rural-urban migration (GOK, 1979). Chapter four of sessional paper No.1 of 1986 outline the rural-urban balance strategies and represents a shift in regional development policies by the Government. It acknowledges the dynamic interdependence between urban and rural areas and the manufacturing and agricultural sectors. The policy recommended the establishment of the District Development Fund. The Rural trade and Production Centres (RTPCs) Programme were introduced in 1986 to create centres that would act as growth centres for the regions to catalyse the development of their hinterlands as well as act as a dispersion mechanism to decongest the main towns (Musungu and Kimani, 2010). During the period when the regional Development Policies were being implemented, the country's economic growth grew by an average of 6% between 1964 and 1980 and by 4% between 1980 and 1990. From 1990 to 2000, the country experienced annual GDP growth of 1.9% while the population grew at 2.9% annually (Omolo, 2010).

2.11 Theories of the Informal Economy

Following the definitions and characteristics of informal employment, a number of schools of thought have been developed. The main schools can be categorized into four groups; the dualistic, the structuralist, and the legalist schools of thought, and the integrated approach (Chen, 2016).

a. The Dualistic School of thought

This school of thought was developed by the International Labour Organization and documented in the ILO report of 1972 on the Kenyan unemployment problems classified as either formal or informal. It saw the informal sector as an inferior portion of the labour market as compared to the formal sector. It dwells in isolation from the formal economy and is thus characterized by semi-industrialized economies. This is due to the imbalances in economic developments resulting from high population growth rate compared to the economic growth rate and the use of traditional labour skills which do not match the new economic opportunities thus the ease of entry, small scale in operation, and labour intensive (International Labour Organization, 1972). The weakness of this theory is that it views the informal sector as excluded from the rest of the economy which is not the case; Chen, in her study of the informal economy noted that most formal firms source their raw material and/ or are supplied by finished goods by the informal sector directly or through intermediates (Chen, 2005)

b. The Legalist School of thought

The legalist approach was spearheaded by Hernando De Soto in his study of informal enterprises and entrepreneurs. He argues that informality is those activities and actions of individuals that break barriers of legality (De Soto H. , 1989). He further explains that the policies and regulations put in place by the authorities are too cumbersome and costly for the working poor and therefore often violated by the informal entrepreneurs. This school of thought views the informal sector as a vehicle for labour absorption and which provides a survival avenue for the poor, a means of redistribution or a platform for dynamic growth (De Soto, 2000). This school explains the flexibility of the informal economy as it allows free entry of individuals both as a start-up enterprise but also provides an open market for people from the formal sector.

c. The Structuralist School of thought

The structuralist approach to informality is the work of Manuel Castells and Alejandro Portes of 1989. It is caused by the growth of capitalism. This theory demeans the informal economy and views it as a subordinate economic unit thus, focus on the unregulated nature of informality. However, unlike the dualism approach, the structuralist saw the linkage between the informal and the formal sectors which exist due to the globalized supply and production chains. It, therefore, sees the informal sector as composed of small firms and unregistered workers, subordinated to large capitalist firms but are not exploited by the regulations that support the formal sector.

d. The Voluntarism Approach

This approach was pioneered by William Maloney in 2004. It focuses on the self-employed, notably, male micro-entrepreneurs. They deliberately choose to operate informally by avoiding regulations and taxation which are costly. They view the informal economy as competing unfairly with the formal economy by avoiding formal regulation and costs of production and therefore lobby for it to be regularised in order to increase the tax base and reduce the unfair competition to the formal businesses.

All these theories have broadened our understanding of the informal economy in terms of the reasons for their existence, their characteristics and linkages with the formal economy. However, they have not recognized the spatial component of informality, the challenges they pose in their areas of existence and the plausible strategies that can be applied to effectively minimize the challenges they pose. However, in as much as they all do not give the spatial aspect of the informal activities but for the purpose of this study the legalistic approach which views the informal sector as a vehicle for labour absorption and which provide a survival avenue for the poor, a means of redistribution or a platform for dynamic growth (De Soto, 2000).

2.12 Towards Effective Management of the Informal Sector; Case Studies

The following case studies allow for the examination and enhancement of the understanding of the underlying complex issues surrounding the informal sector and especially its effects on the community (Johnson, 2006). These case studies, therefore, provide significant insight and in-depth/ holistic approaches towards understanding the informal sector as well as providing real-life/ practical ideas that can be borrowed and applied towards the effects management of informal activities within Nairobi among other towns.

2.12.1 Factors to consider in locating Bus Termini.

Termini play a vital role in alleviating traffic congestion along roads. They provide spaces for the embarkment of vehicles without causing traffic snarl-ups on the streets (World Bank, 2006). Therefore, the factors to consider in locating them include;

- i. Away from the streets/ traffic lanes,
- ii. The frequency and volume of traffic,
- iii. Availability of ample space to cater for the current and future demand for embarkment,
- iv. Passenger demand patterns,
- v. The need to meet the peak traffic load.

2.12.2 Factors to consider in locating Markets.

A market is a mechanism/a physical site used to facilitate the distribution of goods, but only fully effective if it enables the retailer to operate profitably and the customers to obtain products at the most advantageous prices and make an optimal profit from them. Factors to consider when siting a market include;

- i. Availability of the target customers,
- ii. Designed according to the expected levels of sales,
- iii. Adopted to the best preservation of the product being sold,
- iv. Availability of services such as access infrastructure, eating, lighting, and relaxing amenities among others (adopted from Tracey White, 1998)

2.12.3 Case Studies

The table below outlines Case studies that have been used to address various thematic issues surrounding informality; such as governance in the informal economy, stakeholders' involvement in planning and management processes, resolution of conflicts arising from struggles for rightful users of urban spaces among others.

Thematic Issues	Case Studies	Background/ Reforms	Achievements	Reasons for Success
Efficient Public transportation systems	Public Transport in Mexico City	<p>- Mexico City had a population of 20 million people in 2002 when the initiative to start a Bus Rapid Transport (BRT) system began.</p> <p>- Concerns that were to be addressed by the BRT included, to reduce travel times, improve passenger comfort, reduction of air pollution, increase market opportunities for rapid transit bus lines and giving opportunities for paratransit operators to formalize their business.</p> <p>- The BRT was developed along with one of the busiest corridors in the city by incorporating it along other paratransit. This was done through negotiations with the relevant stakeholders, reduction of air pollution by introducing new buses and enhancing the use of the new buses by the general public.</p>	<p>- The Metro Bus was opened in 2005 along with one of the busiest streets in Mexico City.</p> <p>- The Metro bus replaced about 350 standard buses with 97 new articulated BRT vehicles which carried 160 passengers and run at higher frequencies which aggregate to 250, 000 passengers ferried per day.</p> <p>Other benefits;</p> <p>- It has reduced the commute time from 1.5 hours to 1 hour on the route,</p> <p>- Reduced passenger exposure to pollution,</p> <p>- increased market opportunities for rapid transit bus lines.</p>	<p>- Existence of a trust fund that manages and distributes all fare revenues thus enhanced the level of accountability,</p> <p>- Mexico City Government supported the planning, coordination, rectory and management as well as the financing of the construction and maintenance of the corridor infrastructure.</p>
Governance and Informal Economy	Street Vending Legislation in India	<p>-India hosts about 10 million street vendors.</p> <p>-This legislation was created as a result of the long-term campaign against poor social protection and insecure working conditions. These advocacy campaigns were carried out by the Indian street vendors' association such as the National Association of Street Vendors in India (NASVI) and the Self-employed Women's Association (SEWA).</p> <p>The campaigns led to the creation of;</p> <p>- The Protection of Livelihood and Regulation of Street Hawking Act</p>	<p>The 2014 Act laid out procedures for regulating street vending – issued out certificates to existing vendors, established street vendors' right and obligations, developed a plan for street vending and set-up Town Vending Committees including the Chief Executive Officer as Chair, officials and a minimum of 40% representation from street vendors.</p>	<p>- Long term organization of vendors,</p> <p>-Support from representative organizations (NASVI and SEWA), and advice from <i>Pro bono</i> advocates.</p>

		<p>of 2014 – the act aimed at protecting the rights of street vendors and setting up strategies for regulating street vending in which the vendors were involved from inception to implementation.</p> <p>- The National Policy on Urban Street Vendors of 2004 (Reviewed in 2009) established by the Ministry of Housing and Urban Poverty Alleviation (MoHUPA) – it was created to address the grievances of NASVI and SEWA.</p>	<p>The policy created an enabling approach for enhancing livelihood and established conflict resolution mechanisms for conflict caused by vendors.</p>	
	<p>Trader Organizations Negotiating Space, Dakar - Senegal</p>	<p>-The organization of space in Dakar came as a result of effective dialogue/ negotiations between the traders and the state authority.</p> <p>-Initially, traders were marginalized by the municipal policy. Traders then organized themselves into stronger works’ organizations where they lobbied for trading spaces within the city. There were street traders' meetings which eventually led to the buying of an off-street site for a 4-story trading mall which was opened in March 2016.</p>	<p>Review of the laws to incorporate the economic contribution of the street traders, better management of public space, the establishment of better facilities.</p>	<p>Solidarity between the traders in articulating their needs.</p>
<p>Urban Planning and Design</p>	<p>Participatory Urban Design in Durban – South Africa</p>	<p>-Warwick Junction in Durban South Africa is an attraction point for both private and public transport services and many people. This has attracted eight small markets with several traders.</p> <p>-There were no plans for this area – manifested through overcrowding and high crime rate. This led to the formation of the Warwick Junction Urban Renewal Project.</p> <p>-The Warwick project was an all stakeholders ‘participatory project where local government-initiated dialogue with the street traders in the area to enable them to articulate their interests in the plan.</p> <p>-The project aimed at enhancing the quality of Warwick Junction environment through improving safety, sanitation, security, functionality and economic opportunity of the urban poor.</p> <p>-The project started by a clean-up campaign; a communications campaign to improve the image of the junction’s; and the planning, design and</p>	<p>Transformation of Warwick Junction – reduced crime, appropriate working conditions, reduced congestion, and improved infrastructure, improved working conditions between the city’s official and street traders.</p>	<p>- The Flexible design of the project,</p> <p>- The Use of Participatory approach</p>

		development of eight market areas with supporting facilities.		
Legal Framework	Inclusive Policy for Solid Waste Management, Brazil	Increased waste build-up in Brazil as a result of the country's progressive led to the recognition of Informal Waste Pickers as an integral part of the economy. This led to the establishment of Waste Pickers Cooperatives in the 1990s and in the early 2000s, the state included them in the municipal solid waste management systems and recognized the role of 'waste pickers' as a profession.	Protection and promotion of the role of waste pickers at the local, state and national levels. Better remuneration and secure working conditions for waste pickers.	Inclusive legislation and effective stakeholder forums.
	Pro-Poor Street Vending Ordinance in Lima- Peru	-Lima hosts about 300, 000 street vendors. Street Vendors' campaigns for better governing of street trade led to the development of Metropolitan Ordinance of 1985, however, this ordinance was poorly implemented which thus more advocacy by the traders. - In 2014, the ordinance 1787 was developed which simplified administration and gave priority to the licensing of workers (giving priority to mothers, elderly vendors, mothers of young children and people with disabilities), enrolling them to formalization programmes aimed at enhancing the vendors' business skills, introduction of groups' saving schemes and access to financial services.	By-laws have been drafted by the Local District Municipalities to define licensing regimes and commissions for solving problems.	Consultations between the Local District Municipalities and the Street Organizations and the street vendors' themselves. Accommodating the political realities in Lima.
Rights and Representation	Enhancing Market Safety in Accra - Ghana	-The 2010 study on the problems affecting street vendors and market trader in Accra identified the problems of poor sanitation and drainage, inadequate lighting, poor ventilation, poor storage facilities and harassment from the city authorities. Most of these challenges were believed to stem from institutional and governance failures. The Workers' Trade Union saw a need to mobilize the traders to overcome these challenges – the issues addressed included governance, safety and health, and negotiation skills.	The stakeholders organize a dialogue that caught the attention of the workers' leaders and the government on the significance of proactive dialogue. This resulted in an increased awareness of safety issues and improved confidence in public speaking and the tactic of approaching the authorities.	Pro-active engagements among stakeholders. Availability of data on priority issues affecting the traders, Partnership between the governments the workers' unions.
	Gender, Representation and Waste,	-Most women across the world are still marginalized in working areas, be it formal or informal. However, for women waste pickers in Brazil, they are marginalized at the workplace and even in organization	Reduced discrimination and violence between workers.	Principles of popular education and stakeholders' participatory

	Belo Horizonte, Brazil	<p>representation. They, therefore, developed the 2012 Gender and Waste Projects in conjunction with the Federal University of Minas Gerais (NEPEM-UFGM), the National Movement of Waste Pickers (MNCR) and local NGOs – WIEGO and INSEA. The aim of the project was to raise awareness of the importance of increased economic and political empowerment of the women waste pickers and to address the sectoral gender inequality issues.</p> <p>The outcomes of this discussion were two tool kits – for waste pickers and the other one for practitioners who were aimed at mainstreaming gender awareness.</p>	<p>Improved skills in issues articulation and incorporation into policy settings.</p> <p>Engagement of both genders in the creation of a platform for articulating grievances.</p>	methods
Formal – Informal Linkages	Improving Livelihoods in Global Supply Chains, New Delhi, India	<p>-As aforementioned in the report, the informal economy cannot exist on its own – it depends on the formal sector for its survival. In the case study of Indian Home-based workers, they depend on the global supply chain for their businesses to survive but they did not have appropriate ways of claiming their economic rights. Therefore, SEWA which is the union representing the rights of Self-employed Women decided to help Delhi’s embroidery workers to overcome the unclear legal framework in which they were operating through reorganizing the supply chain.</p> <p>SEWA intervened by developing the Embroidery Centre close to the members’ homes where work orders were deposited and collected. These links scrapped out the middlemen and also aided the workers in gaining government support. They were also provided with training on health, micro-finance, and skills.</p>	<p>Established embroidery centres in Delhi,</p> <p>Creation of 800 regular work and 3000 periodic work for the embroidery workers,</p> <p>Improved income for the workers,</p> <p>Removal of middle-men.</p>	<p>Range of strategies introduced by SEWA (e.g. advocacy for legal reforms and market interventions),</p> <p>Benefits from the government,</p> <p>Removal of middle-men facilitated the growth of alternative economic model.</p>

Table 1.2: Model Case Studies for Effective Management of Informal Sector Activities. (Source: Modified from (United Nations Human Settlements Programme, 2016))

2.13 A Theoretical Framework for Effective Management of the Informal Activities.

The significance of the informal sector activities to the urban population cannot be overlooked this is because of the significant part it plays as a source of livelihood, and therefore, should be viewed as a permanent part of the urban economic system (Freeman and Norcliffe, 1985) – it helps in the diversification of the income of the urban dwellers. This, therefore, calls for consultations between all the informality stakeholders (the primary operators, the government and other Non-governmental organizations) during the formulation, design, and implementation of planning and management strategies/ measures for the informal economy.

The importance of this sector of the economy is embedded in the legalistic approach/theory which views the informal sector as a vehicle for labour absorption and which provide a survival avenue for the poor, a means of redistribution or a platform for dynamic growth (De Soto, 2000). However, the sector also has associated challenges and how they affect the overall business operations within towns and cities. The identified challenges from the literature review include congestions; social and spatial issues such as competition for space use, crime, and accidents; economic issues such as disruption of the formal business operations among others. In addition, the conceptual framework takes cognizance of the available policies, laws and institutional framework that can be used as a campus towards achieving effective management of informal operations within the urban realms.

