ROLE OF NETWORKS AND VENDORS' CHOICE OF TRADING LOCATION: A STUDY OF TRADE ON NAIROBI-THIKA SUPERHIGHWAY

BY OTULA CALVINCE OTIENO T51/88162/2016

A Research Project Paper Submitted to the Institute for Development Studies, University of Nairobi, in Partial Fulfillment of the requirements for the award of degree in Master of Development Studies

Institute for Development Studies
University of Nairobi

UNIVERSITY OF NAIROBI

Declaration of Originality Form

Name of Student	OTULA CALVINCE OTIENO
Registration Number	<u>T51/88162/2016</u>
College	OF HUMANITIES AND SOCIAL SCIENCES
Faculty/School/Institute	INSTITUTE FOR DEVELOPMENT STUDIES
Course Name	RESEARCH PROJECT
Title of Work	ROLE OF NETWORKS AND VENDORS' CHOICE
	OF TRADING LOCATION: A STUDY OF
	NAIROBI-THIKA SUPERHIGHWAY

DECLARATION:

- 1. I understand what Plagiarism is and I am aware of the University's policy in this regard.
- 2. I declare that this RESEARCH PROJECT is my original work and has not been submitted elsewhere for examination, the award of a degree or publication. Where other people's work or my own has been used, this has properly been acknowledged and referenced in accordance with the University of Nairobi's requirements.
- 3. I have not sought or used the services of any professional agencies to produce this work.
- 4. I have not allowed, and shall not allow anyone to copy my work with the intention of passing it off as his/her own work.
- 5. I understand that any false claim in respect of this work shall result in disciplinary action in accordance with the University Plagiarism Policy.

Signature: _			
Date:			

DECLARATION

•	that this research project is my original work and has institution or university other than the University of
Signed	Date
	d of Master Degree in Development Studies with my
approval as the Supervisor.	
Signed	Date
Dr. Anne Kamau	
Institute for Development Studies (IDS),	
University of Nairobi	

DEDICATION

This work is dedicated to my late parents: Grace Atieno and Otula Jacob, even though you never lived to see me through my entire education process, I still remember your statement "study and achieve what we never achieved during our time". RIP. To my friends and relatives, thank you for your support and words of encouragement you gave me during this period.

ACKNOWLEDGEMENTS

I am greatly indebted to my supervisor Dr. Anne W. Kamau for her special dedication and guidance that enabled me to write this entire project paper. Without her comments and suggestions, writing this paper would have been so difficult. I would also like to pass my special gratitude to the Institute for Development Studies (IDS) lecturers who shaped me academically for this work.

I also extend acknowledgement to my classmates namely: Yogo Kenneth, George Otiep, Anjejo Kennedy, Jane Wandere and Immaculate Muthembwa for your reminders and encouragement to put more effort and finish this work. To my friends Raphael Indimuli, David Oburu and Musyoki Peter your input in this work was so helpful to me. The list cannot be complete without recognizing vendors trading on Nairobi to Thika superhighway for their willingness to spare time and give me the needed information without which I would have not finished this project paper.

TABLE OF CONTENT

DECLARATION	iii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS AND ACRONYMS	xi
OPERATIONAL DEFINITION OF TERMS	xii
ABSTRACT	xiv
CHAPTER ONE	1
1.1 Introduction	1
1.2 Problem Statement	4
1.3 Research questions	5
1.3.1 Specific questions	5
1.4 Objectives of the study	5
1.5 Specific objectives	5
1.6 Justification of the study	6
1.7 Organization of the Research Paper	7
CHAPTER TWO	8
2.1 Literature review	8
2.2 Empirical Literature Review	8
2.2.1 Characteristics of Highway Venders	9
2.2.2 Networks among Highway Vendors	11
2.2.3 Determination of Types of Goods to Sell	12
2.2.4 Determination of Trading Locations	12

2.2.5 Role of Kenya National Highways Authority (KeNHA) and Nairobi-Thika Sup	perhighway
	13
2.3 Theoretical Framework	15
2.3.2 Social Network Theory	16
2.3.3 Business Networks Theory	17
2.4 Conceptual Framework	19
CHAPTER THREE	20
3.1 Methodology	20
3.2 Research Design	20
3.3 Study Site	20
3.4 Study Population	22
3.4.1 Target Population	23
3.4.2 Sampling Procedure	23
3.4.3 Inclusion and Exclusion Criteria	25
3.5 Data Collection	25
3.6 Data Analysis	26
3.7 Ethical Considerations	26
CHAPTER FOUR	28
4.1Research findings and Discussion	28
4.2 Characteristics of Highway vendors	28
4.2.1 Gender	29
4.2.2 Area of residence	30
4.2.3 Level of Education	30
4.3 Vendors Selection of Trading Location along Nairobi to Thika superhighway	31
4.3.1 Highway Vending	31

4.3.2 Types of Businesses along Thika Super Highway	32
4.3.3 Origin of the Highway Vending Business	32
4.3.4 Reasons for Engaging in Highway Vending	33
4.3.5 Trends of Nairobi - Thika Superhighway Vending Businesses	34
4.3.6 Trading Location before the Construction of Nairobi to Thika Superhighway	35
4.3.7 Average Income of Nairobi - Thika Super Highway Vendors	36
4.3.8 Sources of Goods/Raw Materials for Superhighway Vendors	37
4.4 Networks Among Vendors Trading Along Nairobi to Thika Superhighway	38
4.4.1 Organizations/Groups among Superhighway Vendors	38
4.4.2 Motivation for Joining Superhighway Vendors Groups/Organizations	39
4.4.3 Authority Allocating Business Spaces along Nairobi-Thika Superhighway	40
4.4.4 Procedure for Acquiring Trading Location	41
4.4.5 Networks that Exist in Superhighway Vending	42
4.4.6 Trading Location	43
4.4.7 Trading location	44
4.5 Role of Network in Influencing Highway vendors' choice of Trading Location and type o	f
Businesses along Nairobi to Thika Superhighway	45
4.5.1 Benefits Derived from the Networks	45
CHAPTER FIVE	46
5.1 Summary, Conclusion and Recomendation	46
5.2 Summary and Key Findings	46
5.3 Conclusion	47
5.4 Recommendation	48
REFERENCES	49

APPENDICES	53
Appendix 1: Questionnaire	53
Appendix 2: Key Informant Interview	58
Appendix 3: Research Permit	59

LIST OF TABLES

Table 1: Clustered Areas	24
Table 2: Sampled Clusters	25
Table 3: Data Needs Table	27
Table 4: Respondents Age	29
Table 5: Respondent Gender	29
Table 6: Respondent Education Level	31
Table 7: Types of Businesses along Thika Super Highway	32
Table 8: Reasons for Vending Business	34
Table 9: Table of Previous Occupation before Construction of the Thika Superhighway	36
Table 10: Table of Average Monthly Income	37
Table 11: Source of Business Goods/Raw Material	38
Table 12: Presence of Groups among Superhighway Vendors	39
Table 13: Members of Superhighway Vendors' Organization/Groups	39
Table 14: Procedure for Acquiring Trading Location	42
Table 15: Types of Networks that Exist among Superhighway Vendors	44
Table 16: Influence of Network on Trading Location	44

LIST OF FIGURES

Figure 1: Conceptual Framework	19
Figure 2: Map of Interchanges, Overpasses and Underpasses along Nairobi - Thika	
Superhighway	21
Figure 3: Map of Nairobi -Thika Superhighway	22
Figure 4: Origin of the Highway Vending Business	33
Figure 5: Graph Showing the Trend of Vending along Nairobi – Thika Super Highway	35
Figure 6: Motivation for Joining Organizations/Groups	40
Figure 7: Authority Allocating Business Spaces along the Nairobi – Thika Superhighway	41
Figure 8: Benefits Accrued by Vendors Operating in a Network	45

LIST OF ABBREVIATIONS AND ACRONYMS

WIEGO Women in Informal Employment Globalizing and Organizing

KNBS Kenya National Bureau of Statistics

GDP Gross Domestic Product

ILO International Labour Organization

NACOSTI National Commission for Science, Technology and Innovation

AfDB Africa Development Bank

OECD Organization for Economic Co-operation and Development

IEA Institute of Economic Affairs

DFID-Africa Department for International Development-Africa

SMEs Small and Medium Enterprises

KENHA Kenya National Highways Authority

OPERATIONAL DEFINITION OF TERMS

Vendor- A vendor is defined as someone who operates business in either open or public spaces without having permanent structures or building where they operate but with temporary or mobile stalls. Highway vendors occupies spaces on walkways along the highway at specific point with high human traffic congestion. In this study, vendors refer to people who do business along Nairobi to Thika superhighway at strategic locations where they can easily get access to customers. These locations include; footbridges and pedestrian crossing points.

Networks- This is a social structure which has a set of actors i.e. groups, individuals, societies or organizations and the relationships between these actors. The interaction maybe on an individual to individual level or cut a cross through several levels such as and individual to group relationship. It is concerned with the problem of knowledge creation, dissemination of information and utilization among network members.

Super Highway- A highway designed for travel at higher speeds but within the recommended speed limits. It has two or more lanes for travel in each direction. It has sections of footbridges located at specific sections to enhance safe movement of pedestrians across the highway, roundabouts to facilitate easy movement of motor vehicles and speedbumps to control speed of motor vehicles at some points. The highway referred to in this study is Nairobi to Thika superhighway which covers the section between Pangani to Thika town.

Business-An activity that involves the purchase and sale of goods and services. Most businesses are independently owned, they require low capital and less labour force. Generally, these businesses are operated in small scale but profit driven. This study focused small businesses along Nairobi-Thika super highway operated at specific sections with human traffic including footbridges.

Choice - Choice is a process that involves assessment and judgement; that is the analysis of various options and arriving at a decision. For a choice to be made, there must be two or more alternatives. In this study, highway vendors have to make choice about their trading sites based on the alternatives that they have.

Trading Location- This is the place where business site its operation. This study focused on business locations along Nairobi to Thika superhighway. These are areas with high human traffic and included footbridges and pedestrian crossing points.

ABSTRACT

Studies have observed that vending has been on the increase in developing countries particularly in urban areas and suburbs. The main contributing factors are rural-urban migration, lack of formal employment leading to self-employment as survival alternative, inability of companies to employ people on permanent basis due to economic challenges. For a greater percentage of urban residents who are not able to get absorbed in formal employment, small scale businesses are the main sources of their livelihood. Vendors have developed networks among themselves to help them do businesses in their trading location and increase daily income. This study aimed at understanding the role of networks in the vendors' choice of business location along Nairobi-Thika highway. The study examined how networks helps vendors to identify locations conducive for their businesses. Data were collected through survey of sixty highway vendors and five key informant interviews. The findings showed that the number of vendors doing business along Nairobi to Thika superhighway is continuously increasing after the commissioning of the road and the trend is linked to increasing traffic congestion along the highway. This is linked to the fact that infrastructure development attracts population growth along the corridors and this in turn creates new and unplanned economic activities including market sand trading sites. The study revealed that vendors experienced harassment from county government and Kenya National Highway officials. Further, social networks among vendors played a key role in determining trading locations and their survival along the highway. Being a member of a social network helps in getting market information, source of goods and raw materials, where to sell particular type of goods and getting a space for business, and identifying existing market gaps in specific trading location. The study concludes that vendor-to-vendor networks have enabled vendors' to overcome the challenge they faced while trading along the highway, created opportunities for earning livelihood for the vendors and thereby contributed to poverty alleviation among the vendors.

CHAPTER ONE

1.1 Introduction

Informal sector continues to be Africa's largest source of employment, accounting for 70% of workers in sub-Saharan Africa and 62% in North Africa (AFD, 2013). Informal businesses is key contributor to the economic development of the state since it employs the majority. Informality is becoming more visible in African cities than formal employment, they contribute largely to the revenue of the state. It also contributes to the revenue of a country through value added tax on the items they sell (Skinner, Reed & Harvey, 2018).

In 1972, the International Labour Organization (ILO) characterized informal economy by ease of entry, dependence on local resources and small operations, and subsequently expanded to cover all forms of employment. In developing countries, vending continue to offer employment opportunities and source of livelihood to many urban dwellers. Informal economy in Africa continues to expand due to governments' inability to create employment opportunities for citizens or offer unemployment benefits to the unemployed (Dandukuri,, 2014), rural urban migration, failure of companies to formally employ people and people willing to become self-employed (Chen, 2012).

Informal economy has increased in major cities both globally and locally. Vending has been on the rise globally mostly in less developed countries (Bhowmik, 2012). Street sales account for 15-25% of total informal jobs in African urban areas and contribute about 46-70% of the overall added trade value (Mazhambe, 2017). This has a greater impact on economic development of Africa and livelihood of its vendors as well as in other regions (Vanek, Chen, Carré, Heintz & Hussmanns, 2014).

