

Motorcycle transport in Kenya and its security implications a case of North Imenti  
Meru sub-county  
(2008-2021)

by

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APPROVAL

MOTORCYCLE TRANSPORT IN KENYA AND ITS SECURITY  
IMPLICATIONS: A CASE OF NORTH IMENTI, MERU SUB-COUNTY  
(2008-2021).

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In accordance with Daystar University policies, this thesis is accepted in partial fulfilment of the requirements for the Master of Arts Degree.

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## DECLARATION

MOTORCYCLE TRANSPORT IN KENYA AND ITS SECURITY  
IMPLICATIONS: A CASE OF NORTH IMENTI, MERU SUB-COUNTY  
(2008-2021).

I declare that this thesis is my original work and has not been submitted to any other college or university for academic credit.

Signed: \_\_\_\_\_

Date:

\_\_\_\_\_  
Evans Mwirigi Mugambi  
15-1708

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## LIST OF ACRONYMS AND ABBREVIATIONS

NPS	National police service
NTSA	National transport and safety authority
OCPD	Officer commanding police division
OCS	Officer commanding station

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## ABSTRACT

The aim of this study was to examine the effects public motorcycle transport on security due to alleged unregulation. The objectives of this study were to examine the nature of crime associated with motorcycles use, establish reasons why motorcycles operators do not strive to have their motorcycles registered, and assess initiatives employed by the county government to curb motorcycles related crimes in view of proposing measures for the industries safe operations. This study focused on three wards of the north Imenti sub-county where sample elements were derived. The study was underpinned on securitization and constructivism theory which describes an issue as being a security threat if the population or audience deems it to be so. Where else, constructivism theory puts emphasizes on the world being what we make of it. Descriptive research design was the blue print that was used in the study to systematically describe facts of the population under study which are residents of North Imenti Sub County, consisting of a sample size of 110 derived from a population of 110,000 using random sampling technique. Lastly, data was collected through face to face interviews, focus group discussions and questionnaires which was then analysed and interpreted by use of Statistical Package for Social Sciences commonly referred to as (SPSS). The findings of the study indicate that 94% of the riders operating as commercial transporters had riding license which is good and commendable but way over half accounting for 56% were not genuine riding licenses. Another finding showed that lack of enforcement by the relevant authorities accounting for 54% was quite surprising. The study recommends that relevant body in charge of registration of motorcycles which is the NTSA, to ensure that a re-registration exercise is conducted. Further and extensive study on the implications

motorcycle transport has on security but in a widened scope to capture others regions of the country.

#### DEDICATION

I dedicate this thesis to all lovers of knowledge.

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## CHAPTER ONE

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### Introduction

The transport system in Kenya has mainly been by private enterprise vehicles of different variety including conventional buses, trucks, and minivans commonly referred to as '*matatus*'. While on the other hand, private means of transport include exclusive non-public cars, tri-cycles, peddling bicycles, motorized cycles, while cargo is transported by big trailers (Nantulya, Muli-Musiime, Whitehead, Dahlgren, & Gilson, 2001).

In that same line of thought, private enterprise transport has equally been converted to public transport with the emergence of transport service providers such as Uber, Bolt, Safeboda, and many others that have received their fair share of challenges. According to Howe and Davis (2004), the term 'Motorcycles' which is popularly referred to as (border-to-border) emanated in the Eastern side of Uganda along municipalities that were in close proximity to the Kenyan border which now, developed the term "boda-boda". In essence, it alluded to individuals riding bicycles who carried out the business of smuggling commodities as well as people across one border to another on pedalled bicycles.

In Meru County, motorcycle transport is common and visibly evident by just observation. It is a major source of employment and livelihood for the residents. Meru sub-county being majorly a semi-urban municipal, the road networks are not all well-developed compared to big cities like Nairobi, Kisumu, Mombasa, Nakuru, and others. According to Nyachieo (2012), motorcycles are preferred by many because of the many advantages which include the ability to move around areas with terrible roads and informal settlements which have no planned road networks. Motorcycles

can with utmost flexibility move through areas with heavy traffic, in addition to having good fuel consumption and relatively cheap and affordable servicing costs. Statistics from the Kenya National Bureau of Statistic (2019) and that of the Motorcycle Assemblers Association of Kenya (MAAK) show that there are approximately 1,400,000 registered motorcycles in operation only in Kenya as of the year 2018, with over 600,000 being used for commercial purposes.. This raises the question that indeed there is a possibility that some motorcycles are not documented with the use of the word approximate. The increase is accredited to among others, the 2008 government directive that zero-rated all motorized cycles with an engine capacity of below 250 Cubic Centimetres which as a result had an impact on the prices of motorcycles by the then finance minister Amos Kimunya (Nyachieo, 2012).