This framework targets rationalizing the informal sector by proposing efficient management strategies for accommodating them as an important part of the city's economy. However, the realization of these strategies will require the contribution of various stakeholders to ensure the effectiveness and practicality of the proposed management strategies; these actors will include the government (policies formulators and implementers), Non-governmental organization (to provide sustainable strategies for street use), the informal street operators (to provide information on the factors affecting them as well as strategies for managing the chaos that exists on the street), and the institutional (to provide management tools for effective controlling/ ordering informal street uses).

As outlined in figure 2.1 below, the envisaged conceptual framework for achieving effective management strategies of the urban informal sector must start with the understanding of the inherent issues surrounding it - cause and drive the growth of the informal sector; spatial-temporal aspects, challenges arising from informal activities, and linkages that exist between the formal and informal economies. Spatio-temporal aspects and linkages between the informal and formal sectors are significant because they determine the siting of these activities within specific times of the day.

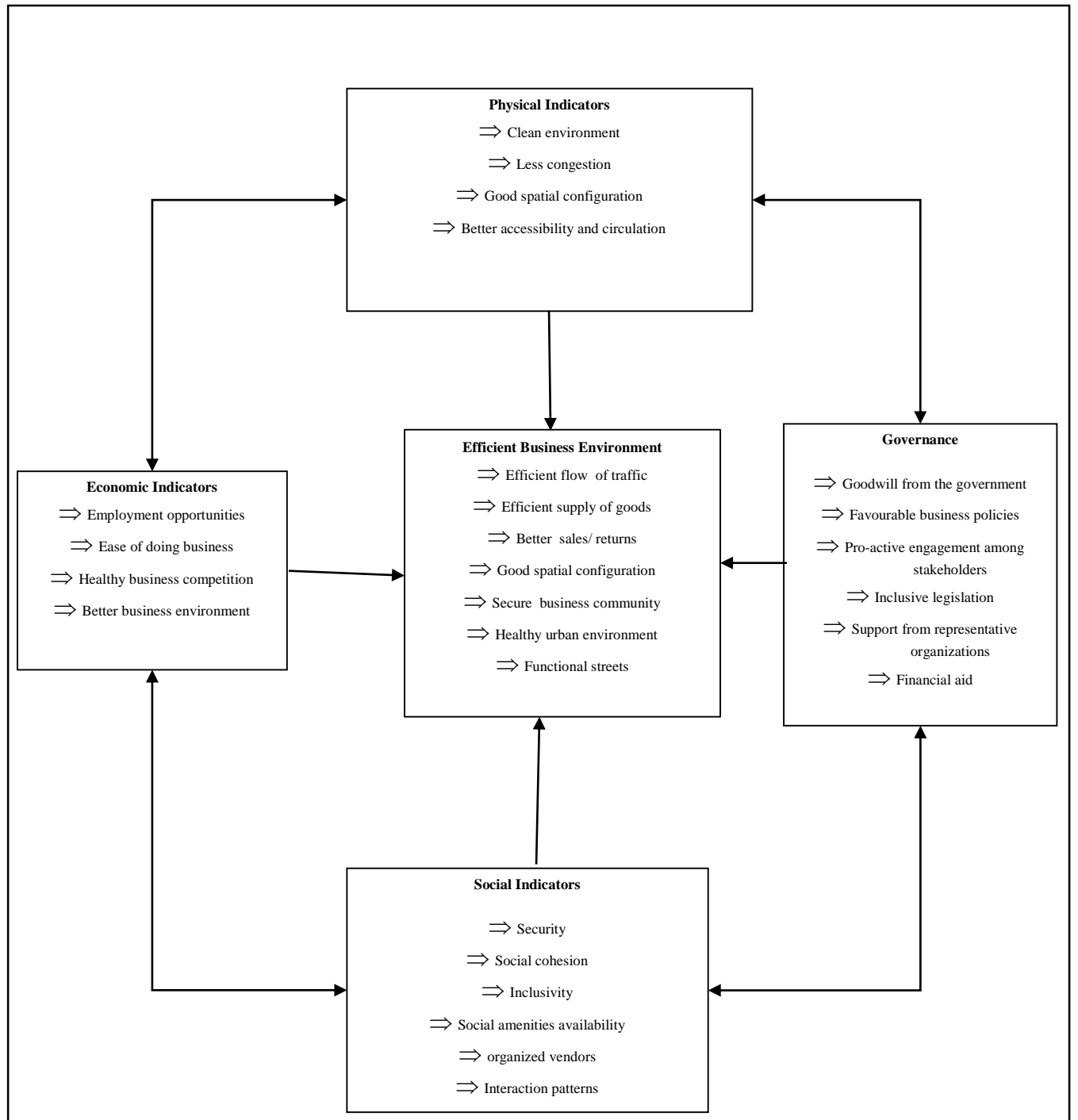


Figure 1.1: Diagrammatic representation of the Study Framework. (Source: Author, 2019)

2.14 Emerging issues form the Literature Review

a. Definition of the informal settlement

The informal sector refers to a composition of enterprises with growing market demands that depict high or low-income elastic demand (ILO, 2002) and are not recognized, regulated or protected by the existing legal and regulatory framework (International Labour Organization, 1972).

b. The nature of the informal sector, growth factors, and siting of informal activities

The informal sector is very diverse and dynamic. It accommodates all cadres of people – be it the rich or poor-selling commodities that change with seasons and time. The workers are affected by issues such as poor access to social and lack of adequate labour protection, low and unstable average earnings and majorly comprised of low-income class citizens who live in areas with inadequate basic services (United Nations Human Settlements Programme, 2016). However, in as much as the sector is affected by various challenges, it has continued to grow courtesy of strong driving forces which include urbanization, socio-economic and political factors, institutional drivers, and the sector's employment structure that is diverse and dynamic; the current statistics on employment in Kenya projects informal employment to represent approximately 82.7% of employment (KNBS, 2014)

Moreover, the informal sector often locates in places that are highly exposed to large traffic of people. In Nairobi for instance, they are located close to each other and near formal business areas along the transportation networks and open spaces (such as the backyard of buildings). Likewise, by locating near the matatu informal bus stops where they can tap into the human traffic which uses matatu transport. It, therefore, imperative to note that the omission of these factors in the development of economic policies has resulted in the incapacity of the governing authorities from controlling the informal sector.

c. Emerging issues from the Kenyan responses to the informal economy

The high growth of the informal sector has created an area of contention between the government, formal uses/ users and the informal uses/ users. To address these conflicts several policies were put forward, however, some issues arose from the policies, namely;

- i. **Weak policy framework:** Some policies have aided in the improvement of informal business but some have not been effective. For instance, urban spatial planning policies and regulations have not recognized the informal sector as an economy that utilizes space and therefore ignored during the allocation of urban land uses. Without properly allocated spaces, space standards and development framework, the informal sector activities, therefore, locate haphazardly in any viable space so long as they can reach the targeted customers.

- ii. **Lack of Institutional capacity to control the informal sector:** These institutions are faced with inadequacies in terms of capacity to carry out their duties, thus face malpractice oversights in terms of integrating and implementing the development policies and laws. The management and planning for informal sector activities are left in the hands of market forces. Additionally, most political institutions/ politicians lack political goodwill in promoting the sector. Politicians use the informal sector as a bargaining tool towards achieving their political aspirations.

d. Relevance of theories of the informal sector

The study is anchored on the legalistic school of thought. This approach views informality as an important aspect of the economy and can compete equally with the formal economy and therefore an alternative economic venture for those excluded from the formal labour force. Moreover, it states that informal activities should be treated more or less equal to formal activities; this can be achieved through the formulation of policies that supports broad-based economic development (Heintz, 2012). These broad-based economic development strategies can begin with the acceptance of the informal sector as an important part of the economy and its significance in changing the lives of low-income people. Additionally, to ensure that the laws introduced take cognizance of the plight of the informal sector proprietors, there should be extensive inclusive stakeholders' participation that involves the informal business proprietors.

e. Lessons from the Case Studies; towards effective management of the urban informal sector.

Governance and the Informal Economy; the government's economic policies and laws should take into consideration the issues that affect the informal economy. Moreover, most of the existing laws have been developed through the top-down approaches where the government officials determine what should be included in the laws and policies, this has proven ineffective and therefore community/ stakeholders' involvement should be involved in all economic development platforms- participatory budgeting, dialogues, and locally-based resolutions.

The government and learning institutions should also establish a data bank consisting of extensive research and statistics on the locally-based informal economy.

There should be solidarity between the informal sector proprietors and government institutions to ensure that the traders can articulate their needs fairly.

Formalizing the informal livelihood activities is important if focused on reducing vulnerability e.g. giving workers ID cards to access social and health benefits – but is not sufficient. However, this is not adequate in tapping the potential of the informal operator as it is large and dynamic.

Political goodwill is also important in ensuring that the issues that affect the informal sector are promptly dealt with.

Urban Planning and Design: In planning for urban land use, most of the economic development plans neglect the informal sector. Therefore, the informal sector tends to locate in vacant open spaces such as parks, streets, lanes among others. The participatory design of these areas can help resolve these conflicts, provide spaces for secure livelihood and improvement of infrastructure such as the experience in Durban –South Africa.

Forceful demolition or evictions of workers for major development proposals or planning objectives should always be avoided, or be a strategy of last resort. If relocations are necessary, those should be followed up through the involvement/ participation of those being relocated.

Legal and Regulatory Framework: legislation and regulations formulated by the governments should strengthen livelihoods, as a key to reducing marginalization and vulnerability. Such enabling laws and regulations include the case of National Street Vendors’ Law in India. These regulations should recognize the informal occupation as a significant profession due to its major contribution to the overall growth of nations.

Rights and Representation: Empowerment of the informal workers is important in strengthening their bargaining power in issues affecting them. Partnerships between the government and workers to be enhanced through institutionalizing dialogue platforms.

Local government officials need consultation and negotiation skills in dealing with those whose workplaces are informal. Workers organize themselves to overcome the difference between groups and sectors.

Formal-informal Linkages: improvement of value chains can significantly improve the economic contribution of workers. This includes the reduction of the number of middlemen, provision of storage, or setting up direct supply produce as in the case of the embroidery workers in New Delhi, India.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the process that was used in data set collection, analysis and presentation in association with the framework that determined how consistency the legalistic theory is linked to the empirical observation. The methodology will cover the research design, target population, sampling procedure, and sample frame, instruments of data collection, the procedure of data collection, data analysis and presentation.

3.2 Research Design

A research design is the study framework used to guide the collection, analysis, and presentation of data (Pandey & Pandey, 2015). It was also the logic that links the collected data and the conclusions to be drawn that addresses the main objective of the study (Yin, 2009). It entails the procedure used to conduct the research – data collection, analysis and the criteria of interpreting the findings. The research design adopted was a **descriptive research design** this was accompanied by various survey tools such as the use of questionnaires, interview schedules, observations, and photography. The research instruments were designed and structured in a manner that ensured consistency and reduced data redundancy. This was a combination of close-ended and a few open-ended questions geared at ensuring the reliability of the data collected. In this sense, both qualitative and quantitative data were collected, analysed and interpreted.

Moreover, before the commencement of the study, all the data instruments were tested through a pilot study where actual data collection was conducted to ascertain the appropriateness and suitability of the data collection tools.

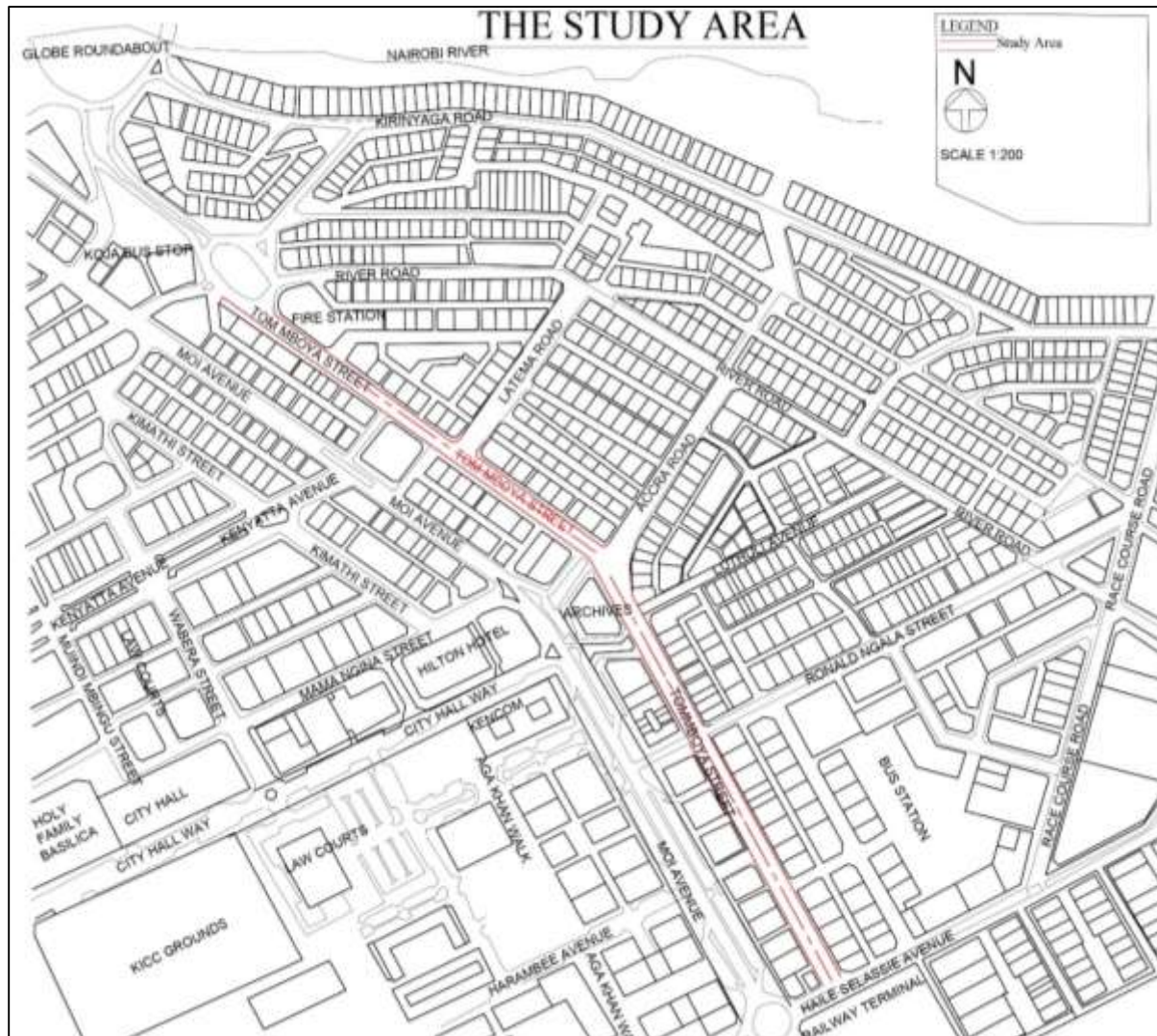
3.3 Area of Study and Population

3.3.1 Areas of study

Locally, the Tom Mboya Street forms the boundary between the upper and downtown CBD (See Map 4.1 below). It runs between Murangá road and Haile Selassie Avenue to the Northwest and Southeast respectively. Other roads within the neighbourhood include Moi Avenue and River road running to the West and North of the site respectively, Ronald Ngala Road, Hakati Road, Lagos Road, River Road, Luthuli Avenue, Latema road and Accra road emanating from Tom Mboya towards the East while Gedi Street, Mondlane Street, Cabral Street, Maragwa Lane and City hall Way emanating from Tom Mboya towards the West (See Map 4.2 below).