Business remains a critical activity, it propels economic development of a nation, enhancing livelihoods of vendors and provide accessibility of goods. Market access is a key aspect in ensuring business growth. Nirathron, (2006) acknowledged that vending is "means poverty reduction in society since the Fifth Economic and Social Development Plan (1982-1986) established in the Ninth Plan (2002-2006) as a strategy of economic self-reliance. (National Economic and Social Development Board, 2001).

Informal sector workers, including roadside and highway vendors have networks that support their business activities in accessing goods and markets. Millions of urban poor people around the world depend on new organizational forms of economic activities (Brown, Lyons & Dankoco, 2010). African cities are experiencing extensive informalization and informality now constitutes a general feature in most of places. Vendors associations, either formal or informal, relies on a broad range of social networks to acquire and improve their abilities, enabling them to establish intrinsically a market advantage (Sciandra, 2011). Thus the network structures that exist among the vendors could improve their access and occupation of trading spaces. It is therefore important to understand how networks between individuals involved in the businesses in the informal economy influence their entry into business and choice of their trading areas.

This study investigated how social networks among vendors along the Nairobi to Thika superhighway influence their choice of trading locations. Expansion of Thika Superhighway opened up the northern corridor which is the main cargo route and it serves as the transit link within the local metropolitan, regionally and internationally. However, it is also categorized as international trunk road A2, originating from Nairobi to Ethiopia via Moyale (Dienel, 2016). This has greatly facilitated movement of people and transportation of goods and services within Nairobi and to other parts of the country. Development of Nairobi to Thika superhighway led to increase in human settlements along the highway and reduced flow of traffic to and from the city. This has led to increase in businesses along the highways and improvement in economic development within the area (Mwaniki, 2017). Expansion of roads has promoted economic activities with vending business emerging along the roadsides, the footbridges and pedestrian crossings where human traffic is high.

Vending is classified as informal economic activity characterized as small scale, ease of entry, low levels of education, operating outside formal regulation and self-employment. The Kenya National Bureau of Statistics (KNBS) extrapolated an increase in the informal economy employment between 2016 and 2017 from 16.0 million to 16.9 million persons, respectively. There has been direct and indirect creation of employment opportunities along the highways (KENHA, 2016). So

many vendors have been observed on the highways especially at the bus stages and footbridges. Number of businesses has increased as compared to before the expansion of the roads.

Vending is known to create employment opportunities and reduce poverty among the urban poor who venture into such activities. Ramaite (2006) defines vending as a key characteristic part of the town setting, providing wide variety of goods from small informal stalls, pavement mats, baskets borne on hands, push-carts wheels or goods in pole and shoulder baskets. In general, vending is an activity for those who operate informally due lack of enough capital as an alternative to other forms of employment in addition to salaries and welfare benefits to help them meet their daily needs (Roever, 2014). In Kenya, expansion of the Nairobi-Thika highway facilitated the opening up of businesses in areas with high human traffic like the footbridges, pedestrian crossing points, overpasses and underpasses over the forty two kilometers stretch.

Expansion of Nairobi-Thika superhighway led to the increase in human population, because of the expected reduction in traffic congestion which enhances easy accessibility to and from various destinations. This made tremendous growth of population within the residential areas that borders the highway. Increased human settlements along Thika highway has led to traffic congestion due to a high population traveling to work during the rush hours, increased use of private vehicles, several pedestrian crossings and speed bumps which causes traffic buildup. High urban population growth rate accompanied by limited formal employment opportunities propagates the rise of informal economy activities (Carr & Chen, 2002). Vending along the superhighway has emerged due to rise in congestion along the corridor. Recent studies show that traffic congestion in Nairobi City is the second worst traffic phenomenon after Kolkata City in India (Mutavi, 2017). Traffic congestion on this major road, both human and motor vehicles, has been instrumental in propelling vending businesses.

Choice of trading location among highway vendors is important in ensuring their access to customers. Trading locations influences the amount or volume of income vendors receive. Negotiation for strategic locations has important implications on the daily returns from sales (Martínez, Short & Estrada, 2017). It is noted that a good space for vending is an important factor that affects the sales that vendors get from their businesses (Cohen, Bhatt, & Horn, 2000). In the

city centers and its outskirts, traders move to areas where there is heavy human traffic, tend to cluster around transport hubs, or roads with heavy traffic congestion (Abbot, Shah & King, 2014). Similarly in Nairobi, vendors operate their businesses in places where there is human traffic, for example close to or along footbridges, pedestrian crossing points, and over-and-under passes along the highway.

1.2 Problem Statement

Vending business today constitutes a significant percentage of the informal sector that has expanded continuously over the years. Due to increasing unemployment and high poverty rates in Kenya, many people have opted to run vending businesses. These businesses are the main source of livelihood for most vendors. These vendors sell a variety of goods such as bottled water, sweets, sugarcane, fruits, kitchen wares, electronic gadgets, new and second hand clothes and many more. Vendors also locate themselves at areas with high human traffic to enable them have easy access to customers who purchase their goods.

The Nairobi-Thika super highway was expanded to facilitate easy movement of goods and people. It has eighteen (18) footbridges which includes Safari park, Roysambu, Kahawa Wendani, Kenyatta University etc. which allow people to cross the road safely to avoid accidents, and has roughly ten (10) pedestrian crossings at some sections such as Garden city, Drive in, Witeithie, Ruiru, Kenyatta road etc. Some of these areas have been turned into trading locations by highway vendors. Other vendors operate along footbridges and crossings situated near academic institutions and small markets. The trend is that whenever footbridges are introduced, small businesses emerge either on the footbridge or nearby.

Constructions are underway to replace pedestrian crossing with footbridges as a way of reducing pedestrian accidents along the highway. Hence in future, there will be permanent footbridges that will potentially attract more vending businesses. This will potentially increase the number of vendors selling wares at different places along the highway, including walking spaces on the footbridges, staircases, ramp, and others points at the foot bridge.

Businesses conducted on the footbridges could lead to continuous conflict with authorities because they are neither registered nor were these points designated for commercial purposes including vending activities. They may also prevent smooth flow of human traffic and obstruct motorists from having a clear view of the highway. This continues to present major challenges but vendors still find appropriate locations to sell their goods. It is in this sense that the study sought to understand how Nairobi-Thika super highway vendors identified and chose their trading areas; and how the networks they belonged to helped them in initiating the businesses including identifying appropriate vending locations which includes Roysambu, Kahawa Wendani, Kenyatta University Juja and Witeithie.

1.3 Research questions

This study's main research question was, what role do networks play in influencing highway vendors' choice of trading location along Nairobi-Thika superhighway?

1.3.1 Specific questions

- 1. What are the characteristics of vendors who operate along Nairobi Thika Super highway?
- 2. How did vendors choose their current trading locations?
- 3. What types of networks exist among highway vendors?
- 4. What role do networks play in influencing vendors' choice of trading location and type of businesses?

1.4 Objectives of the study

The main objective of the study was to investigate the role of highway vendors' network influencing the choice of trading location along Nairobi - Thika super highway.

1.5. Specific objectives

- 1. To determine the characteristics of vendors who operate along Nairobi Thika Super highway.
- 2. To examine how vendors choose their current trading locations.
- 3. To determine different types of networks that exists among vendors operating along Nairobi Thika superhighway
- 4. To assess the role of networks in influencing highway vendors' choice of trading sites and type of businesses.

1.6 Justification of the study

Vending is key contributor to Kenya's Gross Domestic Product (GDP) and a source of employment opportunity to many people. This study was conducted to determine the role networks plays in influencing vendors' choice of trading location along Nairobi-Thika super highway. Little information exist on where these vendors were before the superhighway was constructed and why the surge in their number at the various points, including foot bridges, overpasses and underpasses.

Nairobi- Thika superhighway is the first wider highway which has been constructed in Kenya. Some of the major transport infrastructure development projects in Kenya was the expansion of Nairobi to Thika into a super highway (Kara report, 2012). Observably, it has high number of vendors as compared to other highways in Nairobi and Kenya at large. Considerably it also activated business spaces by opening up easy access to areas that were initially inaccessible. There has been a continuous growth vendors' population along the highway since it was completed in the year 2012. The economy in the adjacent areas was sluggish because of low population, people avoided living anywhere along the highway since few investors wanted to set up shop along the road (K'Akumu, Gateri & Kago, 2017). Since the completion of the project, the whole route has undergone a radical facelift.

Road expansion is a developmental issue and it enhances transport mobility and access for people, vehicles, goods and services (Afolabi, Oyetubo & Oluwaji, 2018). Often, especially where road infrastructure is not integrated in human settlement planning, human population and settlements follow infrastructural development (Cervero, 2003). In the case of Nairobi-Thika superhighway, the expansion led to many people moving and establishing residential places along areas that border the highway, as well as businesses. The reason for focusing on Nairobi-Thika road is because it is the first highway to be expanded in Nairobi and there is need to document the effects of expansion of the highway on choice of trading location. Observably, small traders emerged at the footbridges and underpasses. Hence this study sought to investigate how the vendors identified their trading locations and the type of businesses to engage in.

This is useful to those in academia, researchers, students and practitioners interested in understanding highway vending and the link with infrastructure development in Kenya. This study adds value to policy making process since it provides useful information for planning and integrating informal economy or mainstreaming it in development projects. It also provides a basis for government planners to think about the need to involve vendors in decision making processes.

1.7 Organization of the Research Paper

Chapter one introduces highway vendors in Kenya, regionally and globally. This section contains the statement of problems, research goals, questions and study rationale. The main concern in this project paper is highway vendors relies on networks to help them conduct their businesses in a more profitable environment which is influenced by good trading location.

Chapter two of the study explores available literature on networks and vending businesses. This chapter analyzes vending businesses and how vendors operate through their networks to identify trading locations. This section also examines relevant theories and concept that relate to networks among highway vendors and how these networks influence the choices of their trading locations.

Chapter three describes methods of data collection, sampling frame and procedures and appropriate tools applicable for this study. It includes information on how data was analyzed and presented. Chapter four evaluates and discusses research findings. The research overview, findings and recommendations are found in chapter five. Last is the appendix which contains data collection tools and research permit.

CHAPTER TWO

2.1 Literature review

This section contains theoretical and empirical literature. Theoretical literature discusses the relevant theories to the study which include social networks theory and business networks theory. Empirical literature looks into the previous studies on how networks influences vendors' choice of trading locations.

2.2 Empirical Literature Review

Networks enables vendors to operate as one community. It enhance social cohesion among vendors and improve their businesses (Katz, Lazer, Arrow & Contractor, 2004). Globally, the informal economy has grown steadily and the sector's exponential growth is considered to have been driven by rising unemployment rates (Timalsina, 2011). ILO, 2004 states inadequate opportunities in the formal sectors of the economy as well as lack of required skills and experience has contributed to the growth of informality. Informal economy comprises mostly of unrecognized, unrecorded and unregulated small-scale activities including small businesses, families, self-employed individuals such as street vendors, cleaners, shoe shiners, hawkers, etc. (Timalsina, 2011).

Currently, informal sector has grown globally and has been emerging in new and unexpected places including urban and urban areas (Chen, 2012). These places include the streets, roads and highways. This could be the beginning step in which informality is being recognized as a major way by which urbanites handle the current economic and urban crisis (Lindel, 2002). This has sparked the connection between informality and development and the relation between informality, inequality and poverty. Both informal and formal economy are integrally linked and therefore they both contribute to the development of overall economy. (Chen, 2012) further states that the link between formal and the informal economy benefits the poor and is therefore a key way to reduce inequality and poverty in our society.

According to Kinyanjui (2014) African countries are bounded by informality which consist of hawking, market trade, craftsmanship, manufacturing and repairs. It accommodates the majority of the population since the available formal job opportunities are less than the population. The

sector has accommodated even the educated and uneducated individuals and cuts across all gender. Rapid growth of small scale trade in the streets is deeply rooted in the wider economic and policy dynamics (Lyons & Brown, 2009). Street trade has spilled over even to school going children in most of African countries. Ugochukwu, Okeke, Onubogu, & Edokwe, (2012) reported that sub-Saharan Africa has the highest prevalence, ranging from 20 - 54%, in Nigeria while Cote d'Ivoire and Zambia was estimated at 20 - 30%. This shows how rapid the sector is growing with young children being involved. Developing countries are faced with exponential growth of small scale traders giving rise to unemployment and rural-urban migration in search of a better means of livelihood.