The National Police Service (NPS) picked out motorcycles as a ticking time bomb, and an unfolding threat to national security. The National Police Service and the National Transport and Safety Authority (NTSA) acknowledged that with the high volume of unregistered motorcycles offering services could be a contributing element to them being used as run-away after a crime. It is well known, and of great concern that motorcycle operators act with impunity and display a 'siege' mentality as indicated by Olvera, Maïdadi, Plat and Pochet (2012) which simply means that they carry an attitude of hostility based on the belief that others are automatically hostile and against them. On almost a daily basis, the news bulletin covers a case of insecurity associated or directly linked to the public motorcycle transport industry is reported. According to the National Police Service (2018), the 2018 annual crime report saw the Eastern region record numbers reaching 17,000 cases with Meru County leading in terms of crimes reported to police at 5,689 cases with a direct link to motorcycles either being used as the gateway tool or to even perpetrate the crime.

This clearly shows the menace the motorcycles have in causing/contributing to insecurity in Meru County.

This study therefore sought to investigate and understand the implications public motorcycle transport has on security, in addition to accessing existing policies/measures, and coming up with solutions to curbing the motorcycle crisis, leave alone being ranked second to terrorism (Mosoku, 2018).

The security aspect described in this topic entailed all manner of threats and harm that are posed to human beings and that which affects and disrupts their social life as a result of increased motorcycles. According to Data Repository Crime Research Centre (2019) motorcycle insecurity varies from causing death as a result of dangerous riding, breach of public order, creating disturbance through the loud aftermarket mufflers, theft of Motorcycle and motorcycle spare parts, assault, robbery with violence, murder, kidnapping, abduction, defilement, rape, smuggling of goods across borders; burglary and hijackings. This study focused on the North-Imenti a Sub-county in Meru, which has a high number of Motorcycle operators and reported incidents of urban social insecurity directly relating to the motorcycles transport industry.

#### Background to the Study

The provision of public transport globally has mostly, and mainly been controlled by state-owned cooperation's. For instance, the regional East African airlines and buses. According to Olvera et al. (2012, p. 20), government-sponsored transport companies halted most of their operations in the years of 1980s and 1990s because of the effects or lack of good management, lack of a well-organized transport policy, and the impact of the economic reforms on the means of public transportation industry, initially

provided by a program that introduced minibuses. As a result of the not-so-good management of the public transport industry, individual investors sprouted and dominated the industry in most countries ranging from Air travel, taxis, and motorcycles hailing apps. The decline in organized public transport services resulted to a speedy growth in the emergence of taxis, and more recently public motorcycles (Kumar, 2011).

Transport continues to play an important role in economic growth and, the Motorcycle industry was slowly but surely becoming ingrained as a key player of the Kenyan economy and a source of income and livelihood for many Kenyans in that matter. According to the National Crime Research Centre (2018), Motorcycles are a well sought-after means of transport for a majority of rural as well as urban dwellers and have transformed into an unofficial quarter of the transport industry. With this rising popularity, there are indeed disturbing concerns that the industry is getting aligned to crime, road accidents, and all sorts of impunity, with grave consequences for public safety. Manyara (2016) argued that the challenge has been linked to the Motorcycle transport sector operating with minimal regulation, and supervision. Complaints of motorcycle operators and criminals on motorcycles launching attacks on people are common and frequent across Kenya and, motorcycles are with no doubt, steadily evolving into the new face of crime. In addition, to motorcycles accident-related deaths and injuries becoming a major public health concern in Kenya (World Health Organization & Ministry of Public Health and Sanitation, 2011)

On the face of it, it was evident, that the informal, unchecked nature and weak governance framework for the sector was a serious threat to national security as it provided incentives for risk-taking, recklessness, and impunity among operators (National Crime Research Centre, 2008)

This study therefore sought to investigate and understand the implications motorcycle transport has on security, and if they had a role to play in the rising cases of insecurity in Meru county with an aim of analysing the existing policies and establishing possible solutions to curbing the motorcycles crisis.