Map 2.1: Location of the Study Area within Downtown Nairobi. (Source: Property Magazine, 2018)



Map 2.2: Local Context of the Study Area. (Source: Author, 2019)

3.3.2 Population of the Site

Nairobi City County has an estimated population of 3, 138, 000 accounting for 8.1% of the total national population (KNBS, 2009). The average population density excluding Nairobi National Park is 5,429 per km².

The study area falls within the central division with an approximate population size of 274, 607 and a population density of 25, 640 people per square kilometer. The 274, 607 population is the resident population within the division, however, the CBD itself attracts people from the whole of Nairobi and beyond. Various studies on Nairobi population indicates a day population of approximately 5.0 million people (KNBS, 2009).

3.3.3 Target Population and Sample Design

Population: A population includes all elements (individuals, objects and items) (Denicolo & Becker, 2012) that meet the sample criteria in a study. For this study, the target population included all the street users along Tom Mboya Street – the pedestrians, matatu passengers, the vendors, the matatu and taxi operators (drivers and turn boys), formal business operators, and the governing authorities (the matatu Sacco, the county government officers, and police).

The Key Informants were sampled through purposive sampling; they were directly targeted as they were believed to have informative and reliable data for the study. These personnel included among others, the Nairobi City enforcement officers/ inspectorate/ marshals, the police and Matatu SACCO/ management organization.

3.3.4 Sample Design, Sampling Procedure and size

Sampling Design: Sampling is the process of collecting objects from a population such that the collected objects contain characteristics of the population it represents. Since the target population was highly diverse, a two-stage sample design was therefore used; stratified and simple random sampling. The different operators within the area of study were grouped into strata – the street families, the vendors, the transport operators (the drivers and turn boys), the pedestrians and or the passengers. A simple purposive random sampling was then employed in the selection of a number of cases from each stratum. Combined together, the samples from each stratum gave the total sampling frame.

A sample size represents a fraction of the population under study. A large sample size attracts larger resource use in data collection, analysis and presentation than a smaller sample size, however, it increases the precision of the sample size. Therefore, an average was used – not too large or too small; this was done to ensure reliability, efficiency, and representativeness (Mugenda & Mugenda, Rev 2003). The key factors considered in selecting the sample size among others were the time allocated for the study, the budget/ money allocation as well as the size and characteristics of the population.

It is worth noting that different types of research require a particular number of cases in a sample size; for correlational research, 30 cases or more are required; for descriptive studies, ten percent (10%) of the accessible population is enough and for experimental studies, at least 30 cases are required per group (Gay, 1981). This is Descriptive Research, but since the population under study was dispersed and highly mobile, at least 40 cases were selected from each of the informal activities and 30 and 20 cases respectively for the other users. A Simple Purposive Random Sampling (PRS) was then used to determine the sample size (**n**) which was applied in each subgroup of the population.

Categories/ Strata	Total Sample Size (n)
Vendors	40
Transport service providers (drivers and turn-boys)	40
Pedestrian and or passengers	30
Formal Business operators	23
Key informant interviews (Saccos (2), NTSA, Police or NCC Martials, city planner and Business licensing officers)	7
Total	140

Table 2.1: Sample Strata and Sizes. (Source: Author, 2019)

3.4 Data Needs and Source

3.4.1 Types of Data Needs and Sources

Data needs and sources was guided by the research objectives as discussed below:

- i. To establish the nature of street space informalities within downtown Nairobi.

Data required included the identification of the type of informal activities undertaken along Tom Mboya Street in terms of their spatial organization (size, access, and circulation), number and time of operations. For example, data on the different vehicles included the type of vehicle, size, access, circulation and spaces occupied in the temporary bus termini; data on vending included tenure and size of space occupied, types of goods sold, and time of operation among others. In addition, an assessment of the infrastructure availability and condition was then done for the study area.

Sources of data included; Primary data sources from the following users: the SACCOs provided data on the number of vehicles operating under them, the spatial-temporal organization PSVs along Tom Mboya Street. PSV/ vehicle operators gave data on the traffic origins and destinations, spatial organization, the route schedule. The passengers/ pedestrians provided information on their modal splits, challenges and advantages of the informal activities along the street. The vendors gave data on the type of tenure and size of space use, challenges they experienced in their daily operations, the formal operators gave details on the linkages and relationship with the formal operators. While the secondary data sources included review of relevant literature related to the historical background of the study area's development, past plans on the use of the streets and organization of activities. The records from the City County of Nairobi on the number of registered vendors and PSV operators and the road sizes among others.

Observation of the study area was carried out on the amenity provision, road users' behavioural patterns, environmental and road conditions - street sizes, street markings, access, and circulation etc.

- ii. To analyse the causes and impacts of the informalization of street use within Nairobi downtown

The data required included; spatial-temporal organization of informal activities; factors that attract the informal activities on the street scape, the relationship between the informal and formal activities and their effects on the overall usage of the street. Data on traffic, modal split, duration of travel and wait at the temporary bus parks circulation and accessibility patterns (including the size of the feeder roads); environmental characteristics data (air, noise and solid waste management); road users' behaviour data, satisfaction levels, effects of the informal activities on the access and use of the streets. These pieces of information will be sought from the different road users – the operators of the vehicles, the vendors, the street families, the pedestrians/ passengers, Nairobi City Martial, the Police among others.

Primary data will be sourced from the following; Passengers/ pedestrian will give data on the road users' behaviour, vehicle waiting time and trips duration, fares charged, their satisfaction levels in the face of the informal activities; the Formal business operators will give data on the business operations, their duration of stay and how the informal activities have changed/ affects their daily operations; and the SACCOs will give data on the number of vehicles registered under them, the charges for registration and operation, sizes and organization within the informal termini, reimbursement and how bus fares change among others;

Moreover, observations will be conducted to collect data on road users' behaviour, environmental condition; measurement of space allocation for the different informal operations among others.

- iii. To propose management strategies for effective street use within Nairobi downtown.

Data on the strategies for the effective street use were derived from the data findings from objectives, one (1) and two (2). These strategies were backed by data derived from the literature review; legal, policy and institutional framework for the transportation and vending activities, planning standards and types/ models of road use management strategies for informal activities within towns as well as practical case studies that were applied to enhance effective street use. The data sources included; the records from NCC, legal, policy and institutional framework guiding the development and use of roads and buildings and the management of informal activities.

3.4.2 Data Collection Methods and Tools

Primary data collection involved the formulation and use of different tools to facilitate direct engagement with different stakeholders within the study area, making observations and taking measurements of space-use where appropriate. The primary data collection tools included; structured questionnaires, direct observation, personal interviews, photography and sketches.

Four Research Assistants (RAs) assisted in data collection; these number was divided into two; two males and two females. The breaking down of the gender was important in addressing cultural beliefs (some cultures did not allow the opposite gender to address them); this is also to uphold laws on gender equality (Government of Kenya, 2010).

Before the commencement of the main data collection exercise, the research team conducted a pilot study which included a reconnaissance visit to the study site to familiarize themselves with the study subject as well as develop a rapport with the stakeholders. The team also engaged in observing the area as well as conducting a mock administration of the questionnaires to gauge the credibility of the questions as well as the time used to administer them.

The secondary data collection method mainly involved the review of literature on the subject of study.

a. Primary data collection tools

i. Structured Questionnaire

This consisted of a series of questions prompts for the purpose of gathering information from the street users/respondents. The questionnaires were presented to the respondents and answered in written form. They were used to collect qualitative data from various users of the streets to seek their perceptions on informality, changes that have occurred due to informality as well as operational strategies of effective street use. The structured questionnaires also aided in the collection of data on socio-economic and institutional data on the existing interactions between the users and managers of these sites.

ii. Personal interviews

Interview schedules were prepared and conducted on key informants among other stakeholders. They included interviewing the Nairobi City officials, NGOs, policymakers, the traffic police, formal and informal business operators, the formal and informal business operators, and Saccos.

iii. Observations

A checklist was used as a tool for collecting observable features of the study area for later analysis. After which direct observations were employed for the different characteristics/ features of the site and informal activities.

iv. Photography, mapping, measurements, and Sketches

It involved the measurements/ sketching of the street layout, area of spaces occupied by the different informal uses and other observable site features were captured in the form of pictures.

This was aided by the use of a cameras, tape-measures and sketch pads. Mapping was supplemented by the use of Google earth images and AutoCAD to produce a map of the study area. These sets of data gave an actual picture of the condition/ features of the study area.

b. Secondary data collection tools

The secondary data collection method mainly involved literature review on the subject of study from books, journal articles, studies of working/ practical cases of similar research, conference papers and internet sources in order to get a vivid comprehension of the subject of study. This also included a review of literature on the legal, policy and institutional framework in line with the study topic.

3.5 Data Analysis and presentation

3.5.1 Analysis and presentation of Primary Data

Analysis of data involved the formal identification of themes under study with an aim of demonstrating support for the study themes (Bogdan and Taylor, 1975). The analysis of the collected data considered the interaction between informal operators, formal street users and the institutions involved in the daily running of the activities and the observable features; organization of the informal activities as well as the environmental and streets condition.

Pre-analysis of Data; this involved the systematic organization of the data collected which ranged from numbering of questionnaires to labelling of maps and photographs.

Data Coding, Entry and Analysis; coding of the questionnaire included the preparation of the codebook where each response and item in the questionnaire was assigned a code. The coded questionnaires were then entered into SPSS in order to capture each response. Furthermore, the entered data were cleaned and then frequencies run with respect to the subject/ item being analysed.

Situational analysis and presentation; from the data collected a situational analysis was deduced which represented the physical, economic, social and environmental concerns within the site. From this analysis, recommendations were made accordingly. The data was then presented in the form of written texts, charts, maps, pictures, and sketches.

3.5.2 Analysis and presentation of the Secondary Data.

Data collected from secondary sources was screened to get appropriate data relevant to the study and was presented in the form of a report.

Objectives	Data requirements	Methods/ tools of data collection.	Data sources	Methods of data analysis.	Methods of data presentation.
To establish the nature of street space informalities within downtown Nairobi.	-Historical background of street planning and organization -Informal business activity; type and number of activities, spatial-temporal organization, and the relationship between them and other users, -Tenure of space use, -Infrastructure availability.	-Literature review, -Questionnaires -Interview schedules, -Observation, -Photography, -Mapping and sketching, -Checklist	-SACCOs, -Informal Sector operators, -Formal and informal business operators, -Local authorities, -Pedestrian and passengers -Site observation and taking measurements.	-Use of AutoCAD was used to preparation of maps -Notebooks for sketches and a camera for photography -SPSS was used in the analysis of the qualitative and quantitative data collected -MS Excel was used in the analysis of the qualitative and quantitative data as well as creating charts frequency tables and graphs.	-Maps, -Frequency tables, charts, and graphs, -Sketches and pictures, -Written report,
To analyze the causes and impacts of the informalization of street use within Nairobi downtown.	-The literature on causes of locating on streets within downtown Nairobi, -Benefits of locating on the streets within downtown Nairobi, -Challenges faced by road operators, -Challenges faced by the local authorities.	-Secondary sources, literature review, -Questionnaires -Interview schedules, -Photography, -Traffic counts	-Literature review, - Formal and informal business operators, -Pedestrian and passengers -SACCOs, -Local Authorities -Direct observation.	-Report writing, - SPSS was used in the analysis of the qualitative and quantitative data collected -MS Excel was used in the analysis of the qualitative and quantitative data as well as creating charts frequency tables and graphs.	-Written report, - Frequency tables, charts, and graphs, -Pictures
To propose management strategies for effective street use within Nairobi downtown.	-Management and planning recommendations from the informal and formal business operators, -Case studies -Recommendations from the city-county officials, the central government policies and laws, and -Role of stakeholders on effective street management.	- Secondary sources, -Interview schedules, -Key Informant Interviews, -Questionnaires	-Local authorities, -Literature review, -SACCOs -Informal and formal business operators, -Central government sources	-Report writing, - SPSS was used in the analysis of the qualitative and quantitative data collected	-Written report, - Frequency tables, charts, and graphs,

Table 2.2: Data need Matrix. (Source: Author, 2019).

CHAPTER FOUR: RESEARCH FINDINGS

4.1 Overview

This chapter discusses the findings of the study carried out along Tom Mboya Street. The findings are based on the responses that were collected from the fieldwork. Generally, the findings expound on the nature and implication of informalities on the use of the street space. The analysis of the findings facilitates a comprehensive understanding of the nature of the problem under inquiry thus making it possible to provide management strategies for effective use of the street space within downtown Nairobi. This chapter is divided into three main sections - according to the objectives identified in chapter one (1).

4.2 The nature of street use: informalities within downtown Nairobi.

4.2.1 Demographic and Socioeconomic Characteristics of the respondents

This section outlines characteristics related to age, gender, level of education, marital status, source of income, and tenure of space use. These statistics have a direct relation to the type of informality that an individual engages in.

4.2.2 Gender, Age, and Marital Status

a. Gender of the respondent and the type of business.

From the interviews conducted on the formal and informal businesses, a high percentage of the respondents were male and female in the formal and informal business respectively as shown in table 4.1. However, the case in the informal matatu business was different as 90% of the operators were male and only 10% being female as shown in table 4.1 below. This may be attributed to the nature of the job, which necessitates many physical activities such as hopping off/ on the matatu, carrying heavy luggage, changing tires or because of patriarchy.

From the analysis, 78% of men are active/ preferred in the formal employment than women. Therefore, it can be assumed that the women are left to engage in informal employment and this may be the reason why they account for a larger percentage (59%) in informal vending businesses. This affirms the position of the study done by IBRD and World Bank that revealed that there are more women involved in informal business than men (IBRD & World Bank, 2007).

Gender	Formal Businesses (%)	Informal business (vending) (%)	Informal business (PSV) (%)
Male	78	41	90
Female	22	59	10

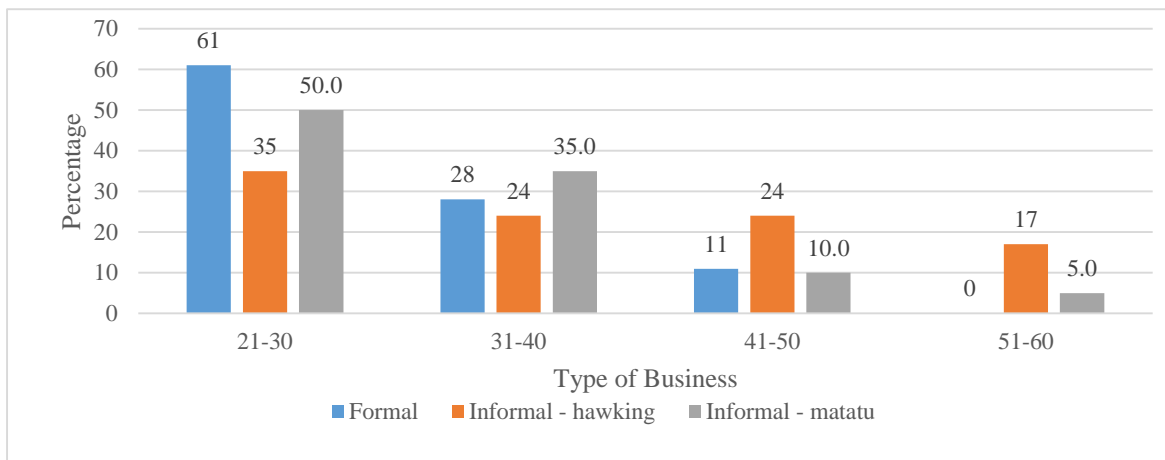
Table 3.1: Gender of the respondents.