Small scale trade greatly contributes to the economic development of African countries. Informal economy in urban areas can be understood, particularly in a broader economic context of few opportunities in agriculture, manufacturing and the public sector (Lyons et.al, 2009). In Kenyan, informal economy is continuously increasing as compared to other developing countries around the world. In 2017 A total of 787 thousand job opportunities were created in the informal sector (Economic survey, 2018). Central Bank of Kenya (CBK) economic survey report indicates that small and medium-sized enterprises make up 98 percent of all businesses in Kenya, generating 30 percent of jobs per year.

Development is a multi-dimensional process which involves change in structure, attitude and institution as well as acceleration of economic growth (Todaro, 1981). Transport system is important in enhancing economic development through mobility and access. In Nairobi, several roads have been expanded to ease traffic flow and accessibility of various places within the city. Significant improvement of the cities 'physical, administrative, social and economic infrastructure fuels up population growth (Tripathi, 2017). This has greatly contributed to mushrooming of trading locations along the roads in Nairobi.

2.2.1 Characteristics of Highway Venders

Small scale business activities are characterized by ease of entry, use of local produce (Karthikeyan & Mangaleswaran, 2017), ownership of enterprises, small scale of operation, use of skills acquired outside formal education system and unregulated and competitive market (Charmes, 2012). It is

therefore composed of individuals with different characteristics for example in Asia, the majority of the street vendors are males (Perera & Tang, 2012). This could be the challenges of time available to start vending business and the places of operation which perhaps may be insecure for the women.

Most people start their own business in the informal sector because of the constraints in the formal sector. Mostly, informal sector activities are found in developing countries for example, street vendors who sell different types of local produce and other products that are commonly used in daily life. Many informal traders work on the local market open their small stalls, where some of them operate day or night. There is a particular day for day or night business activities in different locations across Malaysia (Suhaimi, Mamun, Zainol, Nawi, Permerupan, Malarvizhi & Timalsina, 2011).

Studies have shown that vendors trade varying goods ranging from foodstuffs to non-foodstuffs. (Bhowmik, 2010) states that vendors sell variety of goods and even the volume of trade differs. Variety of items sold by vendors can are available nearly in every corner of the world and this has been existing for several years (Fellows & Hilmi, 2012). Any location with people traffic be it constant or intermittent, attracts venders to sell their goods. (Tiwari, 2000) observed that bicycles, pedestrians and bus traffic attract street vendors. Vendors normally occupy public spaces, pedestrian paths and even walk along the traffic congestion areas sell foods, drinks and other articles which are on demand by road users (Ray & Miashra, 2011).

The same case applies to African countries, in Lagos Nigeria for example, it is observable that most vendors deals in Ceiling brushes, soft drinks, clocks chewing-gum, posters, soccer team flags, magazines, windshield wipers etc. at the next round about where there was traffic congestion, the vendors there were selling fruits and food items. In South Africa, street vending took shape during the apartheid era when the government tried to stop trading activities. Traders resorted to trading light goods and operating their businesses from inconspicuous areas to avoid battle with the city councils (Gamieldien & Niekerk, 2017). The types of goods being sold along the streets and highways are determined by several factors which includes; time, demand, street/highway and

vehicle traffic congestion. It was observed in Ghana that a portion of vendors operate when there is traffic, others at rush hour, some operate in the morning, others in the evening.

According to (Mitullah, 2003), Several vendors simply carry their goods on their hands, bags and shoulders during traffic while others displays their goods on walls, trees and fences. Some may build temporary structures with stands for displaying their goods on the streets. This makes it easier for them to sell them to the passengers in slowly moving motor vehicles. It is further noted that trading commodities ranges from foodstuffs, both fresh and processed, clothes, flowers kitchen wares electrical appliances, sweets, newspaper, office stationary plastic products and even brooms. In Nairobi it was observed that there were 100,000 vendors by the year 2003 and they operate for about 8-12 hours per day. This shows that most vendors sells different types of goods and this is justified by demand which varies with time during the day and the market location.

2.2.2 Networks among Highway Vendors

The informal economy does not only constitute the visible public elements of street vendors but also the invisible aspect of how they arrange themselves to offer goods and services to the customers along the street (Njaya, 2015). Vendors rely on social capital both individually and collectively. Traders develop trustworthy relationships with their colleagues, clients, suppliers and family. (Hall, & Bozeman, 2011). Success or failure of vendors is largely determined by social networks and organizations (Lourenço-Lindell, 2002).

Africa's street trade is an activity that cuts across all ages and gender. It is an activity for women, men and Children (Dada, 2013). In Nigeria, it was observed that children as young as ten years old hawks along the streets and roadside. Some of these children support their parents and relatives, while in some cases they are self-employed entrepreneurs. (Dada, 2013). Considering the social networks that exist between the vendors, for one to grow into business the family ties or acquaintances must be strong with those who have been into the business (Lhotáková, & Klosová, 2009). Most vendors could be agents of formal firms and sell on commission others could be getting goods from their friends and families to enable them start up (Blisson & Rana, 2001).

2.2.3 Determination of Types of Goods to Sell

Vendors are highly necessary in the distribution system from the manufacturers, wholesalers and to the consumers (Buurman, 2002) providing useful services to the community especially the middle class and the poor. Vendors sell fruits, sweets, cigarettes, water, electronic devices and toys. Market is always influenced by different forces; price, demand and supply (Barrett, 1996). Supply and demand are the driving forces behind market economies. They determine the quantity and prices of goods produced. Products sold by vendors are demand driven and therefore it requires proper market analysis to understand the market (Lehmann, 1989).

Vendors trade in variety of products (Mitullah, 2003) and this is subjective to the exiting market gap. Based on the consumer demand and preferences, vendors always provide goods that are in line with the desire of the customers. Market consists of sub demographic groups with different tastes and preferences. Market analysis also helps in determining the specific brands of goods, price points, quality and physical environment that meets the preference of the given target group (Gibbs, 2012).

2.2.4 Determination of Trading Locations

Street vendors are usually located in the city center's most profitable areas such as parks, bus terminals, train terminals, workplaces, universities, and so on where people can buy goods from them easily (Rahayu, Putri & Rini, 2018). The market for goods is always determined with the accessibility to the customers. (Lhotáková & Klosová, 2009) describes market positioning to consist of the consumers of the product, the need of the consumers, the competitors and how the product satisfies the needs of the consumers. Positioning can also be related to networks and associations from which a vendor is involved.

In response to the untimed shifting of traffic jam within the town, vendors have additionally adopted coping methods by selecting multiple locations within the market keep pace with daily traffic fluctuation. Various approaches applied by vendors primarily depends on the prevalent situations however with the goal of increasing profits (Dransfield, 2004). Vending is sometimes a make-shift action which varies with prevailing traffic jam. Like everywhere else, the location is a

crucial option, depending not only on the direction of the traffic, but also on the types of shops that are part of the traditional distribution system in the region.

Businesses are always profit driven and therefore profit is the primary factor that hawkers consider while choosing their trading locations. Some vendors choose a trading sites because they have friends doing business in that specific location (De Klerk, 2012). Trading locations are selected based on existence of networks. Trading location enable vendors the opportunity to build their business (Owusu, Abrokwah & Frimpong, 2013). Some vendors have revealed that shifting from their previous trading site to other areas is in direct reaction to the inflow of vendors from other sites to the town, contributing to a drop in market share. Social capital is a platform that enhances sharing of key information among vendors and serve as a monitor and early warning system based on the invasion by county council officials (Owusu et al, 2013).

2.2.5 Role of Kenya National Highways Authority (KeNHA) and Nairobi-Thika Superhighway.

Kenya National Highways Authority is a state corporation, which was established under the Kenya Roads Act 2007 with the mandate of management, rehabilitation, development and maintenance of international trunk roads connecting centers of international importance and crossing international boundaries or terminating at international ports (Class A road), national trunk roads connecting international important centers (Class B roads), and roads linking locally important centers to each other or two high-class roads (Class C roads).

Roads are the main means of transport in Kenya linking rural and urban centers and regional markets. According to KeNHA, road networks accounts for 93 percent of freight traffic. KeNHA requires that all road users should observe highway safety measures and observe all signs posted for their safety. This is why footbridges along Nairobi to Thika superhighway have been built especially at the sections which connects residential areas or near institutions. These areas are appropriate for vendors to carry out their businesses because there is always high human traffic. KeNHA forbids carrying out of economic activities along Nairobi to Thika superhighway because these areas are meant only for road users (pedestrians and motor vehicles), and the fact that vendors are not legalized to conduct any business along the highway and they even risk their lives in case

of accidents, security threat, littering the highway and interfere with visibility especially at the junctions.

Nairobi-Thika highway is part of the northern trunk road connecting Nairobi to Ethiopia. It is located in both Nairobi and Kiambu Counties. The highway begins at three parts in Nairobi on Uhuru Highway, namely Museum Hills, Haile Selassie Avenue and roundabout at University way, and meets on Thika road at Pangani Roundabouts. The highway then proceeds to Thika via Muthaiga, Alsopps, Kasarani, Githurai, Kenyatta University, Ruiru, Juja and ends at the bridge near Blue Post Hotel.

The highway was improved from four lanes up to eight lanes which includes cycle tracks and footpaths. The road was expanded as follows; Juja-Thika- two lanes dual carriageway including service roads, cycle and footpaths, Kasarani – Juja-three lanes dual carriageway including service roads, cycle tracks and footpaths, Muthaiga-Kasarani- Four lanes dual carriage way including service roads, cycle tracks and footpaths, Pangani-Muthaiga- Four lanes dual carriage way including cycle tracks and footpaths, Museum Hill-Pangani-three lanes dual carriage way and Ring road- Kariokor-Pangani-two lane carriageway (Kara, 2012).

The construction included revamping of intersections through interchanges, underpasses, pedestrian crossings and underpasses. There was a need to construct footbridges at bus stops and points connecting to residential places. This came up when the road was constructed with only ten footbridges initially which translated to only one footbridges in every four to five kilometers. This made it relatively problematic for pedestrians to walk at a point between footbridges to reach the nearest footbridge to traverse the other side of the highway. This made it difficult because most pedestrians risked being hit by speeding vehicles. This lead to the establishment of more footbridges, pedestrian crossing points which have also turned to becoming trading locations for vendors.

2.3 Theoretical Framework

This study aimed at exploring role of networks among vendors operating their businesses in Nairobi to Thika superhighway and how networks influenced their trading locations. Theories that were explored to guide in this study includes: Social network and business networks theory which explains how the trading locations are chosen through vendors' social interactions.

2.3.1 Role of Networks

Network is a form of connection that unites actors based on a common purpose (Bouzdine & Bouzdine, 2004). Network entails the connection between people in which resources are allowed to flow among the individuals involved in the network. In informal economy, Network are expected to create relationships which facilitates circulation of information about prices, market conditions and mitigation of risk (Fafchamps, 2001). The OECD states that social network comprises of common customs, principles and considerations that enhance interaction among members (Durlauf & Fafchamps, 2003).

Networks should enhance access to trading location among vendors. The access to trading locations along the main roads is key in facilitating vending business hence improves the lives of the poor urban dwellers who are majority in the sector. Networks facilitates (savings, connections, reciprocity, resources) and collective level (confidence, customs, unity) (Destombes, 2010). Networks has no consensus on the form it takes but rather depends on the characteristics of the people involved in the network. Using network as a resource has been determined to go beyond one-time request and covers routine everyday activities (Busse, 2001).

Vendors maintains stable relationship among themselves, with the buyers and suppliers in order to sustain the businesses. Traders promise to purchase from a desired supplier on a regular basis. The supplier provided goods in return at favorable prices and, at times, the possibility of supplying goods and the payment is done later within the agreed period. Similarly, the vendors would sell on credit to trusted customers. However, if the rates are no longer too beneficial or if another seller with favorable conditions joins the market by offering cheaper products or even more reasonable terms of credit, market forces succeeds the relationship.

2.3.2 Social Network Theory

This approach is grounded on the relationship between actors, the focus is on the potential benefit accruing to the actors because of their attachment to the social structure. Coleman (2000), refers to social network as to all human relationship, the value of social structures to actors as resource that can be used to achieve their individual interest. Social Network theory argues that networks are important because it makes people to act and react to social groupings in their environment (Lachapelle, 2011). Social networks among vendors provide coping mechanisms from various shocks regarding the vulnerability of the community (Acepis, 2018). Networks create personal ties that people construct for mutual support, for access to resources and for exchange of goods and services. This has been on the increase in informal social and economic activities. Lindel (2002), states that most African cities are experiencing an extensive informality and it has been considered as a universal feature in most urban areas.