(Source: Field Survey, 2019)

b. Age of the respondent and the type of business.

The majority of the respondents from the formal, informal vending and matatu businesses were within the age cohort of 21-30 years with the number declining with ageing as shown in graph 4.1 below. Most of the people that fall in the above-mentioned cohort are the energetic

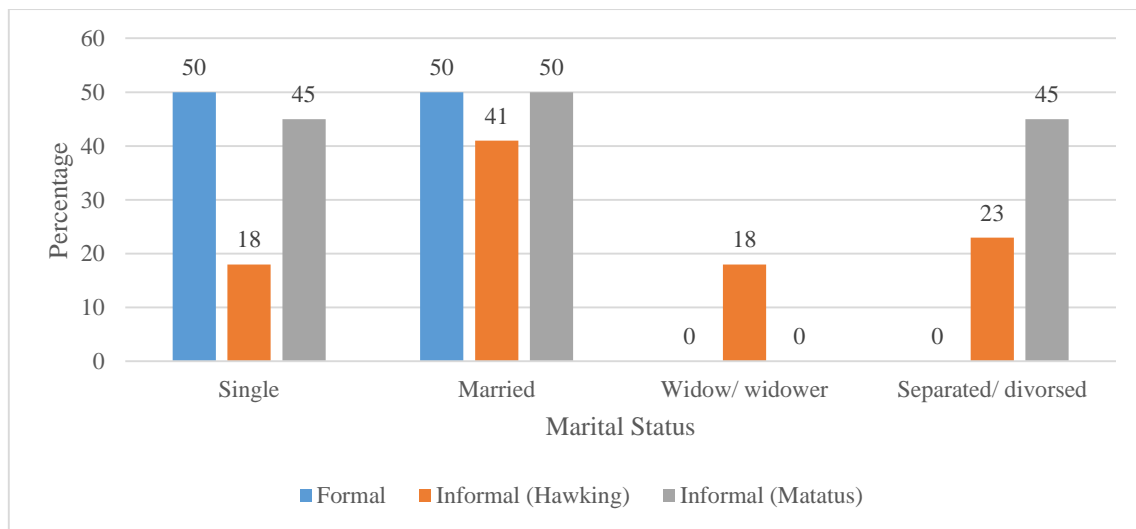
part of the population. However, the informal operators cut across all ages inferring to the acute shortage of formal employment in the country. In addition, the informal operators remain in business for a longer period than the formal employees; this is because informal



employment accommodates everyone in the society regardless of age or skills.

Graph 3.1: Age of the Respondents. (Source: Field Survey, 2019)

In regards to the marital status of the respondents, the majority of the informal business operators (vendors) were married followed by the singles among others. The large population of the married informal business proprietors (vending and matatu) may be one of the reasons for engaging in informal employment. This may have resulted from the high level of dependency from either children or the elderly or the need to complement the low income from their partners.

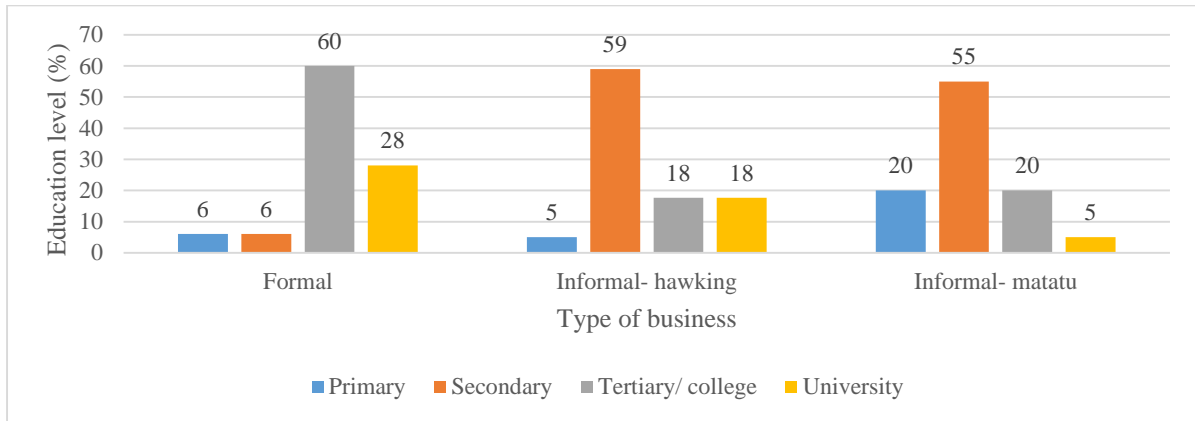


Graph 3.2: Marital Status of the Respondents. (Source: Field Survey, 2019)

4.2.3 Education Level of the Respondents

As shown in graph 4.3 below, a significant number of informal operators are educated with either tertiary (60%) or university (28%) education; however, only a lower percentage of people with low education are employed in this sector. From the informal sector, the majority of the business proprietors have attained a secondary level of education (informal vendors

and matatus at 59% and 55% respectively) and a few have attained a tertiary (informal vendors and matatu operators at 18% and 20% respectively) and a university-level (informal vendors and matatu operators at 18% and 20% respectively). These findings show that the sector is absorbing all cadres of the population (educated people who should otherwise have been absorbed in the formal sector and non-educated) thus echoing the importance of the sector in employment creation.

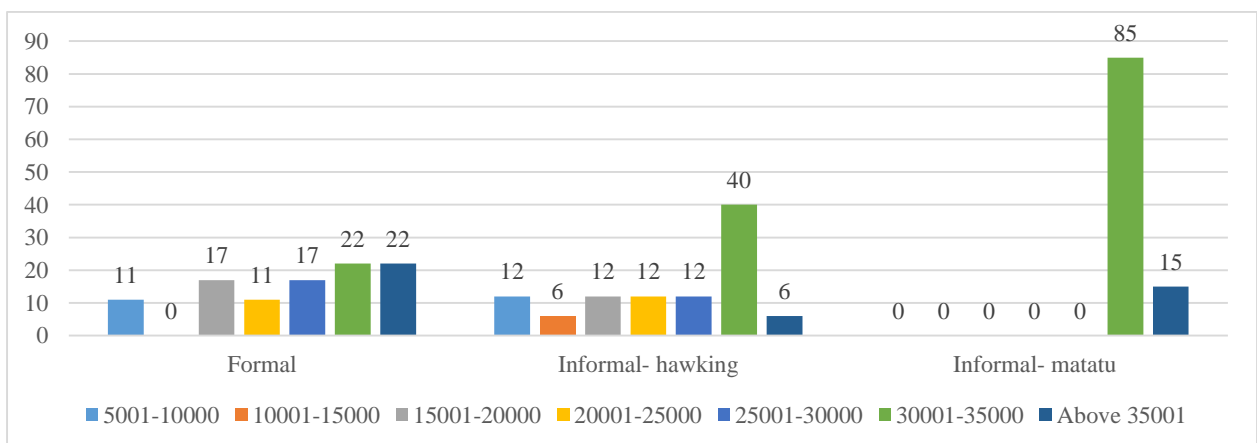


Graph 3.3: Education Level and the Type of Business.

Source: Field Survey, 2019

5.2.4 Type of Business and Level of Income of the Respondents

Most of the formal business owners' incomes are 15000 – 35000 as illustrated in graph 4.4 which imply that they are stable businesses. All the informal PSV operators interviewed earned above 30,000 shillings per month, this showed that PSV business was a lucrative business despite the challenges faced by the operators. The high income was attributed to the availability of many customers on their routes of operation as well as informal terminal spaces. On the other hand, the monthly income for the informal vendors ranged between 5000 and 10,000 per month, and this was because of the challenges that they face in their daily operations, namely; constant harassment and confiscation of merchandise by the county officers, harsh working environment, theft and destruction of goods among others, thus the dismal income.



Graph 3.4: Occupation and the Level of Income. Source: Field Survey, 2019

4.2.5 Ownership of the Business

It was found that 80% of the vendors were sole proprietors of their businesses whereas 20% operated on commission or as assistants. It is worth noting that these proprietors lacked cooperation as they competed for customers; however, they only came together in the face of adversary from external forces such as from the county *Askaris*, for example, they warn each other of the arrival of the city *Askaris*. Some of the street vendors were members of associations such as National Women Hawkers and Street Vendors, which they used to articulate their grievances. It can, therefore, be concluded that formal association is the best approach for articulating challenges affecting the vendors and formulate solutions to address the same issues.

As far as informal vehicle operators are concerned, 80% were employed by either the vehicle owner or the Matatu Saccos. The majority of this group lack funds to start and operate their own business.

4.2.6 Types of Informal Businesses

The study findings showed that the informal vending activities along Tom Mboya Street stemmed from the fact that the area around Tom Mboya Street attracts many passengers and public service vehicles, which ply different routes/ neighbourhoods within and around the city such as Westlands, Wangige, Mwimuto, Banana Hill, Karura, Githiga, Limuru, Kileleshwa, Buruburu, Eastleigh, Kasarani/ Mwiki, Babadogo/ Lucky Summer, Zimmerman, Kahawa and Githurai 44/45 among others. Tom Mboya Street, therefore, creates a sustainable business environment for the vendors. The high turnover goods sold by the vendors include the sale of books/magazines, vegetables and fruits, clothes/ shoes (new and second hand), sweets, cigarettes and electronic repair shops/ kiosks among others as shown on plate 4.1 below. The vending activities which accounted for a higher sample size include electronic repair shops, clothes/shoe activities, vegetables and fruit selling, and vending booths.

As mentioned earlier, some areas of Tom Mboya have mainly been converted into a single carriageway because of the informal bus termini; however, it was also found during the field survey that the most prevalent informal transport mode plying the route include buses/minibuses (55%) and 14-seater matatu (25%). Other modes of travel include rickshaws (tuktuk) (10%), motorbikes and taxis at 5% respectively as shown in plate 4.2 and table 4.2 which gives a summary of the informal transport modes operating within the area of study.



(a) Fruits vendor



(b) Clothes vendor



(c) Shoes shiners



(d) Charity Sweepstake - tickets booth

Plate 3.1: Goods Vended along Tom Mboya Street. Source: (Field Survey, 2019)



Tuktuk (Rickshaws)



14-seater Matatu



Parked Taxis



Mini-buses (32-35 seaters)

Plate 3.2: Modes of travel found along Tom Mboya Street. (Source: Field Survey, 2019)

Type of vending activity	(%)	Informal Transportation Modes	(%)
Electronic repair	25	Rickshaws	10
Sale of books/newspapers	10	Matatu (14 seaters)	25
Vegetable and fruits	15	Buses/minibuses	55
Clothes/ shoe	25	Taxis	5
Sweets and cigarettes	10	Motorbikes	5
Kiosks (vending booths)	15		

Table 3.2: Types of Informal Activities along Tom Mboya Street. (Source: Field Survey, 2019)

4.2.7 Other Land Uses along Tom Mboya Street

The formal businesses, which are mainly commercial / retail enterprises, are based in the buildings along Tom Mboya Street. Some of the formal commercial activities include electronic shops, clothes and shoe stores, household item stores, retail shops and supermarkets, clinics and medical stores, banks and offices. There are also public purpose/facilities along Tom Mboya Street for example; Nairobi Fire Station, Koja Mosque, and National Archives of Kenya (refer to plate 4.3 below).



National Archives



Old Nation Bus Terminus



Afya Centre



Nairobi Fire Station

Plate 3.3: Formal Land uses along Tom Mboya Street. (Source: Field Survey, 2019)

4.2.8 Spatial Organization of the Informal Businesses

Tom Mboya Street is one of the major arterial streets within the Nairobi CBD with a reserve of approximately 18-25m. It plays a crucial role in terms of NMT and vehicular movement besides accommodating informal businesses as mentioned earlier.

It was found out that most vendors prefer to operate their businesses on the northern side of Tom Mboya (around Koja/Fire Station) because of the high number of potential clients and also it is the safest place to operate as it is easy for them to evade the authority. It was also noted that 18% of the vendors were operating from their stations permanently whereas 82% are on a temporary basis. Although it was noted that the vendors occupy small spaces (approximately 4m² - 6m²), cumulatively, they end up using much space that should be used by other users such as vehicles and NMT. Moreover, the vendors use movable materials such as cartons, clothes or gunny sacks for ease of evacuation during an invasion by the city officers. Plate 4.1 above shows the open-aired goods along Tom Mboya Street.

It is worth noting that the permanently stationed vendors were physically challenged individuals; they were allocated the spaces, which they pay for monthly or annual rent, by the nearby building owners and city county. The majority of them sell books/ magazine sellers or run general stores/ Kiosks/ booths, shoe shiners.

The informal transport mode mostly utilized the outer lanes of Tom Mboya Street as informal termini, where they linearly lined along it to park or pick and drop passengers and goods. Most of the informal termini could hold 3-5 vehicles depending on the size of the vehicles, however, for rickshaws (tuktuk) up to 10 of them can occupy a terminus because of their small sizes.

The informal termini are managed by the matatu SACCOs and their role is to designate routes, manage fleets, and handle customers' complaints as well ensuring that their vehicles are in the good state among others.

4.2.9 Traffic Characteristics along Tom Mboya Street

a. Traffic Composition and Flow Patterns

As noted earlier, Tom Mboya Streets accommodates both NMT and vehicular traffic. However, the traffic counts undertaken mainly focused on vehicular traffic. The composition of vehicular traffic on the street include buses/ minibuses (60%) (32-65 seaters), 14-seater matatus (25%) and rickshaws/ motorbikes (15%). Most commuters (66%) preferred using buses/ minibuses as their mode of travel whereas 17% and 11% preferred 14-seater matatus and the rickshaws/ motorbikes respectively. The reasons why people preferred buses/minibuses is because of the comfort and charge lower fares as compared to other modes of travel.

Traffic into Tom Mboya Street emanated from Haile Selassie Avenue, Ronald Ngala Street, Kenyatta Avenue, and Muranga roads. The *traffic out of* the street exits through Muranga Road, Ronald Ngala, Latema Road, Accra Road, Luthuli, and Haile Selassie Avenues.

b. Traffic Volume

Three (3) hours (7:30 am – 8: 30am, 12.00 pm – 1:00 pm, and 5:30 pm – 6.30 pm) traffic surveys were conducted on different days (weekdays and weekends) within September 2019 to capture the traffic flow patterns over normal weekdays, weekends and rainy days. Manual Traffic Counts (MTC) were conducted at two cordon points (Old Nation roundabout and the junction of Tom Mboya and Ronald Ngala streets) to record the intersection turning traffic volume and movement data. The two cordon points were chosen because they form the major entry and exit to Tom Mboya Street. Table 4.3 below provides a record of the traffic surveys. Much traffic was observed at the Old Nation roundabout in the morning and evening, and this was because of the large volume of traffic gaining entry and exiting to the city centre to and from Thika Superhighway through Muranga road to drop and pick-up passengers and goods. In addition, it was observed that slow traffic flow was prominent during the evening hours in areas where the vendors operate and informal termini were located.

Time \ Area	Old Nation Roundabout		Ronald Ngala/ Tom Mboya Junction	
	IN	OUT	IN	OUT
AM peak	228	201	172	160
NOON peak	202	180	98	49
EVE peak	280	104	180	196

Table 3.3: Average Traffic Volume along Tom Mboya Street. (Source: Field Survey, 2019)

4.2.10 Support Services Provision along Tom Mboya Street

For the proper function of vending market and bus termini, support services such as proper waste management system, designated parking areas for the vehicles, designated disembarkment areas for goods and people, water points, storage facilities for goods, street lighting, shelters for passengers and shelter for the market operators, pedestrian crossing

areas and designated areas for NMT, and street furniture are needed. However, these basic services were lacking on Tom Mboya Street. The results obtained from the study are shown in table 4.4.

Type of Business	PSV termini amenities				Vending amenities		
	Parking spaces	Reserved entry/exit for PSVs	Schedules/control rooms	Disembarkment areas	Storage areas	Water/garbage bins/street lights	Stalls
Adequate							
Average				X		X	
Inadequate	X	X	X		X		X

Table 3.4: Level of Support Service provision for Vending/ Bus termini. (Source: Field Survey, 2019)



Plate 3.4: A faulty water point along Tom Mboya Street.



Plate 3.5: Goods stored on the shoulder of Tom Mboya Street

(Source: Field Survey, 2019)

4.3 Causes and Impacts of the informalization of street use within Nairobi downtown.

4.3.1 Factors Contributing to the Growth of Informal Activities

The following are factors that were considered to contribute to the growth of the informal business activities:

a. Socio-economic factors

The literature reviewed indicated that the main driving force of informality is the lack of formal employment opportunities (38%) in the country which was consistent with the literature reviewed. Other reasons for engaging in informal employment was better profit margins (25%) compared to the low earnings from formal employment, while others engaged in informality to supplement income earned from formal employment (by themselves or their partners) (17%). The social reasons for engaging in informal business are as tabulated in Table 4.5 below.

Reason for starting the Informal business	Percentage (%)
Ease of entry	5
Passion for the job/ self-employment	2.5
Earn a living/ livelihood	2.5
Poor working condition in the private sector	7.5
Lack of employment/ loss of job	37.5
Increased income	2.5
Low payment in formal employment	25.0
Supplement an individuals'/partners' income	17.0
Total	100

Table 3.5: Reasons for engaging in informal Businesses. (Source: Field Survey, 2019)

b. Institutional Factors

Eighty-five (85%) percent of the matatu operators were licensed by the Nairobi City County government and National Transport and Safety Authority (NTSA) while the remaining (15%) were not registered because of the high licensing fee. Most of the matatu operators were registered because of the stringent rules put forward by the Matatu SACCOs (a requirement for registration by the SACCOs before operating within the SACCO) as well as constant police crackdowns on their respective operation routes including the city centre.

However, approximately 55% of the vendors were not licensed, while 30% were licensed and 15% were unaware of licensing. The 30% who were licensed were paying a license fee of between 1001 – 1500 shillings per year. The 55% of unlicensed vendors gave the main reason for not being licensed as the high cost of the licenses, the long process of procuring the license, registration was not mandatory and others were not interested in registration. The unlicensed vendors stated that operating without the licenses was not easy as they were constantly harassed and arrested by officials from Nairobi City County.

Nonetheless, all the informal operators expressed a desire to have their businesses licensed because they were being castigated and labelled as illegal traders by the authorities for failing to remit revenues to the county through acquiring a license.

c. Locational Factors

These informal activities thrive in areas of large human conglomeration. In as much as the informal transportation termini are allocated spaces by the county government, the route of

preference depends on the profits accrue on that route. On the other hand, the location of vendors was based on areas of greater access to the target market (76%) and the availability of unpaid spaces (42%). Tom Mboya Street provides a strategic location for the two informal activities; however, these spaces are inadequate for such uses as they infringe on the road reserve thus inhibit the efficient functioning of the street i.e. inconveniencing pedestrians' movement and blocking access to formal businesses along the street. In addition, Tom Mboya Street is located within the business and commercial district which has many land-uses including commercial (offices and businesses), light industrial activities (Shell petrol station), recreational and public purposes thus attract many people that can sustain these informalities.

4.3.2 Problems affecting the Informal Business Operations along Tom Mboya Street.

There are many challenges affecting the operations of informal business activities. In this section, these challenges are categorized according to the informal activities understudy as follows;

a. Problems affecting vending along Tom Mboya Street

The problems associated with street vending are as discussed below;

i. Harassment from the county government officials

Most Vendors reported harassment from the county officers (40%) as the major challenge affecting their businesses along Tom Mboya Street. Forms of harassment included; confiscation, damaging of merchandise, arrest or roughing up by the county officers. In a bid to disperse them, the county officers use a lot of force and brutality. The photo on plate 4.5 shows a form of harassment experienced by the street vendors.



Plate 3.6: Forms of harassment -Vendors running away from the County Marshals.

(Source: Field Survey, 2019).

ii. Invasion of vendors by cartels

The study revealed that the business was invaded by cartels (27%). Individuals disguised as county officials extorted money from the traders. In case of failure to pay, the vendors were victimized by these individuals by confiscating their goods. On the other hand, the county government officials were also engaged in extorting money from the vendors. This has significantly interfered with the informal business activities within the city centre.

iii. Lack of requisite market facilities

Ten (10%) of the traders cited that they lacked requisite facilities within the CBD to facilitate the running of businesses. The major challenge was the inadequacy of spaces for laying out merchandise. Others included the lack of storage areas for goods, watering points, and street lighting. These kinds of facilities are important to ensure the well-being of the business operators. The provision of these facilities in various markets within Durban in South Africa and Accra in Ghana ensured the well-being of the vendor as well as ensured that a lot of time is dedicated to the business instead of looking for these facilities elsewhere

iv. High license fees

Seventeen (17%) percent of the traders indicated that they were required to pay large sums of money to acquire licenses which they were unable to raise. The license charges were incommensurate to their earnings. Therefore, the licenses were mainly acquired by affluent vendors who wanted to do business with minimal disturbance from the county officials.

v. High level of competition

The vendors were selling goods similar to those available in shops. This created stiff competition (7%) between the formal and informal business operators thus leading to low sales. Such competition created some sort of animosity between the vendors and shop owners because vendors' merchandise were sold at lower costs. These challenges are summarised in chart 4.3.

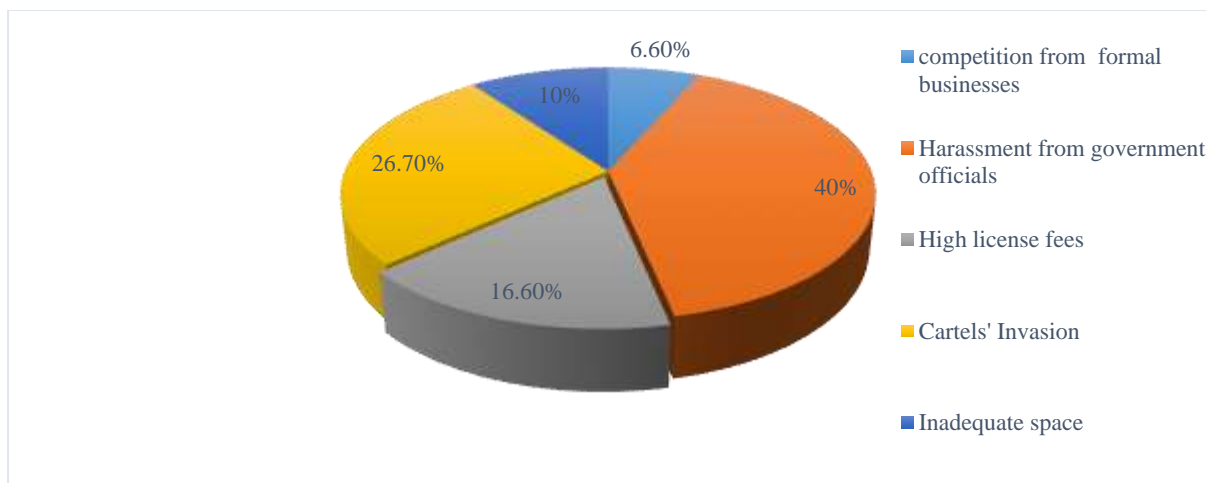


Chart 3.1: Challenges affecting vendors along Tom Mboya Street. (Source: Field Survey, 2019)

b. Problems affecting matatu operators/ operations along Tom Mboya Street.

i. High level of harassment (42%)

This was the main challenge facing the PSV operators. They were harassed by county officials/ police. They were flagged down and accused of traffic offences such as non-compliances or threaten to impound the vehicles

ii. Inadequate designated termini within the city (25%)

The entities in charge of the provision of transport infrastructure with Nairobi are the Nairobi City County and KURA. The Key Informant Interviews (KII) carried out at their offices showed that they operate on an individual basis thus lack of coordination which could be the main reason why these services are inadequately provided. Lack of this facility forced the public transport operators to park, pick and drop off passengers and goods along Tom Mboya Street as well as making U-turns on cross junctions and median of the road; thus the high traffic snarl-up

iii. . Corruption (13%)

The targeted respondents reported that traffic officers lacked integrity as they are corrupt, and forces operators to part with a good sum of money in form of bribery. This, therefore, confirmed the high level of malpractice within the government institutions as outlined by the EACC report of 2018.

iv. High level of pollution (4%)

The responders cited that they experienced a high level of pollution from carbon emitted by the vehicles, especially during traffic jams. The pollution led to diseases which included respiratory disease and irritation of eyes among others.

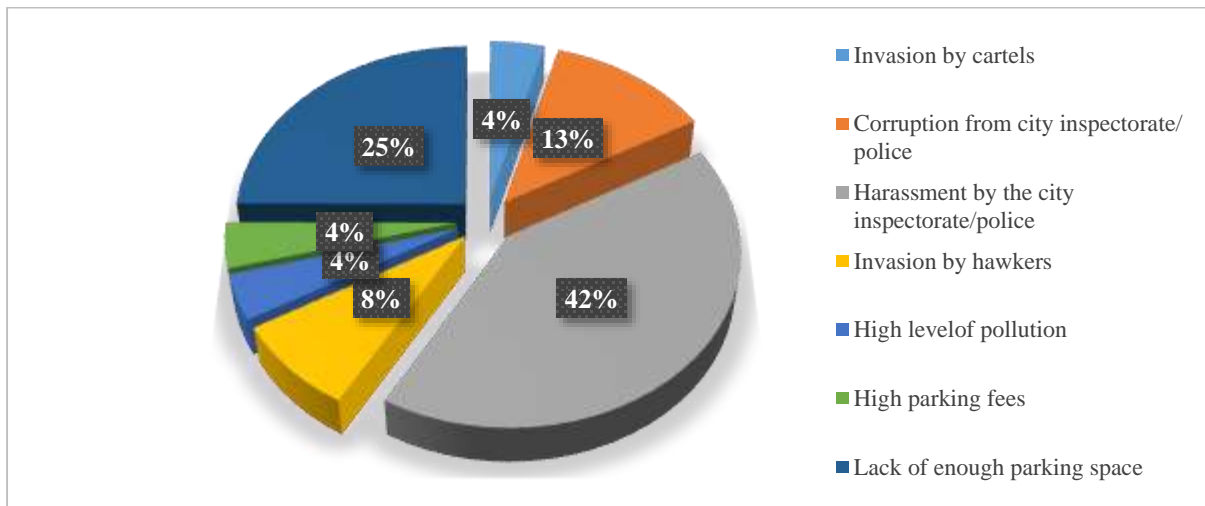


Chart 3.2: Challenges affecting PSV operations along Tom Mboya Street. (Source: Field Survey, 2019)

4.3.3 General challenges experienced along Tom Mboya Street.

The following challenges were pointed out in the survey that was undertaken.

a. Poor circulation and access of the street and the formal land use (6%)

The invasion of Tom Mboya Street by the informal activities has greatly affected the flow of traffic on the street. The survey conducted on Tom Mboya Street shown that they locate on the sides of road carriageway reducing their sizes thus slowing down the traffic flow. Additionally, their location on the frontages of the buildings blocked access to the formal business premises reducing access which culminate in slower traffic flow as the vehicles try to access the buildings.

b. Pollution of the environment

On-street garbage collection is not efficiently done; some garbage collection points are collected seldom. Vendors/ PSV operators and passengers/ pedestrians polluted the environment by dumping garbage (fruits, greens, and vegetable leftovers) aimlessly along the street. On the other hand, the areas along Tom Mboya Street where the informal activities were rampant experience noise pollution brought about by the hooting of vehicles and calling out for customers by the touts and vendors. Moreover, air pollution was experienced from the odour of uncollected garbage and the carbon emissions from vehicles.

c. Poor road users' behaviour

It was observed that PSVs informally park in a disorderly manner the Tom Mboya Street. The PSVs also make reckless U-turns in undesignated locations, pick/ drop passengers outside the areas designated as informal bus termini, do not observe traffic lights and slow down or compete to use the informal termini especially during peak hours of the day. On the other hand, passengers/pedestrians use the shoulders of Tom Mboya Street as walkways. The vendors were also observed to display their goods on any available space along Tom Mboya Street. These poor roads user's behaviours hindered smooth traffic flow which resulted in traffic congestion especially during peak hours of the day. To make the matter worse, traffic emanating from Tom Mboya Street during the peak hours cascaded into other roads such as Moi and Kenyatta Avenues, Kirinyaga and Ronald Ngala roads among others thus rendering them dysfunctional at these peak hours. Plate 4.7 shows the poor road use behaviour along Tom Mboya Street.

d. Poor road condition/ design

Some sections along the road have non-functional traffic signals, street markings and it is in a poor state. There are also no deceleration/ acceleration lanes to help manage traffic speeds. The poor road condition has caused the road to be prone to accidents and traffic snarl-ups. Plate 4.8 shows the poor condition of Tom Mboya Street.



a. A matatu making a U-turn within the median of Tom Mboya Street



b. Pedestrians Crossing Tom Mboya Street amid the traffic congestion

Plate 3.7: a & b Poor Road Users' behaviour. (Source: Field Survey, 2019)



a. A large pothole at the junction of Tom Mboya Street and Mondlane Street.



b. Faulty Traffic Signal Lights

Plate 3.8: a & b Poor road condition/ design. (Source: Field Survey, 2019)

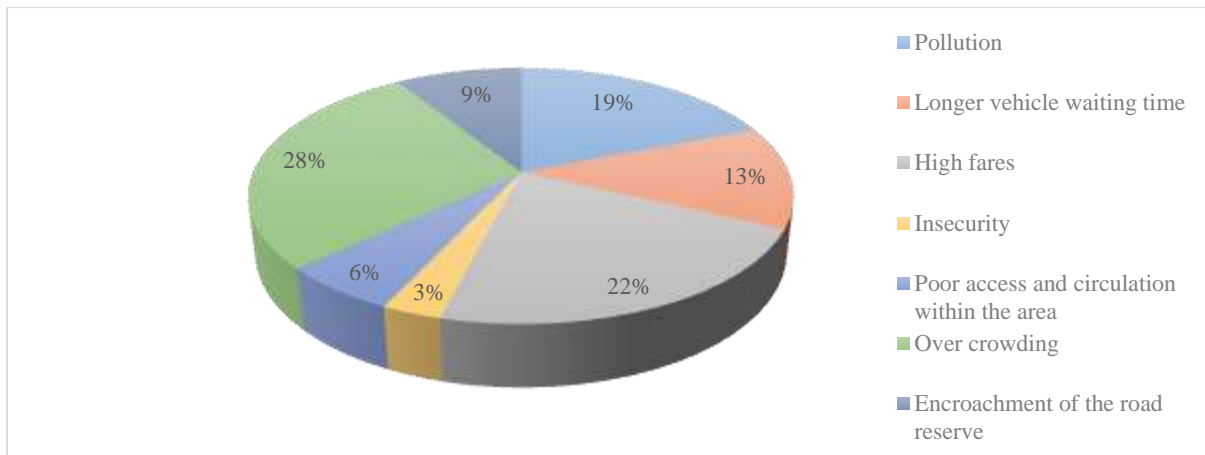


Chart 3.3: Implications of the informal activities on the use of Tom Mboya Street. (Source: Field Survey, 2019)

4.3.4 Impacts of Informalization of Street Use within Downtown Nairobi.

From the study carried out, several impacts were identified; both positive and negative impacts as expounded below.

a. Negative Impacts

Infringement of the road reserve: The spaces for informal PSV operations and vending were located in undesignated spots; outer lanes/ shoulders of Tom Mboya Street, walkways or frontages of commercial buildings. The informal activities (vendors and PSV termini) operate within the same vicinity as they all target public transport users. It is however worth noting that the matatus operated on this road because they were allocated the spaces by the Nairobi county government. The operation of these two informal activities within the area affects the smooth flow of traffic.