Groups with a strong social network and community organization are in a stronger position to address inequality and insecurity, resolve disputes and leverage new opportunities (Isham, 1999). Social networks strengthen the bonds between the actors and it helps individuals to achieve their goals through the help of one another. Among vendors, social networks make it easier for them to identify market for their goods. Lindel (2002) further praises the informal activities for their nature of dynamism, flexibility, creativity and the solidarity they supposedly contain.

Social networks provides opportunities which includes the use of services, training, possibility for participation and information (Destombes, 2010). Persistent relations with specific colleagues help to reduce a number of market distortion and systemic risk issues, allowing long-term economic relationships with known clients to control untrusted operations in the short term (Jackson, 2010). Within the social network concept, for the venders to meet a variety of need, they need to create variety of collaborative efforts. WIEGO indicates that hawkers have been facing a lot of evictions and reallocation by the government and they focus less on the daily struggle of hawkers to make their ends meet. Saha (2011), states that due to harassment by the municipal authorities, traders organizes themselves into groups and associations that enable them to operate

their businesses. Jackson (2010), further states that social network relationship among various organizations affects patent activities, trade patterns and even political alliances.

Social network theory is critical in linking mobile vending business and how they identify their trading location. However much the business is quite dynamic in the sense that they sell different types of goods at different places, this theory helps in knowing the best locations to sell these different commodities. It is also considered as an employment opportunity for a greater portion of poor urban residents. Therefore it's a direct contributor to livelihood of many people as well as to development of a country. This is as a result of the daily struggle between the hawkers and the county officials which may have caused the spillover of businesses to various roads in the city. Development of so many businesses has led to completion, this has made traders to move to other places especially highways in which business spaces has been activated by road expansion

2.3.3 Business Networks Theory

Business network is a pattern of inter-dependence with the goal of deriving mutual benefits from the factories/manufactures to the wholesalers and to the retailers (Cheng & Paulraj, 2004). This relationship enhances the effectiveness and efficiency of the business. It is a set of interconnected relationship along the distribution chain. Networking seems to be everywhere in the face of globalization more so where economic activities takes place. Business networks facilitates information sharing (Gohal, 2009) and it acts as an information respiratory.

Interaction between business operators and other city dwellers helps in acquiring new ideas and information that can lead to changes in the way they do their business (Kinyanjui, 2014). Networks are importance because they enhance cooperation and supportive relationships among the members; and create a strong sense of community which works with the aim of achieving mutual benefits (Muia, Kamau, Kamau, Baiya, & Ndung'u, 2018). Milsner and Morgan (2000), states that networking becomes important for reasons such as ever changing environment, degree of reliability offered by the relationship and the technological innovations of the modern era that do not recognize the importance of human interaction. Interpersonal relationships and the establishment of trustworthy relationships are essential for any business success and effectiveness (Cisi, Devicienti, Manello & Vannoni, 2016). Visibility is improved, competitive advantage is

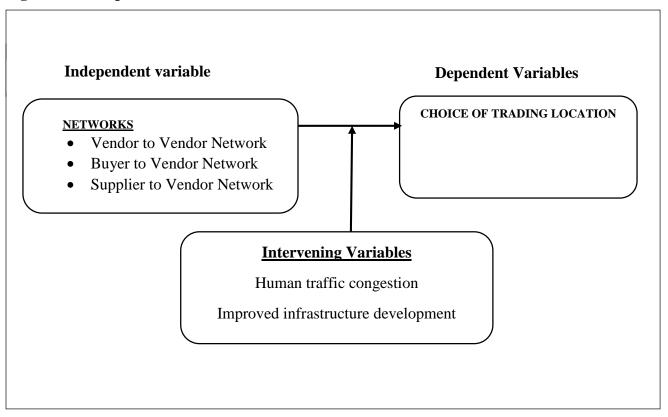
created, productivity is increased and a balance is formed. Vendors can acquire trading locations through interactions and development of bonds among themselves which is essential in sustaining daily livelihood (Njaya, 2015).

Business networks link together different businesses that struggles towards achieving mutual gain situation from the interdependence (Vervest, Van, Heck, Preiss & Pau, 2005). In developing countries, vending business have for a long time been considered as illegal. This contributes to confrontations with urban authorities over licensing, taxation and trading location (Mitullah, 2003). Vendors face harassment from city and town officials and this affects their business performance in many ways. Networks enhance security of vendors trading locations and protection against harassment (Panwar & Garg, 2015). This theory is relevant to the study since it acts as a collective power of vendors to mutually achieve benefits and to acquire their trading locations.

Njaya (2015), divides network into three groups; bonding networks which links people based on common identity and stretch beyond this. Social networks have no consensus on the form it takes but rather depends on the characteristics of the people involved in the network (Blisson & Rana, 2001). Using social network as a resource has been determined to go beyond one-time request and covers routine everyday activities (Busse, 2001). Vending business is a daily event for the people who operate it and therefore they perhaps form their business networks which help them to achieve their livelihood (Alila, & Mitullah, 2002).

2.4 Conceptual Framework

Figure 1: Conceptual Framework



Source: Author's conceptualization

A discussion on the Conceptual Framework

The study looked at how networks influences vendors' choice of trading locations along Nairobi to Thika superhighway. Choice of trading location among the vendors operating along the highway is the dependent variable in this study. This study narrowed down to one key independent variable which is network. In understanding how network effects vendors' choice of trading location, it was operationalized in the following parts: vendor to vendor networks, buyer to vendor networks and supplier to vendor networks. The study further explains how networks influence decision making on the trading location through information sharing. For this reason: human traffic congestion and improved infrastructure development are intervening variables as they are the key aspects that influence trade and business along the Nairobi and Thika superhighway.

CHAPTER THREE

3.1 Methodology

Understanding the relationship between networks and vendors trading locations requires a sound research procedure. This study aimed at developing knowledge on how vendors' network influences their choice of trading locations.

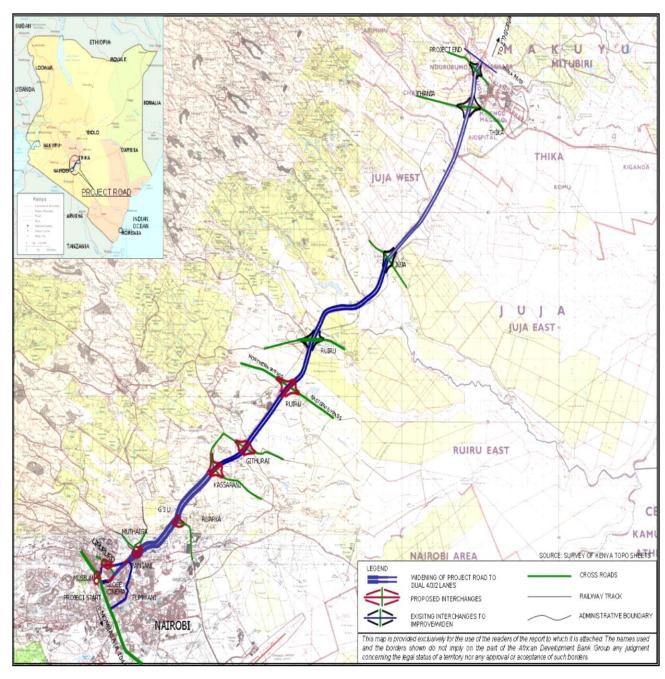
3.2 Research Design

The study used a mixed methods cross-sectional design that combined quantitative and qualitative approaches. Cross-sectional design was used because it allowed collection of data for more than one variable at a single point in time. Quantitative method enabled the researcher to obtain numerical data from the sample whereas qualitative methods helped in getting in-depth information from vendors and key informants about highway vendors' networks and choices of trading location.

3.3 Study Site

This study was conducted along the 42 kilometers Thika superhighway which stretches from Pangani all the way to Thika Town. It has eighteen (18) footbridges, excluding the new ones currently under construction at different locations along the route. Footbridges and underpasses are located at key crossing points to residential areas, including Ngara footbridge, Roysambu, Kahawa Wendani, Kenyatta University, Juja, and Witeithie. It was evident that high human traffic occurs around these footbridges, underpasses and overpasses which provides ideal environment for small businesses.

Figure 2: Map of Interchanges, Overpasses and Underpasses along Nairobi - Thika Superhighway



Source: KARA Report, 2012

Githunguri

Kiambu

Ruiru

Githurai

Figure 3: Map of Nairobi -Thika Superhighway

Source: Google Maps, 2018

3.4 Study Population

Study population were vendors located in strategic areas (footbridges, pedestrian crossing sections, underpasses and overpasses) along Thika super highway. The sampled vendors were those who operate and sell their goods along the forty two kilometer stretch of the superhighway. Due to lack of proper documentation of the population of highway vendors, mapping was done to estimate number of vendors operating at these selected strategic locations on the superhighway.

A mapping exercise was done to identify the various trading locations. In the absence of statistics for vendors trading in various sites along Nairobi to Thika superhighway, estimates of the number of vendors trading at each site ware made with the help of section leaders or the vendors themselves. Trading locations which were identified includes Ngara footbridge, Garden City,

Safari Park, Roysambu, Kahawa Wendani, Kahawa sukari, Ruiru, Kenyatta University, Juja, and Witeithie.

3.4.1 Target Population

The target population were vendors in areas with high human traffic. The target areas included Roysambu, Kahawa Wendani, Kenyatta University, Juja and Witeithie along the highway. These locations were purposively selected because they have the majority of vendors along the highway as shown in the table below. Vendors trade in variety of goods, including those selling single or a combinations of items such as candies, water, cigarettes, vegetables and cereals, new and secondhand clothing, shoes, photographers, khat (miraa), sugarcane, cooked snacks etc.

3.4.2 Sampling Procedure

A sample is a subset of the target population which is selected to participate in the study (Bryman, 2004). The neglect of continuous collection of data on economic activities of vendors has resulted to the lack of accurate estimates of the numbers of traders (Mitullah, 2003). It was difficult to get the exact number of highway vendors at the selected trading locations. This was due to the nature of vendors' activities and daily fluctuation in numbers. Prior to fieldwork, mapping was done at various trading locations including; Ngara footbridge, Garden City, Safari park, Roysambu, Kahawa Wendani, Kahawa Sukari, Kenyatta University, Ruiru, Juja and Witeithie to estimate the population of vendors as shown in table 1 below.

Researcher used cluster sampling procedure to identify trading locations appropriate for the study. Table 1 shows the areas from which clusters were derived from. Gay (1981) cited in Mugenda (1999) that for a descriptive study, ten to thirty percent of the estimated population is considerable enough to be a sample size. In this study, ten percent of the population per trading location was considered to participate in the study.

Table 1: Clustered Areas

Clustered areas	Population of vendors	10% of the population
Ngara footbridge	140	14
Garden City	50	5
Safari Park	10	1
Roysambu	100	10
Kahawa Wendani	80	8
Kahawa Sukari	40	4
Kenyatta University	80	8
Ruiru	100	10
Juja	110	11
Witeithie	90	9
TOTAL	800	80

Key informants were purposively selected from based on the relevance of the study. Key informants were drawn from relevant institutions dealing with highways in Kenya and county government. These included KeNHA, county government and highway vendors' group officials.

The study purposively selected trading locations with high population of vendors. Ten percent of vendors per trading location was calculated to identify the recommended number of vendors to be interviewed. Sampled areas of the study include Ngara footbridge, Roysambu, Kahawa Wendani, Kenyatta University, Juja and Witiethie as shown in Table 2. The respondents were selected through systematic sample. At each of the trading location, the researcher deployed right hand rule where the first vendor on the right hand side was interviewed. A skip pattern of four vendors was used. After the first interview, the researched skipped four vendors and interviewed the fifth and the process continued until the sample per trading location was achieved.

Ngara was included in this study because most of the vehicles from Thika superhighway terminates at this point. This has made it to have higher population of vendors. It was therefore necessary to include it in the sample.

Table 2: Sampled Clusters

Clustered areas	Population of vendors	10% of the population
Ngara footbridge	140	14
Roysambu	100	10
Kahawa Wendani	80	8
Kenyatta University	80	8
Juja	110	11
Witeithie	90	9
TOTAL	600	60

3.4.3 Inclusion and Exclusion Criteria

The study included only vendors aged eighteen years and above and were trading in any of the identified trading locations including: Ngara footbridge, Roysambu, Kahawa Wendani, Kenyatta University, Juja and Witeithie along the highway. The focus was on vendors who are in fixed locations, not mobile vendors who move with their goods from one point to the other searching for customers.

3.5 Data Collection

Semi-structured questionnaire was developed by the researcher to help in gathering both quantitative and qualitative data from vendors. The study adopted mixed method, applied both quantitative and qualitative approaches. Data was collected through face to face interviews of sixty (60) highway vendors. Administered questionnaire comprised of both closed and open ended questions (Appendix 1). The tool was pre-tested at the Globe Cinema roundabout by interviewing four vendors. This was done to ensure validity of the tool, clarity and flow of questions.

During questionnaire administration to the participants, a skip pattern was adopted by the researcher to enhance data quality and to avoid biasness. From each and every selected location, the researcher maintained right hand rule and a skip pattern of five vendors. From the first respondent in each trading location, the researcher counted four vendors on the right hand side and interviews the fifth vendor. The process was carried throughout all the selected trading locations. Qualitative data was obtained from key informants through key informant interview (KII) guide. Key informants were from specific institutions including officials from highway vendors' groups,

KeNHA and county government. Key Informant Interview guide (Appendix 2) was the main qualitative data collection tool. Interviews were recorded through field notes.

3.6 Data Analysis

Quantitative data was entered into the Statistical Package for Social Science (SPSS) version 25, cleaned by removing errors to ensure that the data is correct and consistent. Quantitative data was analyzed in descriptive statistics. The results were presented in summary tables, charts and figures generated from SPSS.

Qualitative data was coded and analyzed using the common themes which emerged from vendors and key informants interviews. Themes which emerged from the respondents were types of goods, sources of goods and raw materials, type networks among vendors and reasons for joining vendors' networks. Analysis and description of the data was done based on the demographic characteristics, types of businesses, reasons for joining vendors networks and types of networks existing among vendors doing businesses on the superhighway.

3.7 Ethical Considerations

Researcher obtained a research permit from the Kenya National Commission for Science, Technology and Innovation (NACOSTI) (Ref: No. NACOSTI/P/19/22749/27550), dated 31st January, 2019 (Appendix 3). Addition to the National Commission for Science, Technology and Innovation permit, clearance letter was obtained from Nairobi County Commissioner and Nairobi County Director of Education as well as an introduction letter from the Institute for Development Studies, University of Nairobi was obtained.

Informed verbal consent was obtained from the selected highway vendors. Highway vendors were informed about the purpose of this study. The participants had the right to reject or to accept to participate in the study. The researcher assured the participants that information given by the vendors to remain private and confidential, and the study only focused on highway vendors with over eighteen years of age.

Table 3: Data Needs Table

Research	Data needed	Sources	Type of	Instruments
Questions			Data	
What are the	• Type of the business	• Specific vendor	Nominal	• Interview guide
characteristics of	• Age of the business	• Specific vendor	• Ratio	• Interview guide
the vendors who	• Gender of the	• Specific vendor	• Nominal	• Interview guide
operate along the	vender	• Specific vendor	• Ratio	• Interview guide
Nairobi to Thika	• Age of the vendor	• Specific vendor	• Nominal	• Interview guide
Super highway?	• Level of education			
How did they	Trading location	• Specific vendor	Nominal	• Interview guide
choose their		• Key informant	Nominal	• Interview guide
current trading				
locations?				
What types of	• Type of networks	• Specific vendor	Nominal	• Interview guide
networks exist	• Who are connected			
among highway	in the network			
vendors?				
What role do they	• Roles of vendors in	• Specific vendor	Nominal	• Interview guide
play in influencing	influencing the	• Key informant	Nominal	
vendor's choice of	choice of trading			
trading sites and	location			
type of businesses?				

CHAPTER FOUR

4.1Research findings and Discussion

Chapter reports the findings of the study which investigates the role of networks and how they influence the choices of trading locations among the vendors on Nairobi-Thika superhighway. Specific objectives of the study include: to examine the characteristics of vendors who operate along Nairobi to Thika Super highway; to examine how they choose their current trading locations; to determine different types of networks among the highway vendors; and to assess the role of networks in influencing vendor's choice of trading sites and type of businesses. Tables and figures have been used to illustrate the findings of the study and the relationship between different variables in regards to the role of networks and vendors' choices of trading location along Nairobi-Thika superhighway.

4.2 Characteristics of Highway vendors

4.2.1 Age distribution of vendors operating along Nairobi to Thika superhighway

This section describes the findings of the first objective of the study which is to examine the characteristics of vendors who operates along Nairobi-Thika superhighway. The common characteristics which were captured include age, gender and level of education of vendors.

Vendors are comprised of different age groups. According to the table below, age distribution among the vendors on Nairobi to Thika superhighway shows that 23.3 percent fall within the age group of 18 years to 24 years old, 21.7 percent of the respondent fall within the age bracket of 30 years to 35 years old, 18.3 percent of the respondents fall within the age bracket of 25 years to 29 years old, 15 percent of the respondents fall within the age bracket of 41 years to 45 years old and 13.3 percent are on the age bracket of 36 years old to 40 years old of age.

Table 4: Respondents Age

	Age								
		Frequency	Percent	Valid Percent	Cumulative Percent				
Valid	18-24	14	23.3	23.3	23.3				
	25-29	11	18.3	18.3	41.7				
	30-35	13	21.7	21.7	63.3				
	36-40	8	13.3	13.3	76.7				
	41-45	9	15.0	15.0	91.7				
	Above 45	5	8.3	8.3	100.0				
	Total	60	100.0	100.0					

Source: Survey Data, 2019

The findings shows that age is a key factor when it comes to highway vending. Majority are young people below the age of 35 years who are still energetic and able to carry their goods from their stores to trading locations and back every day. As observed from the field, highway vendors always experience attack by Kenya National Highway Authority (KeNHA) officials and county government officials who arrest them for occupying unauthorized trading locations. Age plays a critical role because it is only young people who can escape quickly in case of invasion by the named authorities.

4.2.2 Gender

The table below shows 50 percent representation from each gender. Majority of vendors are women but there is considerate number of men (Mitullah, 2003). For the purpose of this study, the researcher opted to involve equal number of men and women vendors to participate in giving the information regarding networks and choice of trading location. This was purposively done to help in capturing the opinions from both gender.

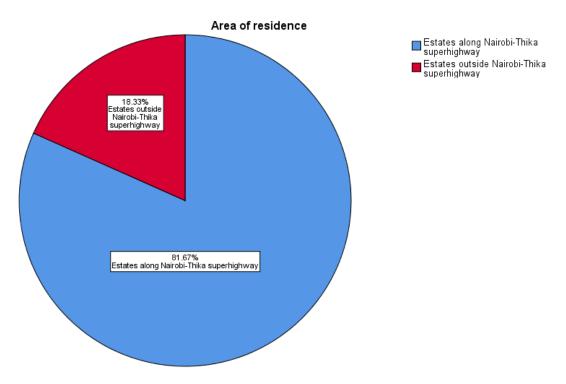
Table 5: Respondent Gender

	Gender							
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	Male	30	50.0	50.0	50.0			
	Female	30	50.0		100.0			
				50.0				
	Total	60	100.0	100.0				

Source: Survey Data, 2019

4.2.3 Area of residence

In the study findings, the distribution of highway vendors by areas of residences reveals that 81.7 percent of the respondents come from estates that border the Nairobi to Thika superhighway and 18.3 percent of the respondent comes from estates that are far away from the highway. Most of the vendors reside at the estates that borders Nairobi to Thika superhighway and close to their trading locations. The main reason that came out is that being that vendors carry their goods back home and come with them the following day, they stay closer to their trading locations to reduce expenditure on transport.



Source: Survey Data, 2019

4.2.4 Level of Education

The education level of the Nairobi to Thika superhighway vendors represents that 61.7 percent completed secondary school, 25 percent had completed primary school, 5 percent of the respondent has post-secondary education as well as the other 5 percent had completed their diplomas, 1.7 percent had completed University College while another 1.7 percent never attended the school.

This confirms that education plays critical role in enhancing an individual's ability to be employed in formal employment which requires technical skills. The larger portion of the vendors who have

not gone beyond post-secondary education decides to venture in vending because it is the only alternative way of earning livelihood. This is also attributed to lack of technical education, requires small financial input which doesn't require technical knowledge of education to manage. Vendors involve into vending businesses because they can't get absorbed into other form of formal employment

Table 6: Respondent Education Level

	*	Level of Education									
		Level of	Education								
		Frequency	Percent	Valid Percent	Cumulative Percent						
Valid	Never attended School	1	1.7	1.7	1.7						
	Primary School	15	25.0	25.0	26.7						
	Secondary School	37	61.7	61.7	88.3						
	Post-secondary training	3	5.0	5.0	93.3						
	Diploma	3	5.0	5.0	98.3						
	University	1	1.7	1.7	100.0						
	Total	60	100.0	100.0							

4.3 Vendors Selection of Trading Location along Nairobi to Thika superhighway

4.3.1 Highway Vending

Finding from data analysis shows that Nairobi to Thika superhighway vending businesses has been continuously increasing since the commissioning of the highway. More residential areas came up along the highway which did not exist before. Hence, from a development perspective, it is important to understand that human settlements will follow infrastructure development. Therefore the need to plan for both and not one ignoring the other.

This was viewed as an opportunity of market development at specific locations which connects residential areas. Means of transport is considered as the biggest infrastructure development, being an important aspect of employment opportunities, accessibility and ease of lifestyles (Craven, Horan & Goulding, 2014). A section of the population migrated to residential areas bordering the highway leading to development of business to serve the population.

4.3.2 Types of Businesses along Thika Super Highway

Vendors normally trade on variety of portable goods and they always change their goods according to the seasonal variation (Kumari, 2006). From the table below, the findings indicates that 46.7 percent sells foodstuffs which includes chips, sausages and boiled eggs. Demand for inexpensive items went high and this was influenced by high population of people which keeps on moving around these trading locations. 23.3 percent were trading on candies, the other 23.3 percent sold clothes, 3.3 percent of the respondents sold books and newspapers and the remaining 3.3 percent were trading on electronic items.

Table 7: Types of Businesses along Thika Super Highway

	Type of business								
	Frequency Percent Valid Percent Cumulative Percent								
Valid	Candies	14	23.3	23.3	23.3				
	Wears (clothes, shoes, socks)	14	23.3	23.3	46.7				
	Foodstuffs(boiled eggs, sausage, fruits, water)	28	46.7	46.7	93.3				
	Books and Newspapers	2	3.3	3.3	96.7				
	Electronic items	2	3.3	3.3	100.0				
	Total	60	100.0	100.0					

Source: Survey Data, 2019

4.3.3 Origin of the Highway Vending Business

Vendors are spread along Nairobi to Thika superhighway even though most of them are concentrated at specific locations. This perhaps depends on whoever started the business. From the chart below, study finding reveals that 86.7 percent of the respondents started the business by themselves, 11.7 percent of the respondents said that the business was started by relatives while 1.67 percent of the respondents said that the business was started by their friends. This shows that a lot of highway vending businesses are operated by owners.

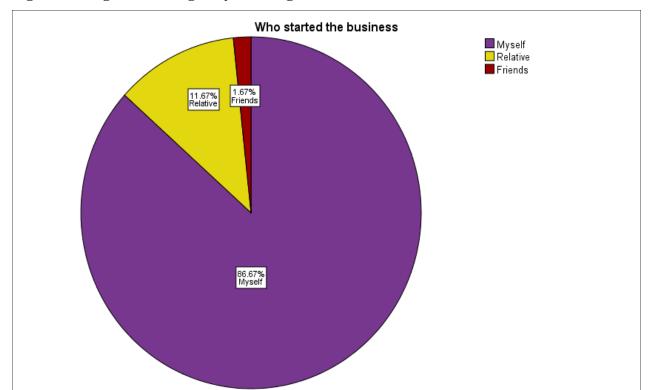


Figure 4: Origin of the Highway Vending Business

4.3.4 Reasons for Engaging in Highway Vending

Vending is like any other economic activity which contributes to the livelihood of the vendors. This has made them to live and meet the needs of their families. Table 7 shows the findings from the field with regards to the reasons why they engage in highway vending. 35 percent of the respondents said that their reason for highway vending is to generate income, 23.3 percent said that vending business requires little capital to start and that's why they find it easy to start it and sustain their livelihood. 18.3 percent of the respondents said that highway vending business is easy to operate since it has no overhead expenditures such as rents, electricity and tax. The main reason for doing vending business is income generation which translates as employment opportunity for many urban dwellers. It also requires little amount of capital to start and operate.

Table 8: Reasons for Vending Business

	Reasons for Engaging in Vending Business					
		Frequency	Percent			
Valid	Income generation	21	35.0			
	It requires low capital to start	14	23.3			
	It is easy to operate	11	18.3			
	Passion	1	1.7			
	It has low level of competition	13	21.7			
	Total	60	100.0			

4.3.5 Trends of Nairobi - Thika Superhighway Vending Businesses

Infrastructural improvement is always accompanied by social and economic development (Craven, Horan & Goulding, 2014). People usually follow development and this results to population increase in various areas that borders the improved infrastructure. In the case of this study people migrated because of business spaces activated by expansion of the major road (Irandu & Malii, 2013). These contributed to development of highway vending started at specific points.