Environmental degradation – noise and air pollution: As a result of informal operations along Tom Mboya street, the place experiences noise and air pollution. Noise pollution was caused by the continuous hooting of the PSVs as well as the rhythmic calling by the vendors. There is also too much air pollution caused by the burning of fossil fuel by the matatus and the heaps of garbage deposited by the vendors along the street.

Increased Matatu waiting time/ fares: the level of efficiency of PSVs can be determined by the waiting time within a terminus. The vehicle operators' reported that they tend to spend more time during peak hours as compared to off-peak. On average, the wait time for peak and off-peak was found to be 15 and 7 respectively. Long wait time confirmed the inefficiency in the control of PSVs along the road using traffic signals, traffic police, County Martials and the SACCOS. The more the PSVs spent more time waiting the lesser the trips they make thus leading to low profits. It also leads to high fuel consumption, and high fares incurred by the passengers.

Congestion: This is the main factor that leads to ineffective utilization of the street (28%). Congestion within the study area was attributed to the road design, lack of designated bus termini and the invasion of the street by the vendors and poor road user behaviour. The street

width ranges between 18-25m with an average of four lanes, however, there are no designated cycling paths.

The lack of designated bus termini forces the PSVs to terminate on the outer lanes of Tom Mboya Street. The PSVs were observed to overlap, drop or pick passengers, and make U-turns at the median of Tom Mboya Street. The activities of the PSV operators as well as the invasion of the street by the vendors were seen as the main cause of traffic congestion (22%) on Tom Mboya Street.

Infrastructural provision was also a major concern as its provision has not been commensurate with the population increase. Tom Mboya Street was designed during the colonial era when the population of the city was quite low, however, current according to the Kenya National Bureau of Statistics (2019) population of the city is approximately 4.3 million people and growing at a rate of 4%. For this reason, there should be an equivalent increase in infrastructure services which may be done through urban redevelopment/ renewal.

Poor circulation and access of the street and the formal land use (9%): The invasion of Tom Mboya Street by the informal activities hampered the efficient circulation of traffic within the street. The heavy traffic invaded open spaces that could have been used by NMT. Additionally, the informal activities block access to formal land uses.

Insecurity (3%): Unregulated informality attracts socio-economic challenges such as insecurity. This is because of the rowdiness associated with the activities. There have been cases of an upsurge in mugging and snatching incidents especially during peak hours of the day, thus hampering the business atmosphere within Tom Mboya Street. Even though insecurity has been rated at 3% of the harmful effects of informality, it is a major concern which if left unmanaged, the situation may deteriorate, however, if regulated, this may boost the profits earned by the businesses along Tom Mboya Street.

Traffic accidents: these accidents were often caused by poor driving, NMTs, poor road condition, and vagaries of weather. The accidents caused by drivers were caused by distracted driving, drunk driving, overspeeding, reckless driving and running red lights. The NMTs caused traffic by jaywalking. The poor road condition/ design such as potholes, lack of road markings, and improper turns. While rain accidents were caused by the slippery of the road and poor visibility. All these issues combined often lead to a traffic accident and even death.



Plate 3.9: Vehicular congestion along Tom Mboya Street. (Source: Field Survey, 2019)

b. Positive impacts/ Roles played by the Informal Economy

Some of the identified benefits of the informal sector included;

Generation of income: the informal sector created employment for low-income people in society. This affirms the position of the informal sector as an important sector in employment creation. In Nairobi, the sector employed more than 1 million people both skilled and unskilled (Nairobi City County, 2014).

Alleviation of poverty; informal sector provides economic opportunities to people who may not have the skills to be employed or missed opportunities in the formal sector. The sector therefore provides opportunities for people to earn a living thus alleviating poverty.

Enhancing security: Lack of employment is known to cause insecurity in any society; however, the informal sector opens up business opportunities thus reducing crime incidents.

Provision of affordable goods and services: The informal sector provides affordable basic goods and services such as food and clothing; therefore, minimizes the gap associated with income inequality as low-income people can have access to goods and services at affordable prices. Moreover, it provides affordable transportation services.

Revenue generation: The county government collects revenue from the informal operators in the form of Cess, license and parking fees.

Convenience in accessing the PSV: these vehicles were readily available to pick passengers and goods close to working and shopping areas.

4.4 Study Recommendations

The possible recommendations made from the study included the following. They have been grouped into short and long term.

4.4.1 Short Term Measures

a. Recognition of the Importance of the Informal Economy/ Sector

The study revealed that lack of recognition of informality as land use (42%) was a major challenge for the traders. This had led to exclusion from policies and planning provisions within the CBD.

On this basis, the study recommended that the services provided by the informal operators be recognized by law and ensure that they are planned. This proposal is in tandem with the legalistic school of thought. This approach viewed informality as an important aspect of the economy that can compete side by side with the formal economy. It provided an alternative economic venture for those excluded from the formal labour market and therefore, it should be treated more or less equal to formal activities.

Borrowing from the Street Vending Legislation passed in India. The 2014 Act laid out procedures for regulating street vending – issued out certificates to existing vendors, established street vendors’ rights and obligations, developed a plan for street vending and set up Town Vending Committees including the Chief Executive Officer as Chair, officials and a minimum of 40% representation from street vendors. In Kenya, these provisions can be realized through the formulation of policies that support broad-based economic developments (Heintz, 2012). These broad-based economic development strategies include the acceptance of the informal sector as an important part of the economy and its significance in changing the lives of low-income people. Additionally, the creation of policies and laws should apply the bottom-up approach which ensures that the laws introduced take cognizance of the plight of the informal sector proprietors which can be achieved through extensive and inclusive stakeholders’ mobilization and engagement that also involves the proprietors.

b. Enforcement of the existing Nairobi City by-laws.

The city bylaws were being flouted by both the law enforcers and informal business operators (28%). The flouting of laws manifested itself in terms of unlicensed informal businesses operating with the street (15%) and (42%) for the unregistered matatu operators and vendors respectively, corruption was also cited as one of the hindrances to efficient business operations at 27% and 13% by vendors and matatu operators respectively, and the county/ policy allowing matatus to park along the street waiting to pick passengers also resulted into traffic congestion along Tom Mboya Street.

The respondents recommended that the challenges experienced by the informal operators can be regulated by enforcing the existing city by-laws that strictly allow PSVs to pick and drop passengers without parking at the termini and only 2-3 PSVs (depending on the size of the PSV) to be allowed within the termini at a particular time. At the same time, the available formal bus termini (Muthurwa bus terminal, Railways bus terminal, and Bus Station, etc.) should be used as decanting sites for parking the PSVs while waiting to pick passengers.

All the Street vendors should also be organized into SACCOs and licenses and identification cards issued to ensure effective monitoring and planning for the vendors.

c. Appropriate Siting of Vending Areas

The factors to consider when siting or designing a market include; availability of the target customers, expected levels of sales, shelter and availability of services such as access to infrastructure eat out places, lighting, storage facilities, and relaxing amenities among others (Tracey White, 1998). From the survey conducted along Tom Mboya Street, there was an inadequate site for informal activities as well as the poor organization of the vendors. From the interviews carried out, some of the recommendations outlined included;

i. Street closure strategy (55%)

Specific days should be identified on which streets/ lanes/ alleys within the CBD (specifically downtown Nairobi) shall be open for vendors to trade without interference from motor vehicles or city authorities. This should be done on the wider sections of Tom Mboya Street; such as near the National Archives. This approach is illustrated in Figure 4.1. It is worth noting that this is already being done on a small-scale basis by the county government along the slip roads of Moi Avenue (near Kenya Cinema) and Kijabe Street Park. This should be done at a minimum fee for management purposes and strict rules to be enforced to reduce noise pollution and garbage dumping (garbage bin/ materials to be provided on-site).

ii. Parking lots strategy (35%)

Specific properties with adequate parking lots to be identified along Tom Mboya Street. The property owners to be urged to allow the vendors to use the open spaces within their properties for vending on days when they are not in use. This should be done bearing in mind that the vending activities are sources of employment and income for individuals and as such, the county cannot completely do away with it. However, on these parking lots, arrangements can be made to ensure that they do not interfere with other businesses taking place. For example, this is already being done on a small-scale basis by different property owners; for instance, the use of Kenyatta International Conference Centre (KICC) and the High Court parking lots as Maasai Market as shown in plate 4.10 below. The county should therefore, agree with the property owners to allow the vendors to operate on the open spaces in lieu of reduced rates and strategies to be put in place to manage noise pollution and solid waste disposal (can be done through educating the operators).

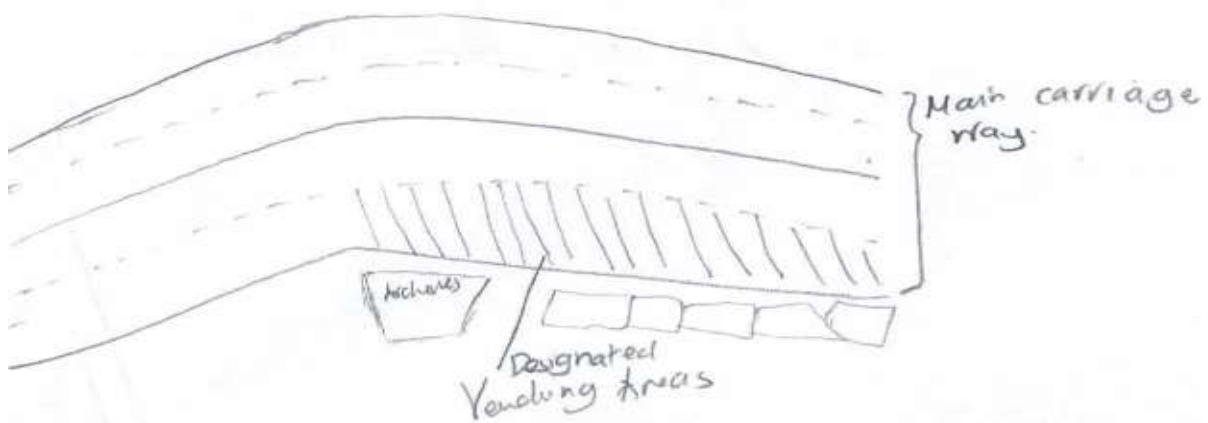


Figure 3.1: Illustration of a lane closed for vending purpose. (Source: Author, 2019)



Plate 3.10: Maasai Market at KICC. (Source: Dreamtimes, 2019)

d. Accommodating Both Matatu Terminus and Street Vending on Tom Mboya Street

i. Using the Open spaces along Tom Mboya Street as Vending areas

According to the study carried, most of the responders (78%) proposed that they be accommodated along the walkways and the wider pavements (Fire station and Tom Mboya walk) along Tom Mboya Street. These traders are to be arranged along the walkway by providing horizontal spaces of 2*2m for the vendors while leaving gap intervals between stalls for entry into the formal dwellings. Moreover, a 1 – 1.5m width space to be reserved as a buffer between the street vendors and the business areas. This space will be used by pedestrians and will, therefore, solve the issue of inaccessibility that is currently experienced by the formal business outlets because of the existence of the informal activities. This approach is illustrated in figure 4.2 below.

Additionally, the existing informal terminus should be used exclusively as **pick and drop** areas for matatus. This approach is illustrated in figure 4.2 below. Moreover, the study recommended the possibility of providing parking areas outside the CBD to make room for informal activities. In this approach, sites are to be identified and allocated for the parking matatus. Among the selected areas for the bus termini included Globe Cinema roundabout which will provide ample space for some of the buses plying Thika Superhighway, Kiambu Road, Waiyaki way and Limuru Road. This land could be further fitted with requisite bus terminal utilities and services (good and people embarkment areas, shades, parking areas for the PSVs). The Globe Cinema Roundabout may also offer an alternative site for relocating the PSVs that use the Old Nation bus terminus which is a major contributor to traffic congestion within Tom Mboya Street. Tom Mboya Street was to provide areas solely for disembarkment and picking up of passengers and goods.

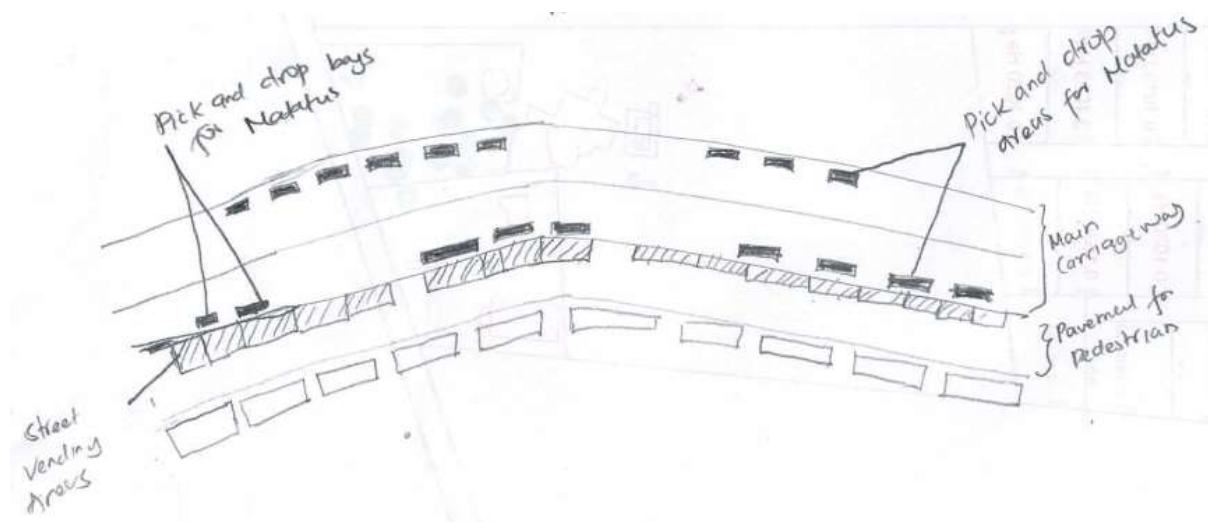


Figure 3.2: Accommodating the Informal Activities along Tom Mboya Street. (Source: Author, 2019)

4.4.2 Pros and Cons of the Short term measures

The pros of these measures are that they provide temporary markets for the vendors, reduced harassment of the traders by the county officials, access to clean trading environment, increased sales due to fewer interruptions, reduced traffic snarl-ups on the downtown roads, and increased revenue earned by the formal owners of the buildings and the county authority. However, the cons of these measures include; they are short-term, traders have to pay fees, inconsistent days of work thus loss of traders' income on the days they are not allowed to operate, reduced privacy, and increased noise pollution within the proposed areas.

4.4.3 Long Term Measures

a. Redevelopment Approach

Vendors had no designated markets, thus the root cause of vending problems within the CBD. This was accentuated by the fact that they were excluded from the planning framework of the city. It was therefore recommended that the vending activities be included in the plans for the city. This may involve setting aside parcels of land within strategic areas of the CBD

(especially where pedestrians converge) to be used by the street vendors. These parcels of land may be developed into storied buildings (following the building codes and zonal guidance of the city-county), which are well serviced with requisite facilities needed by the street vendors. These vendors' spaces are to be acquired and used by the vendors at a minimum monthly/ annual fee, which has to be remitted to the county or building owners for maintenance purposes. The existing vendors should then be enlisted and the first priority for occupancy and use of the buildings given to the enlisted and existing vendors. A case study of such strategy includes the case of Accra in Ghana where the government bought an off-street site and developed a 4-story trading mall that was opened in March 2016. This facility was fitted with the requisite support facilities for the vendors' market thus enhancing the well-being of the street vendors.

Another case may include pedestrianizing of some streets to be mainly used by pedestrians and commercial activities. This will include the re-organization of vehicular routes within the affected areas and creating a dual carriageway for vehicles. The remaining section of the road will then be planned for use by the street vendors. Moreover, a 1-1.5m width space to be reserved as a buffer between the street vendors and the business areas. This space will be used by pedestrians and will, therefore, solve the issue of inaccessibility that is currently experienced by the formal business outlets because of the existence of the informal activities. This proposal looks at bringing life or enhancing interactions within the street by reactivating the spaces and making spaces where people can meditate relax and interact with other urban dwellers. Through the multifunction of spaces, the spaces will begin to address the needs of all the urban dwellers instead of spaces being seen as a tool to institutionalize activities. This has been done on Luthuli Avenue and can be replicated further on a few more roads within the CBD to make space for pedestrian and street vendors' interactions without interference with the general flow of traffic within major roads. The plates, 4.10 and 4.11 below illustrates the past and current condition of Luthuli Avenue. This is a possible solution that the government can explore as it accommodates the informal activities within their optimal areas of operation as well as ensure that effective traffic flow is achieved.



Plate 3.11: Luthuli Avenue before the redevelopment plan

Source: Akello Odenyo – SDE news, 2017



Plate 3.12: Luthuli Avenue after Redevelopment

Source: Mike Sonko – Twitter, 2019

b. Relocation approach

This approach was mainly sited by the formal business owners. They regarded the informal businesses as a nuisance to the well-being of their business activities; the informal business created competed with formal businesses for customers, they blocked access and circulation (6%) to the formal premises as well as reduce the flow of traffic along Tom Mboya Street. They therefore, recommended that since Tom Mboya Street was a major arterial street ferrying through heavy traffic across the CBD, the location of these activities hampered the general traffic flow and thus should be excluded. This can be done by providing alternative spaces within and around downtown for the activities.

They therefore, proposed the integration of these informal activities in a land outside the CBD. However, this is to be done through a market survey/consultation and adoption of recommending viable spaces for the two activities, and the identified spaces should only be selected after an inclusive stakeholder engagement and a thorough market survey. The market survey should include: -

- i. Proper space allocation for the different activities.
- ii. Access to basic services such as water supply, waste management services, storage, areas of embarkment of goods and people, sheds, parking areas, and electricity supply.
- iii. Improvement of service quality for informal business enterprises.
- iv. The development of designated markets and PSV termini within the residential areas will decentralize the functions played by the CBD.

The aim of these long-term measures, which include land use redevelopment (development of spaces for vendors and PSV terminus) and relocation approaches, is to facilitate urban renewal as a means of reorganizing the city itself and making provisions for the informal

activities that have always been marginalized. This will reduce the conflicts that occur between the pedestrians, PSVs operators/ operations, vendors and formal land users. Also, a huge sum of revenue can be generated from the spaces utilized by the informal business. However, this study deemed this option as impractical since the space allocation and use for the informal activities were outside their [informal activities] lucrative areas of operation.

4.5 Relationship between the study findings and literature review

This sub-section summarises the relationship between the findings and the literature review:

Concept Under discussion	Findings from Literature	Study Findings	Remarks
The concept of informality	<ul style="list-style-type: none"> -Significant enterprises that contributes to the growth and development of the national economy. -Individuals or households take up informal activities for survival purposes or low and irregular salaries. -Informal activities are easy to start, small scale in size, no skills needed to start, informal markets are competitive, and make use local. -It is very diverse and dynamic in terms of people employed and activities. -The yields/ revenue from informal economy depend on season and time. -The main driver of the informal economy is unemployment in the formal sector. 	<ul style="list-style-type: none"> -The sector employs many people thus contribute to the GDP of the country. -Majority of individuals in the informal sector are from low income part of the society. -The informal economy attracted all people regardless of gender, age and education levels. -Most of the good sold by the vendors were seasonal/ varied. -High returns were accrued during peak hours of the day. -The key reason for engaging in informal activities was due to lack of employment in the formal sector. 	Study findings agree with the past literature.
The nature of street space informalities.	<ul style="list-style-type: none"> -The spatial location of informal activities is a factor of demand such as the number of customers. -They locate on available open spaces. 	<ul style="list-style-type: none"> -The informal activities (informal bus termini and vending) located in areas close to large human conglomerations. -They were found to mushroom on open spaces along the roads, walkways and lanes. 	Study findings agree with the past literature.
Drivers/ causes of informality.	<ul style="list-style-type: none"> -High levels of unemployment in the formal sector has caused many individuals to seek employment in the informal economy. -High rate of urbanization has put pressure on the available formal jobs causing many people to engage in informality -Increased urbanization and poverty has created demand for the informal goods and services. -Poor institutional framework for planning and management of the informal economy. 	<ul style="list-style-type: none"> -The main cause of informality was lack of employment or low wages in the formal sector. -Overpopulation within the city has caused acute shortage of jobs in the formal sector causing many to engage in informality. -Overpopulation and poverty has created demand for low costs goods and services. A niche that is covered by the informal activities. - Poor planning and regulation for the informal economy has caused 	Study findings agree with the past literature.

		them to mushroom on open spaces such as road reserves among others.	
The role of informal activities within urban areas.	<ul style="list-style-type: none"> - Provide goods and services at affordable costs. - Employment provision. -Creation of revenue. 	<ul style="list-style-type: none"> -The informal activities ferry goods and services at affordable prices. -They provide goods at affordable costs for the low income class. -The informal economy creates employment. -The informal economy earns income to the operators and the county government (Cess and licenses). 	Study findings agree with the past literature
The necessity of planning and managing informal activities.	<ul style="list-style-type: none"> -It decongest the public open spaces such as streets, encourages efficient traffic flow and access to the streets and premises near them. -Enhanced energy saving and reduced pollution. -A market is crucial for the exchange of goods and services and storage etc. -Transport termini is an important component of public transport and provide areas for embarkment/ disembarkment of goods, change of mode of travel, spaces for waiting and rest etc. 	<ul style="list-style-type: none"> -The informal activities are unregulated thus operates under market forces of supply and demand. -Public open spaces and specifically Tom Mboya faces problems of traffic congestion thus rendering it inefficient and ineffective in performing its main function of ferrying goods and services and providing breathing space within the CBD. -The existence of the informal termini and market along Tom Mboya Street depicts poor planning and management within the city. -Resulting in transportation problems rather than benefits. 	Study findings agree with the past literature
Towards effective street use within downtown Nairobi.	<ul style="list-style-type: none"> -Efficient traffic flow patterns can be achieved through proper planning and coordination of transport systems and activities. -This requires intentional provisions for all activities within urban areas; including terminal areas and vending markets. -Good laws and policies, and coordination between the institutions can boost efficiency in doing businesses and well as effectiveness of the transportation networks. 	<ul style="list-style-type: none"> -Physical planning policies have not adequately provided for land uses such as vending and PSV termini thus the constant traffic congestion. -Duplication of roles and lack of capacity to manage activities within the city has led to chaos and implementation of the existing laws problematic. 	Study findings agree with the past literature

<p>Relevant theory to this study – the legalistic school of thought.</p>	<ul style="list-style-type: none"> -This approach viewed informality as an important aspect of the economy which can compete with the formal economy. - Informality provides an alternative economic venture for those excluded from the formal labor market. -acceptance of the informal sector as an important part of the economy and its significance in changing the lives of low-income people. -Inclusive stakeholders' involvement to ensures that the laws introduced take cognizance of the plight of the informal sector proprietors -Extensive and inclusive stakeholders' mobilization and engagement that also involves the proprietors. 	<ul style="list-style-type: none"> -The informal sector has not been included in the spatial planning of the city and therefore they operate illegally. -It is an important economy that provides goods and services to the majority of people in the city. -Inclusive stakeholders' involvement is key in ensuring that adequate and proper provisions are made for this sector. 	<p>Study findings agree with the legalistic school of thought</p>
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Table 3.6: Relationship between Findings and Literature Review. (Source: Author, 2019)

CHAPTER 5: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This study was carried out to establish the nature of informalities, their causes and impacts on the effective use of the street space in downtown Nairobi as discussed in the previous chapter. Moreover, the same chapter discussed in details various recommendations to enhance the effective use of street space. This chapter provides the conclusion and areas of further research.

5.2 Summary of Findings

The study unravelled several key issues. First, it was observed that the informal bus termini and vending located close to each other. The latter informality tapped into the large human conglomeration on transit to board vehicles at the informal termini. The informal termini located on Tom Mboya Street because it was designated unto them by the County Government of Nairobi; however, the majority of PSV operators chose the routes operating on Tom Mboya Street because they served a large population of the city.

The major drivers/ causes of informality within downtown were found to include institutional, locational and socio-economic factors. The institutional factors comprised of a high level of taxation, lack of political goodwill, poor enforcement of the existing laws on the proper use of the street, absence of planning and management regulations for space allocation, use and management were lacking. Socio-economic factors included limited employment opportunities in the formal sector, ease of entry into informal employment, better wages and high cost of living thus the need to supplement the income earned from formal employment. Location factors included the availability of open spaces as well as access to a ready market.

The main implication for the existence of the informal activities was congestion along Tom Mboya Street. The congestion created difficulty for the PSVs, private vehicles and NMTs to navigate into and out of the road. They also impeded entry and exit of the abutting buildings thus causing land-use conflicts. Moreover, the congestion caused by the informal activities increases the cost of doing business along Tom Mboya Street in terms of time and financial losses. The traffic delays reduced the number of trips made by the individual vehicle and high fuel loss on traffic. To recover the losses, the vehicle operators tend to overcharge the commuters who therefore, incur more losses on top of the time lost in traffic. It was also noted that the traffic congestion created a barrier for formal shop owners thus reducing their sales and profit. However, the congestion along the road creates a thriving environment for vending; while passengers wait for the PSVs they tend to shop. Other effects on the existence of informal activities included road infringement, environmental degradation and pollution, accidents and insecurities.

On the other hand, it was noted that the informal activities also had positive contributions. They created employment opportunities especially for the low-income class, provided

affordable goods and services for the majority of city dwellers, and generated revenue not only to the proprietors but also to the County government in form of Cess, license fees and parking fees.

It was also evident from the study that the existence of informal activities was not the only cause of traffic congestion along Tom Mboya Street. Other factors included the lack of institutional capacities to plan and manage the informal sector. Urban spatial policies and regulations have not taken cognizance of the informal activities in terms of space allocation and management. Moreover, the management institutions are faced with inadequacies in terms of capacity to carry out their duties thus face malpractice oversights in terms of integrating and implementing the development policies and laws. The management and planning for informal sector activities are left in the hands of market forces. Additionally, most political institutions/ politicians lack political goodwill in promoting the sector.

It is clear from the above discussion that Tom Mboya Street faced major problems which require radical solutions if effective solutions are to be realized. The solutions related to accommodating the informal activities and achieving efficient flow of traffic along the street can only be achieved through institutional adjustments, inclusion in planning policies and inclusive stakeholders' involvement.

5.3 Conclusion

This study brought to light the nature of the informal economy (especially vending and informal PSV termini) as a source of job opportunity to all cadres of people, the siting of their areas of operations and the adequacy of provision of support facilities. However, the spatial provision for the informal activities are lacking and therefore, they locate in open spaces within the CBD such as Tom Mboya Street. The allocation and use of Tom Mboya Street Space as bus termini and vending areas was deemed ad hoc due to their unplanned nature. The spaces were insufficient and hampered with the designated functions of the Street, thus, causing inefficiencies in its use. The informal markets and bus termini also lacked adequate support facilities that could facilitate their optimal use. As such the siting of these informal activities was found to be inappropriate thus depicting the lack of adequate regulatory policies and laws for planning, organizing and managing informal activities. Analysis of the situation within Tom Mboya Street and other roads within the CBD is important for an effective citywide solution to be sought.

5.4 Recommendations for Policy Makers and County Government of Nairobi

a. Governance and the Informal Economy

The study revealed the lack of political goodwill from the government. It therefore recommends that the government's economic policies and laws to consider and institutionalize the issues that affect the informal sector economy. The government and learning institutions should undertake extensive research and statistics on the informal sector of the economy and the data be managed by establishing a management information centre. Additionally, the government institution should also work closely with the informal

proprietors to ensure that the operators can fairly articulate their needs for the government to articulate.

b. Legal and Regulatory Framework

Legislation and regulations formulated by the central governments and local governments should strengthen livelihoods and aim to reduce marginalization and vulnerability. India as a case study has formulated enabling laws and regulations including the case of National Street Vendors' Laws. These regulations recognized the informal occupation as an important profession due to its major contribution to the overall growth of nations. These laws were developed through a top-down approach where the government officials determined what was to be included in the laws and policies and thereafter approved by the community/stakeholders' through platforms such as participatory budgeting, dialogues, and locally-based resolutions.

c. Rights and Representation

Informal business operators should be empowered by strengthening their bargaining power and ways they can articulate issues affecting them. They need to form working groups to enable them to chart their course and articulate their issues in unison to the relevant authorities. Partnerships between the government and informal workers should also be enhanced through institutionalizing dialogue platforms. Additionally, the county government officials need retraining on leadership, consultation and negotiation skills to aid in addressing grievances articulated by the informal operators.

d. Formal-informal Linkages:

Improvement of value chains can significantly improve the economic contribution of workers. This includes the reduction of the number of middlemen, provision of storage, or setting up direct supply produce as in the case of the embroidery workers in New Delhi, India.

e. Streamlining the licensing procedure

The process of acquisition of business licenses from the Local Authority should be made easy for all the business proprietors. This will encourage many informal proprietors to secure business licenses so that they can operate legally without risks of arrests and/or conflicts with other land uses. This can be achieved through: -

- i. Reducing the timeframe for the acquisition of licenses
- ii. Lowering the licenses fees to a standard that can be afforded by the street vendors or PSV operators.
- iii. Close supervision of the licensing department and city-county officers deployed at specific areas. This would ensure that black-marketing in trade licensing and corruption is eradicated.

f. Enactment and enforcement of favourable business regulation

Corruption and harassment of the street workers were pointed out as the major challenges they face. They, therefore, called for the enactment of laws that create a favourable working

condition for the workers as well as enforcement of the existing corruption laws that seem to have been neglected in this sector.

g. Financial acquisition Avenues

Informal traders do not have adequate funding because they lack collaterals need for funds acquisition, or the loan acquisition process is cumbersome or a lot of money is deducted during loaning processes. The acquisition of finance from banks and other loaning agencies was reported to be difficult because of the stringent requirements by the bank before they can offer a loan. It was recommended that loaning institutions revise their loaning requirements to enable low-income earners to be able to acquire loans. Additionally, the government provide financial support by availing the Youth Enterprise Development funds (YEDF).

h. Spatial Siting and Planning for Informal Activities within the CBD

From the study carried out, both long and short term recommendations were made regarding the informal economic activities. Notably was the discretion of the county government if Nairobi to operationalize these recommendations. It was recommended that public areas be identified for use by the vendors on specific days and decanting sites for PSV. Additionally, the street pavements to be rearranged to give room for a 2*2m spaces for vendors, 1 – 1.5m space for pedestrian and the current bus parks to be used exclusively as **drop and pick-up** areas for passengers.