Figure 3 shows the findings on the trends of highway vending before and after expansion Nairobi to Thika superhighway. 65 percent of the said that they started to operate along the highway between the years 2016 to 2019, 20 percent started their business between the year 2011 to 2015, 8.3 percent started to operate along the highway between the year 2006 to 2010, 6.67 percent started to operate along the highway between the year 1996 to 2000.

From the analysis output, it is evident that highway vending increased between the years 2011-2015 after the road was expanded. Population of vendors continues to grow along the highway as shown in the graph below. This could be as a result of business spaces being activated as result of the expansion of the highway. Expansion of Nairobi to Thika superhighway started in January 2009. Field result shows that was a slight increase of the population of vendors before the expansion of the highway. This could be as a result of increased rural to urban migration (Hope, 2012) and lack of employment opportunity. From the onset of the expansion to after its completion, there has been a tremendous increase in the population of vendors along the highway.

Which year did you start vending in this location

40

20

1996-2000 2006-2010 2011-2015 2016-2019

Which year did you start vending in this location

Figure 5: Graph Showing the Trend of Vending along Nairobi – Thika Super Highway

(Source: Survey Data, 2019)

4.3.6 Trading Location before the Construction of Nairobi to Thika Superhighway

Most studies have indicated that small-scale businesses will persist in developing countries. The continuous increase in vendors' population is attributed to rural-urban migration, inter-urban migration and class disparities associated with existing pattern of capital accumulation. Business opportunities arises when there is a gap that exist in the market. This is often the entry point of business people into the market.

The output from the field survey shows that 39.0 percent of the respondents were doing business in markets that border Nairobi to Thika superhighway. These markets include; Mathare, Kahawa Wendani, K.U market, Githurai, Juja, Ruiru and Mwiki. 24.4 percent of the respondents were still at school and 19.5 percent of the respondents were employed in informal sectors like public transport and hotel industry.

Table 9: Table of Previous Occupation before Construction of the Thika Superhighway

	Occupation before the	constructi	on of the	Thika Superhi	ghway
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Doing business in markets	16	26.7	39.0	39.0
	that border Nairobi to				
	Thika superhighway				
	At school	10	16.7	24.4	63.4
	Employed	8	13.3	19.5	82.9
	Unemployed	6	10.0	14.6	97.6
	Doing business outside	1	1.7	2.4	100.0
	Nairobi towns				
	Total	41	68.3	100.0	
Missing	System	19	31.7		
Total	1	60	100.0		

Source: Survey Data, 2019

4.3.7 Average Income of Nairobi - Thika Super Highway Vendors

Highway vendors sampled engaged in different types of businesses from offering goods for example boiling eggs, frying sausages and selling along the highway, some selling shoes, second hand clothes, fruits, fried groundnuts, electronic accessories and some providing services of measuring weight. From the findings of the level of education highway vendors, it was found that the majority of the respondents completed secondary schools and primary schools respectively. Being that these group of people cannot be engaged in formal employment, they see vending as an opportunity to provide livelihood to dependent family members.

Table 10 shows that 21.7 percent of the respondents earn an average monthly income of between Kenya shillings 10001-15000, 20.0 percent of the respondents earns an average monthly income of between Kenya shillings 5001-10000. 15.0 percent of the respondents earns an average monthly income of between Kenya shillings 15001-20000 and 20001-25000, 11.7 percent of the respondents earns an average monthly income of between Kenya shillings 30001-35000, 5.0 percent of the respondents earns average monthly salary above Kenya shilling 35,000 while 3.3

percent of the respondents earns an average salary of between Kenya shillings 25001-30000. This shows that most of the goods that are being sold by highway vendors doesn't fetch a lot of money in the market, most of the goods are being sold at Ksh 5 of Ksh 10 and this is the reason as to why majority of the respondents earns average monthly income of below Ksh 15,000.

Table 10: Table of Average Monthly Income

	Average Income per Month								
		Frequency	Percent	Valid Percent	Cumulative Percent				
Valid	Below 5000	5	8.3	8.3	8.3				
	5001-10000	12	20.0	20.0	28.3				
	10001-15000	13	21.7	21.7	50.0				
	15001-20000	9	15.0	15.0	65.0				
	20001-25000	9	15.0	15.0	80.0				
	25001-30000	2	3.3	3.3	83.3				
	30001-35000	7	11.7	11.7	95.0				
	Above 35000	3	5.0	5.0	100.0				
	Total	60	100.0	100.0					

4.3.8 Sources of Goods/Raw Materials for Superhighway Vendors

Data on the sources of good/raw materials which are being sold by vendors operating along Nairobi to Thika superhighway helps in understanding how far traders need to go to access raw materials and how they minimize on the cost of transportation. From the sample, 93.3 percent get their goods/raw materials in Nairobi and its border towns, 5 percent of the respondents get their goods/raw materials in other towns but within Kenya and 1.7 percent of the respondents get their goods/raw materials in other countries. This shows that most highway vendors sell goods which are readily available/manufactured in Nairobi and its border towns. It is based on the reason that vending requires little capital start and therefore majority of highway vendors get their goods/raw materials within Nairobi. This is mainly because that they minimize on some overhead costs such as transportation and tariffs.

Table 11: Source of Business Goods/Raw Material

	Source of Goods/Raw Materials							
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	Nairobi and its border towns	56	93.3	93.3	93.3			
	Other places within Kenya	3	5.0	5.0	98.3			
	Outside Kenya	1	1.7	1.7	100.0			
	Total	60	100.0	100.0				

(Source: Survey Data, 2019)

4.4 Networks Among Vendors Trading Along Nairobi to Thika Superhighway

4.4.1 Organizations/Groups among Superhighway Vendors

Membership-based groupings help highway vendors in their relationship with authorities, enhance cohesion and peaceful coexistence among themselves and other vendors. Based on the challenges faced by vendors in their places of work, it is only group formation that can help them address such problems. As presented in table 10, 75.0 percent of the respondents agreed that various groups exist among Nairobi to Thika Superhighway vendors. 25.0 percent of the respondents are not aware of any groups among the highway vendors. This shows that majority of highway vendors are in various vendors groups.

The principle motivation that makes vendors to join various groups is to address challenges such as space negotiation, business problems, addressing financial constraints and security issues (Njaya, 2015). Vending business is not legally recognized, this could be the reason why they face harassment from government authorities (Roever& Skinner, 2016). Formation of groups was essential in maintaining livelihood of vendors along Nairobi-Thika superhighway.

Table 12: Presence of Groups among Superhighway Vendors

Groups that Exist among Superhighway Vendors								
Frequency Percent Valid Percent Cumulative Percent								
Valid	Yes	45	75.0	75.0	75.0			
	No	15	25.0	25.0	100.0			
	Total	60	100.0	100.0				

Source: Survey Data, 2019

Table 12 show the result on highway vendors who belong to particular vendors groups that exist along the Nairobi-Thika superhighway. 50.0 percent of the respondents are in highway vendors groups while the other 50.0 percent of the respondents doesn't belong to any highway vendors groups.

Table 13: Members of Superhighway Vendors' Organization/Groups

Membership to an Organization / a Group					
Frequency Percent Valid Percent				Cumulative Percent	
Valid	Yes	30	50.0	50.0	50.0
	No	30	50.0	50.0	100.0
	Total	60	100.0	100.0	

Source: Survey Data, 2019

From the two tables above, it is observable that 75.0 percent of the respondents are aware that highway vendors groups exist but only 50.0 percent of the respondents are mebers of the groups. This show that 25.0 percent of the respondents are yet to join highway vendors groups.

4.4.2 Motivation for Joining Superhighway Vendors Groups/Organizations

Being a member of a group plays motivational role in the sence that self-uncertainity may have the benefit of wide generality to all groups and group contexts. Variety of groups are formed based on ethnicity, ability, religion, profession, employment, political ideology and gender (Hogg, Hohman & Rivera, 2008). In groups, members can coordinate their actions and cooperate to achieve goals that individuals acting alone cannot achieve by themselves.

The Nairobi-Thika superhighway vendors have different motives of joining vendors' groups. Figure 4 shows that 43.3 percent of the respondents were interested to join the group so that they can easily get access to market information, 40.0 percent of the respondent were motivated to join the group so that they can save and get access to business capital and loans, 10.0 percent of the respondents joined the groups so that they can get access welfare benefits in any case of sickness or death of vendor or immediate relative, 6.7 percent of the respondents joined the group so that they can have sense of togetherness, one voice when fighting to occupy trading locations. From the result, it is evident that what motivates vendors to join the groups is to get market information.

Motives for joining vendors' organizations/groups 50 40 Percent 43.33% To get market information 40 00% 20 savings and access to business loan 10 10.00% Welfare benefit 6.67% Sense of togetherness 0 Welfare benefit Sense of togetherness To get market For savings and access information to bušiness Ioan

Figure 6: Motivation for Joining Organizations/Groups

Motives for joining vendors' organizations/groups

(Source: Survey Data, 2019)

4.4.3 Authority Allocating Business Spaces along Nairobi-Thika Superhighway

Business site is important for the success of the business and this depends on the accessibility to customers, vendor to customer relation, price and the quality of the goods. Among highway vendors exist different groups with their officials, vendors who makes their own decisions on the trading spaces, friends/relatives who started the business and owners of the business.

With regards to figure 5 below, 55.3 percent of the respondents said that vendors just identify trading location by themselves, then they consult with the fellow vendors who operates closer to the identified space to start their business in the space. Some vendors also invites their fellow vendors when there is a business gap in their trading location, for example, clothes vendor can invite fruits vendor to his/her trading location when there is no one selling fruits and there are potential customers for fruits in the area. 35.0 percent of the respondents said that their trading locations are identified by friends/relatives who started the business or who did not start the business but they wanted the business to be located at the places of their own interest. 3.3 percent of the respondent said that their trading location were identified by the groups. This is basically the business spaces within the trading locations which had already been identified by the independent vendor.

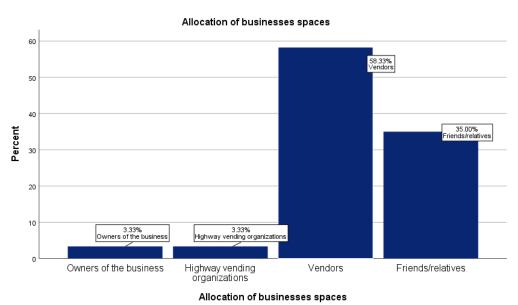


Figure 7: Authority Allocating Business Spaces along the Nairobi – Thika Superhighway

Source: Survey Data, 2019

4.4.4 Procedure for Acquiring Trading Location

In most urban areas, getting business spaces involves a lot of procedures and payments of overheads which are yet to be incurred. Payments involve down payment and at least some months' rent in advance before occupying the premise, this is always accompanied by payment goodwill which always vary depending on the site and the person giving out the space.

Some negotiate with the person who they were willing to set business next to his or her structure and if there is something to be paid, payment is being done once and it is always affordable bearing in mind that their income is always low depending on the types and quantity of goods that are sold.

Study findings from the table 12, indicates 78.3 percent of the respondents had informal consultation with the fellow vendors if they could occupy the existing business spaces in the trading location. This shows that there is no formal procedure to be followed in acquiring a business space. 10.0 percent of the respondent paid some authorities, for example a vendor operating near a learning institution footbridge said she paid some money to the security guard so that she could occupy the business space. 10.0 percent of the respondents consulted fellow vendors operating in identified trading locations to help them in getting business space. 1.7 percent of the respondents were allocated business spaces by chairperson of highway vendors groups that exist in some trading locations along the highway.

Table 14: Procedure for Acquiring Trading Location

	Procedure for Acquiring Trading Location					
Frequency Percent Valid Percent Cumulativ					Cumulative Percent	
Valid	No formal procedure	47	78.3	78.3	78.3	
	Paid some fee	6	10.0	10.0	88.3	
	Directed by chairman	1	1.7	1.7	90.0	
	Consulted a fellow vendor	6	10.0	10.0	100.0	
	Total	60	100.0	100.0		

Source: Survey Data, 2019

4.4.5 Networks that Exist in Superhighway Vending

Networks among vendors portrays set of repetitive transactions based on structural and relation formations that comprises of interconnected elements which include; actors, resources and activities (Todeva, 2006). It is observable that networks facilitates co-alignment of interest in joint activities and continuous exchanges, in which vendors exchange market information, commodities, heterogeneous resources, personal affection, commitment and trust. Networks are in the context of actors' strategic decisions and choices to select interacting counterparts in the market and to engage in repetitive exchange of market/business information.

Within the same context of vendors' networks, it is interpreted as collaborative business communities in the informal sector which help them in getting market information in regards to where they can access the goods, where to sell their goods, business spaces and security in case of invasion by the county council and National highway authority officials. Making friendship is a priority among vendors and it is key in sustaining the businesses. For instance, neighboring vendors help by selling other vendors' goods when they are away or have something agent to attend to. Sometimes friends are able to help their friends financially and even where to get some types of goods even though these friends are the main competitors of each other, friendship among vendors help them in building strong network among themselves. Kinyanjui (2014) states that network among traders enhances sharing of ideas and information which enhances sustainability of the businesses

From the field survey, 78.3 percent of the sample belonged to vendor to vendor networks, 16.7 percent belonged to buyer to vendor network while 5.0 percent belonged to supplier to vendor network. Vendor to vendor network is important in building ties among vendors and promotion small scale businesses. The general information from vendors operating in Nairobi to Thika super highway is that network is a key approach to moderate uncertainty and complexity of their condition.

4.4.6 Trading Location

Trading location is influenced by several factors which include customer availability, business space and security. Sharing of information among highway vendors, facilitated by network among the actors have a greater influence in choices of trading location. Results in the table below shows that 73.3 percent of the respondents agreed that their trading locations were influenced by their networks while 26.7 percent of the respondents said that they identified their trading locations by themselves. This shows that networking among highway vendors is critical in getting trading location along Nairobi to Thika superhighway.

Table 15: Types of Networks that Exist among Superhighway Vendors

	Types of Networks that Exist among Superhighway Vendors				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Vendor to Vendor Network	47	78.3	78.3	78.3
	Supplier to Vendor Network	3	5.0	5.0	83.3
	Buyers to Vendor Network	10	16.7	16.7	100.0
	Total	60	100.0	100.0	

Source: Survey Data, 2019

4.4.7 Trading location

Trading location is influenced by several factors which include customer availability, business space and security. Sharing of information among highway vendors, facilitated by network among the actors have a greater influence in choices of trading location. Results in the table below shows that 73.3 percent of the respondents agreed that their trading locations were influenced by their networks while 26.7 percent of the respondents said that they identified their trading locations by themselves. This shows that network among highway vendors is critical in getting trading location along Nairobi to Thika superhighway.

Table 16: Influence of Network on Trading Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	44	73.3	73.3	73.3
	No	16	26.7	26.7	100.0
	Total	60	100.0	100.0	

Source: Survey Data, 2019

4.5 Role of Network in Influencing Highway vendors' choice of Trading Location and type of Businesses along Nairobi to Thika Superhighway

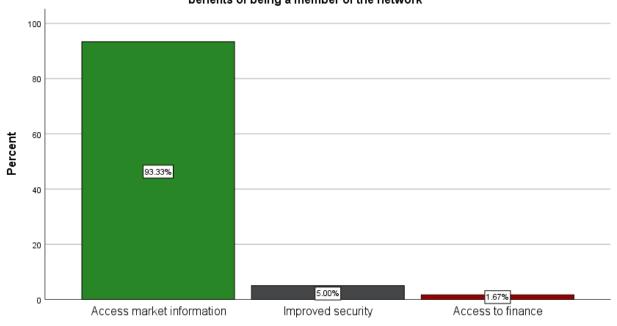
4.5.1 Benefits Derived from the Networks

The main benefit derived from networking is market information which helps vendors to address business challenges. Networks among the highway vendors create mutual benefit and this keeps everyone at par with current market information. The table below shows that 93.3 percent of the respondent said that they benefit by getting market information such as where to get goods, trading spaces, goods that are highly on demand and market prices. 5.0 percent of the respondents said that they get the benefit of security.

Trading along Nairobi to Thika superhighway is illegal and there is always operations done by Kenya national highways authority officials and the county council officials to move them away of their trading places. Vendors always get early alerts through their networks and respond by not spreading their goods for sale. 1.7 percent of the respondents said that they can access business loans through their networks and this allows them to sustain their businesses.

Figure 8: Benefits Accrued by Vendors Operating in a Network

benefits of being a member of the network



benefits of being a member of the network

Source: Survey Data, 2019

CHAPTER FIVE

5.1 Summary, Conclusion and Recommendation

This chapter reviews the main findings and draws conclusion as derived from the study. Further, the study gives recommendation on further research regarding highway vendors.

5.2 Summary and Key Findings

Vendors usually operate as a community. This enhances social cohesion among them and helps to support their businesses. It is agreeable that networks are important in enhancing access to livelihood opportunities among the informal sector workers.

This study focused on the role of networks among Nairobi to Thika super highway vendors and how their networks help them in determining their trading locations. It is evident that some vendors on Nairobi to Thika superhighway resides in the residential areas along the highway. This is to make it easy for them to access the markets and also to reduce on the transport expenditure to their trading places. The income of highway vendors is averagely low and this depends on which types of product they sell and varies from product to product and also in amount of the stock.

The study revealed that highway vendors have businesses which are heterogeneous in terms of stock. Most highway vendors sell different types of assorted goods. This type of diversification increases the probability of vendors to earn livelihoods. It was further found that highway vendors have small amount of stock which they can easily run away with incase they are invaded by the authorities such as KeNHA and the county government officials. The study revealed that the main reasons for engaging in highway vending is to generate income for livelihood.

Vending along Nairobi to Thika super highway increased after the upgrade of the road to dual carriage highway. Improvement in infrastructure is key in attracting population growth which influences the development of businesses (Güney, 2017). Population growth of vendors along the highway is also attributed to by the rural to urban migration in search for employment. Most of the vendors previously conducted business within Nairobi but due to emerging new markets, they moved to the highway.

Goods sold by vendors along Nairobi to Thika superhighway such as clothes, candies, electronic appliances, fruits and household goods, are sourced locally. This provides a valuable service by helping sustain employment in local industries (Bhowmik, 2002).

The study determined that group formation among highway vendors is critical in enhancing their operation and earning daily livelihoods. The study revealed that groups are also a form of security through which market information is relayed to vendors. It also another means through which vendors identify their trading locations along the highway. There is informal leadership structure formed in the groups at various trading locations. Through the group or trading location officials, a vendor is capable of getting a business space.

The study found that vendor to vendor networks are important among vendors in getting their trading locations along the highway. Through these networks, vendors invite their fellow vendors to occupy specific trading location based on the identified existing market gap. This influences some vendors to change the types of goods they sell in order to fit into the market gap at the new trading location. Availability of buyers also influence the choice of trading location for vendors once they identify the market needs in a specific locations. For example a vendor who roasts maize moved to a footbridge near a learning institution to enhance accessibility to students.

5.3 Conclusion

Inequality and lack of enough job opportunities in most parts of the country facilitate the rate of population migration to the cities. Majority of vendors generally possess low skills and lack the level of education required for better paid jobs in the formal sector. For the majority of the urban poor, vending is one of the means of earning livelihood because it requires minimal financial input and low level of skills to operate. This evidently contributed to the start and expansion of vending businesses along busy streets and highways.

The study concluded that the informal groups among the highway vendors is critical in ensuring establishment of businesses at identified trading locations along Nairobi to Thika superhighway. It enhances organization among vendors and development of strategies to help them respond to the challenges they experience. Groups also helps in supporting vendors financially to help them stabilize their business by increasing stock. They help in giving business loans and also give

welfare benefits to members in case of problems such as sickness or when a member is bereaved. This ensures togetherness and help highway vendors work as a family and towards solving their members' problem.

Networks provides a platform of communication among vendors concerning the trading location, where to get goods, market trends and even matters pertaining to security. However before some vendors identify a business space in a trading site, they must get in touch with vendors who currently operate their businesses in the location to help them learn how to acquire a business space. This helps highway vendors to know the procedure to follow when setting up the business and also to understand and adapt to the location.

5.4 Recommendation

Infrastructure development activates business spaces within the vicinity of the infrastructure. Expansion of highways will results in business establishment along these corridors. Hence, planning for these development should include setting aside business operating sites and places. This will provide favorable business environment for vendors to earn their living and at the same time contribute to the economic development of the country. The study also to recommend that highway vendors should strengthen their networks to help them build the sense of togetherness and also to promote each other and their businesses for the determents of their lives. Lastly, there is a need for continuous assessment and data gathering on economic activities along the superhighway

REFERENCES

- Abbot, T., Shah, S. & King, R. (2014). Public transport and the informal sector: Competing visions of Bogotá's future. *Urban Development*. Retrieved May 29, 2018 from http://thecityfix.com/blog/pu blic-transport-informal-sector-competing-visions-bogota-future-thomas-abbot-robin-king-sonal-shah/
- Afolabi, O. J., Oyetubo, O. A., & Oluwaji, O. A. (2018). Implications of highway development and expansion on urban resident in Nigeria: A case study of Abeokuta metropolis. *Nigerian Journal of Technology*, *37*(2), 302-308.
- Africa Centre for People Institutions and Society (2018). Exploring vulnerability among small scale traders in the informal sector in Nairobi, Kenya. Institute for Economic Affairs.
- Alila, P. O., & Mitullah, W. V. (2002). Policies, regulations and organisational capacity of women street vendors in Kenya: Street vendors handbook. *Institute for Development Studies*. Nairobi: University of Nairobi.
- Blisson, D., & Rana, B. K. (2001, June). The role of entrepreneurial networks: The influence of gender and ethnicity in British SMEs, *46th ICSB World Conference*.
- Bouzdine, T., & Bouzdine, T. (2004). The role of social capital within business networks: Analysis of structural and relational arguments. Austria: Bordeaux Business School.
- Brown, A., Lyons, M., & Dankoco, I. (2010). Street traders and the emerging spaces for urban voice and citizenship in African cities. *Urban Studies*, 47(3), 666-683.
- Bryman, A. (2016). Social research methods. New York: Oxford University Press.
- Buurman, J. (2002). Supply Chain Logistics Management. New York: McGraw-Hill.
- Carr, M., & Chen, M. A. (2002). Globalization and the informal economy: How global trade and investment impact on the working poor. Manchester, UK: Women in Informal Employment: Globalizing and Organizing (WIEGO), 1-24. Retrieved on November 10, 2019 from https://www.ilo.org/employment/Whatwedo/Publications/WCMS_122053/lang-en/index.htm
- Cervero, R. (2003). Road expansion, urban growth, and induced travel: A path analysis. *Journal of the American Planning Association*, 69(2), 145-163.
- Chen, M. A. (2012). The informal economy: Definitions, theories and policies. *WIEGO Working Paper* (1). Manchester, UK: Women in Informal Employment: Globalizing and Organizing (WIEGO), 1-22.
- Cisi, M., Devicienti, F. S. M., Manello, A., & Vannoni, D. (2016). The impact of formal networking on the performance of SMEs. *Working Papers Collegio Carlo Alberto* (1). Available at; http://www.carloalberto.org/assets/working-papers/no.490.pdf
- Coleman, J. S. (2000). Social capital in the creation of human capital. In Knowledge and Social Capital: Foundations and Applications. Ed. E. Lesser, 17-41. https://doi.org/10.1016/B978-0-7506-7222-1.50005-2
- Dada, O. M. O. (2013). A sociological investigation of the determinant factors and the effects of child street hawking in Nigeria: Agege, Lagos State under survey. *International Journal of Asian Social Science*, 3(1), 114-137.
- De Klerk, S. (2012). Establishing and developing business networks: The importance of trust. *African Journal of Business Management*, 6(18), 5845-5856.
- Destombes, T. J. (2010). Informal Entrepreneurs: Street Vendors, their Livelihoods and the influence of Social Capital. The case of cut-flower and fruit vendors in Old Downtown Cebu City, 2007 (Master's thesis).