It was also recommended that in the future redevelopment of the city of Nairobi, land/buildings should be set aside in designated locations for vendors and designated locations for disembarking and embarking of PSVs. These recommendations will address the issues of congestion within the streets, better circulation and access from/to the formal land uses reduced competition between the formal and informal business operations and reduced pollution of the street among others. On the same note, the county government will be able to regulate informal business operations.

5.5 Areas of Further research

The study is limited to the scope of the informal activities; the nature, causes and impacts of informality and various ways of integrating the informal activities within the city without causing road congestion. Further research should be done on the institutional factors influencing the informal activities operations within urban areas.

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APPENDICES

Appendix 1: Introduction Letter from the Department of Architecture and Building Science



UNIVERSITY OF NAIROBI

School of the Built Environment

DEPARTMENT OF ARCHITECTURE & BUILDING SCIENCE

E- mail: architecture@uonbi.ac.ke

P.O. BOX 30197,
Nairobi, Kenya
Telephone: 020-4913519
Telegrams: Varsity.

Our Ref: UON/CAE/ABS/ST

Date: 22nd May, 2019

TO WHOM IT MAY CONCERN

RE: SITE INTROUDCTION – ISDORA AWINO OTIENO REG. NO. W50/87784/2016

This is to confirm that the above named is a Student at the Department of Architecture & Building Science, University of Nairobi pursuing **Master of Urban Management** As part of the programme our students are encouraged to conduct research for their final project.

We wish to request you to give her some of your valuable time by responding positively to her inquiries, and provision of drawings/plans/photographs, etc. This is for academic purposes only.

Any assistance accorded to her will be highly appreciated by this office.

CHAIRMAN
DEPARTMENT OF ARCHITECTURE
& BUILDING SCIENCE
UNIVERSITY OF NAIROBI


Arch. Musau Kimeu
CHAIRMAN,
DEPT. OF ARCHITECTURE & BUILDING SCIENCE

/ang

CONFIDENTIALITY CLAUSE: A study on the **Informalization and Management of Street Use within downtown Nairobi**, any information provided towards this research will be treated with confidentiality and used exclusively for academic purpose.

Questionnaire No. Date/ Time of Interview Name (optional)

.....

SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Gender of the respondent

1	Male	2	Female
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2. Marital Status of the respondent.

1	Single	4	Separated
2	Married	5	Divorce
3	Widow/ widower		

3. Age of the respondent.

1	15-20	4	41-50
2	21-30	5	51-60
3	31-40	6	60 and above

4. Education level.

1	Primary Level	4	Tertiary/college
2	Secondary Level	5	University

ECONOMIC CHARACTERISTICS

5. Occupation status of the respondent.

1	Formal	2	Informal
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6. What is the nature of business operated?

1.	Salon and Barber shop	6.	General/retail shop
2.	Computer services/ Printing	7.	Grocery
3.	Hotel/ restaurants	8.	Clothes/shoes
4.	Repair of electronics	9.	Office
5.	Bakery	10	Others (specify)

7a. Have you been employed elsewhere? Yes (1) No (2)

b. If yes, what are the reasons for starting this business?

1	Underemployment
2	Poor working condition
3	Loss of job
4	Increased income
5	Low payment
6.	To supplement my income
6	Other (specify)

8. How long have you operated this business?

1	≤1 year	3	≥ 5 years
2	2-5 years		

9. What is your monthly income?

1	≤ 5000	5	20001-25000
2	5001 -10000	6	25001-30000
3	10001-15000	7	30001-35000
4	15001-20000	8	≥35001

10a. How did you acquire this space?

1	Allocated by the county	4.	I pay rent
2	Purchased from the owner	5.	Others (Specify)
3	Allocated myself		

1	≤ 5000	4	10001-15000
2	5001 -10000	5	≥15001

b. If you pay rent, how much?

c. On what basis do you use the space? Temporary (1) Permanent (2)

11. Who manages this space?

1	The owner	4	Nobody
2	County government	5	Others (specify)

12. Why did you choose to operate in this area?

1	Close to the target customers
2	No rent paid
3	It is the only available space
4	I was allocated this space
5	Low rent paid
6	Others (specify)

12a. Is this space adequate/ ideal for the display of your goods? Yes (1) No (2)

b. If NO, would you opt for another place? Yes (1) No (2)

c. If YES, Where?

13. What challenges do you experience as a trader?

1	Unhealthy competition from informal businesses
2	Unhealthy competition from other formal businesses
3	Harassment from the government officials
4	High rents

5	High licence fees
6	Low profits due to middlemen/ cartels
7	Others (specify)

14a. Are there any interventions that have been taken to address these challenges? Yes (1) No (2)

b. If yes, who has been involved and how?

	Actor	Involvement
1		
2		

c. If No, what suggestions would you recommend towards improving the working conditions in this area?

	Actor	Involvement
1		
2		

LEGAL ISSUES

15a. Is your business registered? Yes (1) No (2)

b. If yes, please indicate the type of registration

1	Limited Company	4	Societies
2	Partnership	5	Others-specify
3	Sole proprietorship		

c. If No, what are the reasons for not registering?

1	High costs	3.	Long procedures/requirements
2	Not interested	5.	Do not know how to acquire one
3	Registration is not mandatory	6	Others-specify

16a. Do you have a license to operate this business? Yes (1) No (2)

b. If No in (a) above, what are the reasons for not having a license?

1	High costs	4	Long procedures/requirements
2	Not interested	5	Others-specify
3	Registration is not mandatory		

c. If Yes in (a) above, how much was the license fee?

1	≤ 500	4	1001-1500
2	501 -1000	5	≥1501

CONFIDENTIALITY CLAUSE: A study on the **Informalization and Management of Street Use within downtown Nairobi**, any information provided towards this research will be treated with confidentiality and used exclusively for academic purpose.

Questionnaire No. Date/ Time of Interview Name (optional)

.....

SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Gender of the respondent

1	Male	2	Female
---	------	---	--------

2. Marital Status of the respondent.

1	Single	4	Separated
2	Married	5	Divorce
3	Widow/ widower		

3. Age of the respondent.

1	15-20	4	41-50
2	21-30	5	51-60
3	31-40	6	60 and above

4. Education level.

1	Primary Level	4	Tertiary/college
2	Secondary Level	5	University

ECONOMIC CHARACTERISTICS

5a. Do you own the matatu? Yes (1) No (2)

b. Why did you start matatu business?

1	
2	

c. Which route do you operate on?

.....

6. Why do you operate in this area?

1	
2	

7a. Do you have an alternative source of income? Yes (1) No (2)

b. If Yes in 5a. Above, what are the other sources of income?

1	Formal employment
2	Informal employment

8. On average, how much income do you make per day?

1	1000 - 2000	4	6001 - 8000
2	2001 - 4000	5	8001-10000
3	4001- 6000	6	> 10001

9a. how did you access this space of operation?

.....

b. Who manages this space?

.....

c. Do you pay rent? Yes (1) No (2). If yes, how much do you pay?

.....

d. How much space is the temporary bus stop?

.....

e. Is the space suitable for use? Yes (1) No (2)

f. If the answer is NO in 10e above, what can be done to enhance the use of this space?

1	
2	

g. If the answer is NO in 10e above, would you change your business location?

Yes (1) No (2)

h. If answer is YES in 10g above, which place would you like it to be relocated to?

.....

.....

10. Who are your main customers?

.....

11. What challenges do you experience as a matatu operator?

1	
2	

12a. Are there any interventions that have been taken to address these challenges?

Yes (1) No (2)

b. If yes, who has been involved and how?

	Actor	Involvement
1		
2		

C. If No, what suggestions would you recommend towards improving the working conditions in this area?

	Actor	Involvement
1		
2		

LEGAL ISSUES

13a. Is your business registered? Yes (1) No (2)

b. If yes, please indicate the type of registration

1	Limited Company	4	Societies
2	Partnership	5	Others-specify
3	Sole proprietorship		

c. If No, what are the reasons for not registering?

1	High costs	3.	Long procedures/requirements
2	Not interested	5.	Do not know how to acquire one
3	Registration is not mandatory	6	Others-specify

14a. Do you have a license to operate this business? Yes (1) No (2)

b. If No in (a) above, what are the reasons for not having a license?

1	High costs	4	Long procedures/requirements
2	Not interested	5	Others-specify
3	Registration is not mandatory		

C. If Yes in (a) above, how much was the license fee?

1	≤ 500	4	1001-1500
2	501 -1000	5	≥ 1501

Appendix 4: Questionnaire for Passengers/ Pedestrians

CONFIDENTIALITY CLAUSE: A study on the **Informalization and Management of Street Use within downtown Nairobi**, any information provided towards this research will be treated with confidentiality and used exclusively for academic purpose.

Questionnaire No. Date/ Time of Interview Name (optional)

.....

SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Gender of the respondent

1	Male	2	Female
---	------	---	--------

2. Marital Status of the respondent.

1	Single	4	Separated
2	Married	5	Divorce
3	Widow/ widower		

1. Age of the respondent.

1	15-20	4	41-50
2	21-30	5	51-60
3	31-40	6	60 and above

2. Education level.

1	Primary Level	4	Tertiary/college
2	Secondary Level	5	University

ECONOMIC CHARACTERISTICS

4a. what brings you to this street?

1	To buy goods	3	To work
2	Window shop	4	To board a vehicle

b. Where is the origin of your journey?

.....

c. Where is your destination?

.....

d. What modes of travel do you use?

1	Walking	5	Bus/mini-bus
2	Bicycle	6	Trucks or Pick-ups
3	Motorcycle	7	Personal vehicle
4	Matatus (14 seaters)	8	Others (specify)

e. If the answers in 5d. Above are 2-6, what amount of money do you spend on transport in a day?

1	< 99	4	300 - 399
2	100 - 199	5	400 - 499
3	200- 299	6	>700

f. How long is this trip?

6a. Are there any support facilities within the informal bus stop? Yes (1) No (2)

b. If YES, what facilities are available?

1		4	
2		5	
3		6	

c. If No, what facilities would you like to be provided?

1	
2	
3	
4	

7a. Are there any challenges experienced in using this street and the bus stop?

Yes (1) No (2)

b. If YES, what are the challenges experienced?

1	Poor road condition
2	Poor access and circulation within this area
3	Longer vehicle waiting time
4	Poor condition of the travelling mode
5	High fare
6	Inadequate public transport facilities
7	High pollution
8	Overpopulation (hawking and matatus) thus reduced road carriage way
9	Poor management of the streets and temporary bus stop

8a. How can you rate the condition of the street and bus stop?

1	Poor
2	Average
3	Good

b. Have there been efforts made towards improving/managing the condition and use of this area/street? Yes (1) No (2).

c. If yes, who has been involved and how?

	Actor	Involvement
1		
2		

d. What are the improvements /management strategies that you would like to be incorporated to the use of this street and/ or temporary bus terminus?

	Actor	Involvement
1		
2		

9. If the answer in 5a above is to buy goods, which is you prefer shopping area?

1	Informal enterprise	2	Informal enterprise
---	---------------------	---	---------------------

10. Why do you buy goods at this place?

1	Cheaper prices	4	Proximity to where I board PSV
2	Variety of goods	5	Longer working hours
3	Smaller packages	6	Others (specify)

11. What are the type of goods and services do you get from the formal enterprises

1		3	
2		4	

12. What are the type of goods and services do you get from the informal enterprises

1		3	
2		4	

13. Do you think this the ideal place for informal business activities? Yes (1) No (2)

1	If Yes, explain	
2	If No, explain	

14. What do you think are the factors contributing to the location of the informal business activities within this place?

1	Availability of space
2	population increase
3	Away from the county officials
4	Unemployment
5	Presence of matatu bus stops
6	Presence of customers
7	Others -specify

15. What importance are these activities within downtown Nairobi?

1	
2	

16. What in your opinion is the disadvantage of locating such activities within downtown Nairobi?

1	
2	

3	
---	--

17. What should be done to deal with the issue of informal activities?

1	
2	
3	

Appendix 5: Key Informant Interview Schedule

Questionnaire No. Time of InterviewDate of interview

.....

Name (optional)..... Age

Sex; 1. Male () Female ()

a. City County of Nairobi (City planning)

1. Are there street spaces specified for informal uses?
2. What informal use are specified for these streets?
3. What are the causes of informal street use within Nairobi City?
4. What are the effects of informal street use within Nairobi City?
5. What requirements are necessary for informal users to fulfil so as to operate here?
6. What are the conditions for obtaining an operating licence?
7. What services are offered for the informal user?
8. Are there management strategies that have been put in place to manage informal street use within Nairobi City?
 - i. Yes (); which strategies?

1	
2	
3	

- ii. If Yes, have they been effective?
- iii. If No, what informal street use management would you propose?

b. Traffic Police/ city martials

1. What are the challenges you face regarding the street's usage?
2. How do you cope with these challenges?
3. Are there any strategies that have been put in place to manage challenges caused by informal activities?
4. In your opinion, have these strategies been effective? Yes () No. ()
5. If No, what strategies would you propose towards the management for street use within Nairobi City?

c. Matatu SACCOs

1. Which SACCO do you belong to?
2. How much do you pay to the CCN for the use of this terminus?
3. How much do the matatus operators pay to be a SACCO member?
4. Are you satisfied with the services offered by the CCN?
5. In your opinion, what are the challenges experienced in this terminus?
6. In your opinion, what are the possible solutions to the challenges experienced in this terminus?

d. KURA

1. What is the designated size of this road?
2. Are there past/ future regulatory strategies to curb traffic congestion along the road?
3. What are/were the strengths and short coming of such efforts?
4. Suggestion on other plausible remedies to curb traffic congestion along this road?

Appendix 7: Observation Checklist

Cordon point on Tom Mboya Street

Day of observation Date Time

Observation item	Remarks
Road transportation	
Modal composition of the vehicles	
Vehicle entry and exit points	
Parking style and size	
Traffic volume	
Street condition	
Street size	
Road users' behaviour (vehicle operators, pedestrian and passengers)	
Availability of amenities	
Hawking Activities	
Road users' behaviour (hawkers and pedestrians)	
Type of business or wares sold	
Size of the hawking spaces	
Structures used by the hawkers	
Location and condition of the areas of operation	