- Dienel, H. L. (2016). Transportation infrastructure integration in East Africa in a historical context. In *Linking Networks: The Formation of Common Standards and Visions for Infrastructure Development* (pp. 133-154). Routledge.
- Dransfield, R. (2004). Business for foundation degrees and higher awards. Oxford: Heinemann.
- Durlauf, S. N., & Fafchamps, M. (2003). Empirical studies of social capital: A critical survey. *Economic Journal 112*. 79-459.
- Fafchamps, M. (2001). The role of business networks in market development in sub-Saharan Africa. *Community and Market in Economic Development*, 1, 186-215.
- Fellows, P. and Hilmi, M. (2012). Selling street and snack food. Rome: FAO.
- Gamieldien, F., & Niekerk, L. (2017). Street vending in South Africa: An entrepreneurial occupation. *South African Journal of Occupational Therapy*, 47(1), 24-29.
- Gibbs, R. J. (2012). Principles of urban retail planning and development. Hoboken, N.J. Wiley.
- Hogg, M. A., Hohman, Z. P., & Rivera, J. E. (2008). Why do people join groups? Three motivational accounts from social psychology. *Social and Personality Psychology Compass*, 2(3), 1269-1280.
- Hope Sr, K. R. (2012). Urbanisation in Kenya. *African Journal of Economic and Sustainable Development*, 1(1), 4-26.
- Irandu, E., & Malii, M. J. (2013). Nairobi-Thika highway improvement project: An environmental assessment. Retrieved November 24, 2019, from http://erepository.uonbi.ac.ke/handle/11295/8107
- Jackson, M. O. (2010). An overview of social networks and economic applications. In *Handbook of Social Economics*, *I*, pp. 511-585. North-Holland.
- K'Akumu, O.A., Gateri, C.W, & Kago, J. (2017). State capacity and inclusive development in Nairobi city: Case studies of the densification of Kileleshwa residential district and Nairobi-Thika highway improvement. Nairobi. PSGR Krishnammal College for Women.
- Karthikeyan, R., & Mangaleswaran, R. (2017). Problems faced by the street vendors in their workplace: A study with special reference to Tiruchirappalli City, Tamil Nadu, India. *International Journal of Recent Research and Applied Studies*, 4(1).
- Katz, N., Lazer, D., Arrow, H., & Contractor, N. (2004). Network theory and small groups. *Journal of Small Group Research*, *35*(3), 307-332; doi.org/10.1177/1046496404264941
- Kinyanjui, M. N. (2014). Women and the informal economy in urban Africa: From the margins to the centre. Zed Books Ltd.
- Kumari, & Pinki. (2017, April 15). Livelihood pattern and working condition of street vendors in Delhi. Retrieved November 24, 2019, from https://dx.doi.org/10.2139/ssrn.2952102
- Lachapelle, P. (2011). The use of social networking in community development. CD Practice, p. 8.
- Lehmann, D. R. (1989). Market research and analysis. Homewood, IL: Irwin.
- Lhotáková, M., & Klosová, A. (2009). Identification of a target consumer in process of positioning-theoretical and practical aspects. *Acta Oeconomica Pragensia*, 2009(3), 3-24.
- Lourenço-Lindell, I. (2002). Walking the tight rope: Informal livelihoods and social networks in a West African city. Stockholm: Almqvist & Wiksell International.
- Lyons, M., & Brown, A. (2009). Legal pluralism and development: Street-trade and regulatory reform in Tanzania. London: *London South Bank University*.
- Martínez, L., Short, J. R., & Estrada, D. (2017). The urban informal economy: Street vendors in Cali, Colombia. *Cities*, 66, 34-43.
- Mazhambe, A.K. (2017). Assessment of the contribution of street vending to the Zimbabwe. *Journal of Business and Management,* (19), 91-100.

- Mitullah, W. V. (2003). Street vending in African cities: A synthesis of empirical findings from Kenya, Cote D'ivoire, Ghana, Zimbabwe, Uganda and South Africa. *Background Paper for the 2005 World Development Report*. Washington DC: World Bank.
- Mugenda, O.M. and Mugenda, A.G. (1999) Research methods: Quantitative and qualitative approaches. Nairobi: Acts Press.
- Muia D., Kamau A., Paul Kamau, Baiya H., Ndung'u J. (2018). "Social capital as a coping mechanism for women small scale traders in the informal economy in Nairobi, Kenya." *Journal of Social Welfare and Human Rights*, 6(1):13-20.
- Mutavi, L. (2017, April 16). Nairobi ranked world's 'second-worst city'. Retrieved on November 15, 2019, from https://www.nation.co.ke/news/Nairobi--is-world-s-second-worst-city-/1056-3892294-1208syiz/index.html
- Mwaniki, D. (2017). Infrastructure development in Nairobi: Widening the path towards a smart city and smart economic development. *Smart Economy in Smart Cities*. Springer, Singapore, 687-711.
- Nirathron, N. (2006). Fighting poverty from the street. A Survey of Street Food Vendors in Bangkok. Thailand: International Labour Organization.
- Njaya, T. (2015). Strategies for daily survival: The role of social capital among street vendors of Harare Metropolitan. *Journal of Humanities and Social Science*, 20(7); 98-105.
- Owusu, A. B., Abrokwah, S., & Frimpong, S. (2013). Analysis of the spatial and temporal dynamics of street hawking: A case study of the Accra Metropolitan area. *Journal of Geography and Geology*, 5(4), 169.
- Panwar, A. M., & Garg, V. (2015). Issues and challenges faced by vendors on urban streets: A case of Sonipat City, India. *International Journal of Engineering Technology, Management, and Applied Sciences*, 3(2), 71-84.
- Rahayu, M. J., Putri, R. A., & Rini, E. F. (2018, February). Sustainable street vendors spatial zoning models in Surakarta. *Earth and Environmental Science*, *123*(1). IOP Publishing.
- Ray, C. N., & Mishra, A. (2011). Vendors and informal sector: A case-study of street vendors of Surat City. *Centre for Urban Equity: An NRC for Ministry of Housing and Urban Poverty Alleviation, Government of India*. Gujarat, India: CEPT University, 1-32.
- Roever, S. (2014). Street vendor sector report: Informal economy monitoring study. Cambridge, MA: WIEGO.
- Roever, S., & Skinner, C. (2016). Street vendors and cities. *Environment and Urbanization Journal*, 28(2), 359-374.
- Saha, D. (2011). Working life of street vendors in Mumbai. *The Indian Journal of Labour Economics*, 54(2), 301-325.
- Sciandra, A. (2011). Social capital and social network sites: An empirical analysis of European high school students. *Italian Journal of Sociology of Education*, *3*(3), 52-68.
- Skinner, C., Reed, S. O., & Harvey, J. (2018). Supporting informal livelihoods in public space. United Kingdom: *WIEGO*.
- Timalsina, K. P. (2011). An urban informal economy: Livelihood opportunity to poor or challenges for urban governance. *Global Journal of Human-Social Science Research*, 11(2).
- Tiwari, G. (2000). Urban transport priorities: meeting the challenge of socio-economic diversity in cities: A case study of Delhi, India. *Cities*, 19(2), 95-103.
- Todeva, E. (2006). Business networks: Strategy and structure. New York: Routledge.
- Tripathi, S. (2017). Relationship between infrastructure and population agglomeration in urban India: An empirical assessment. *ADBI Working Paper Series* (731).

- Ugochukwu, E. F., Okeke, K. N., Onubogu, C. U., & Edokwe, E. S. (2012). Socio-demographic characteristics of child street vendors in Nnewi, Nigeria. *Nigerian Journal of Pediatrics*, 39(4), 174-178.
- Vanek, J., Chen, M. A., Carré, F., Heintz, J., & Hussmanns, R. (2014). Statistics on the informal economy: Definitions, regional estimates and challenges. *Women in Informal Employment: Globalizing and Organizing (WIEGO) Working Paper (Statistics)*, 2.
- Vervest P, Van Heck E, Preiss K, Pau L (2005). Smart business networks. Berlin: Germany, Springer.

APPENDICES

APPENDIX 1: QUESTIONNAIRE

INTRODUCTION

Good morning/afternoon (Habari), my name is Otula Calvince Otieno. I am a student and am conducting this study in fulfillment of my Master Degree in Development Studies at The University of Nairobi. You have been selected to participate in this study because you are a vendor doing business at this location along Nairobi to Thika superhighway. Your information in this study is voluntary and any information provided will remain strictly confidential. If you agree to participate, you will be asked a series of questions regarding networks and choice of trading location along Nairobi to Thika superhighway. The responses to these questions will help me to understand the types of networks among vendors operating along Nairobi to Thika superhighway vendors and how network helps vendors to determine trading locations.

May I start the interview?

A. DEMOGRAPHICAL DATA OF THE RESPONDENT

1.	Name		
2.	Telephone Number		
3.	Age	18-24	[]
		25-29	[]
		30-35	[]
		36-40	[]
		41-45	[]
		Above 45	[]
4.	Gender (observe)	Male	[]
		Female	[]
5.	Highest level of education	None	[]
		Primary school	[]
		Secondary school	[]
		Post-secondary training	[]
		Diploma	[]
		University	[]
6.	Area of Residence		

B. BACKGROUND INFORMATION OF THE BUSINESS

7.	Type of the business		
8.	Age of the business		
9.	Who started this business?		
10.	Why do you engage in vending		
	business?		
11.	When did you start vending in		
	this location?		
12.	How long do you take to travel		
	to this place?		
13.	Were you here before the	YES [] NO []	
	construction of the Highway		
	(footbridge/underpass/Pedestrian		
	crossing?)		
14.	If NO in 12, where were you		
	before the construction of the		
	highway?		
15.	What influenced you to move to		
	the current location?		

C. ABOUT HIGHWAY VENDING

16.	When did you start highway		
	vending?		
17.	What was your previous		
	occupation before you started the		
	vending business?		
18.	Where was your previous		
	location of the business before		
	the expansion of the Nairobi-		
	Thika superhighway?		
19.	Apart from vending, do you have		
	any other source of income?		
20.	What is your average income per	Below Ksh 5,000	[]
	month?	Ksh 5,001 – 10,000	[]
		Ksh 10,001 – 15,000	[]
		Ksh 15,001 – 20,000	[]
		Ksh 20,001 – 25,000	[]
		Ksh 25,001 – 30,000	[]
		Ksh 30,001 - 35,000	[]
		Above Ksh 35,000	[]
21.	What are the source(s) of your		
	goods/raw materials?		

D. ABOUT ORGANIZATION AND NETWORKS AMONG THE HIGHWAY VENDORS

22.	Are there groups that exist				
	among the highway vendors?				
23.	Are you a member of any group?	YES	[]	NO	[]
24.	If YES , When did you join this		Į.		
	group?				
25.	What was the main reason of				
	joining the group?				
26.	How are you benefitting from				
	the group?				
27.	Are there rules and regulations				
	set by the groups on highway				
	vending?				
28.	Who defines the location of	Owners of the bu	isiness		[]
	businesses?	Highway vending	g organi	zations	[]
		Salespersons			[]
		Friends/relatives			[]
29.	Are there goodwill which should	YES	[]	NO	[]
	be paid before securing the				
	location?				
30.	If YES , what is the range?	Below Ksh 5,	000		[]
		Ksh 5,001 - 10,0	000		[]
		Ksh 11,001 - 15,0	000		[]
		Ksh 15,001 - 20,	000		[]
		Ksh 21,001 - 25,	000		[]
		Above Ksh 25,	000		[]
31.	Who are the main customers for				
	your goods?				

32.	What factors did you consider		
	when moving to the current		
	location?		
33.	Have you been moving to other		
	alternative locations along the		
	highway?		
34.	What is the procedure you		
	followed when moving to the		
	current location?		
35.	Which type of networks exist	Vendor to vendor Networks	[]
	among the highway vendors?	Supplier to vendor networks	[]
		Buyers to vendors networks	[]
36.	Which network do you belong		
	to?		

37. Did your network influence your trading location? **YES**[] **NO**[]

38. If **YES** in 35, briefly explain how?

39. State the benefits you derive for being a member of the network

THANK YOU FOR YOUR TIME AND COOPERATION

APPENDIX 2: KEY INFORMANT INTERVIEW

I. GENERAL INFORMATION ABOUT THE KEY INFORMANT

NAME

5.

6.

7.

AG	EE	
PO	SITION (ROLE)	
CO	NTACT INFORMATION	
	II. INTERVIEW GUIDE	FOR THE KEY INFORMANTS
1.	Please tell me about the Nairobi-	Thika superhighway vending?
2.	How has the Nairobi-Thika super	highway transformed the vending business?
3.	How did vending business emerg	ed along the Nairobi-Thika superhighway?
4.	How does the vending groups alo	ng the highway function at different trading locations?

What are the main government interventions?

What is the future of vending business along this highway?

What are the challenges and opportunities of vending along the highway?

THANK YOU FOR YOUR TIME AND COOPERATION

APPENDIX 3: RESEARCH PERMIT



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax:+254-20-318245,318249 Email: dg@nacosti.go.ke Website: www.nacosti.go.ke When replying please quote NACOSTI, Upper Kabete Off Waiyaki Way P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No. NACOSTI/P/19/22749/27550

Date: 31st January, 2019

Calvince Otieno Otula University of Nairobi P.O. Box 30197-00100 **NAIROBI**

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Role of networks and choices of trading locations: A study of Nairobi-Thika Super Highway" I am pleased to inform you that you have been authorized to undertake research in Nairobi County for the period ending 31st January, 2020.

You are advised to report to the County Commissioner and the County Director of Education, Nairobi County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Nairobi County.

The County Director of Education Nairobi County.