#### Statement of the Problem

The alleged unregulated nature of the motorcycle transport industry had largely contributed to insecurity within the Sub-county of Meru. There was a pressing need to come up with new, and implementable policies that will give room, and allow motorcycle operators to engage in meaningful and legal economic activities in a regulated and orderly manner, where they can derive an income while at the same time adding to our nation's development and prosperity (National Crime Research Centre, 2008). If the public motorcycle transport industry is to go unchecked, then there is no doubt that it may get to a point where restoring sanity and order for the purposes of curbing insecurity in the industry may be impractical, posing significant risk to the general public and more so constituents of North Imenti, Meru sub-county.

Statistics from the National Police Service (2018) crime report, indicated that the use of motorcycles accounted for the bigger percentage in terms of mode of transportation that was and continue to be used to perpetrate crime. Indeed, motorcycles had a linkage to causing insecurity and little has been done to address the ramifications of insecurity caused by the motorcycle transport industry. According to Kenya National Bureau of statistics (2019) Bodaboda imports rose by 26 % as at September 2019 from 1, 036,000 to 1,400,000 Million bodabodas compared to other means of transport such as cars and public buses and minivans which rose by a mere 12% and 8% respectively.

There is no doubt that motorcycle transport had contributed positively in its own way, be it economy-wise or even accessibility of areas that once seemed unreachable. This is seconded by Nyachieo (2012) who argued that motorcycle operators who are engaged in the business of public transportation are major contributors to the Kenyan economy and equally take up the role of creating employment and livelihoods for many, including the ever-growing population of unemployed youth. According to data from the Motorcycles Assemblers Association of Kenya (MAAK) motorcycles in the business of public transportation have created jobs for the youth, both in rural and urban areas and currently there are over 600,000 motorcycles operated by the youth. According to a report done by the Kenya institute of public policy (2020) titled *Creating an Enabling Environment for Inclusive Growth in Kenya*, reported that the boda boda industry plays a critical role in the economy with an estimated contribution of 350 billion per year with an average earning of 750 Kenya shillings per day per motorcycle. However, on the flip side, motorcycles came with their fair share of challenges.

#### Purpose of the Study

The purpose of this study was to establish and analyse the challenges caused by the use of motorcycle transport and the impact it has on security in Meru sub-county. Commercial motorbike operators are known to capitalize on the easy manoeuvrability which comes with the use of the motorbikes to perpetrate and indulge in all sorts of crimes ranging from mugging to kidnapping either against their passengers or other citizens.

Since the zero-rating of the motorized engines below 25 Cubic Centimetres in the year 2008, prices dropped which saw a spike in the importation and even local assembling

resulting to an increase of motorcycles in the country, and ever since the crime trajectory has been on the rise compared to prior years supported by the annual crime index from the national police service of 2018

#### Objectives of the Study

The main objective of this study was to establish the implications of public motorcycle transport on security in North Imani, Meru sub-county, stressed by the specific objectives below:

1. To examine the nature of crime associated with motorcycles use.
2. To establish reasons why motorcycle operators do not strive to have their motorcycles registered.
3. To access initiatives employed by the County government to curb Motorcycle related crimes in Meru County, in view of proposing measures for the industry's safe operations.

#### Research Questions

The main research question was to find out if motorcycles used for public transportation have an effect on security and to what extent. Specific questions were as follows;

Objectives have been operationalized as

1. What crimes are associated with the use of motorcycle transport within the sub-county of Meru?
2. Why do motorcyclists in the public transport industry not strive to have their motorcycles registered?
3. What existing policies are there, and what can be done to curb motorcycle-related crimes for enhanced public safety?

### Justification for the Study

This study was deemed essential and critical in the discussions, states, people, institutions, and organs of the government are having today on how to make Kenya and the world a more secure place. According to Mosuko and Ombati (2018), motorcycle-related crimes are ranked second from terrorism. This and many other relevant studies need to be done to help inform Key Government institutions in essential sectors such as NTSA, NPS, and other key stakeholders in developing frameworks to regulate and implement policies in the motorcycle industry. As a result, these policies would also help inform and devise strategies to address the rising cases of road carnages involving motorcycles. Additionally, the study is deemed and perceived to be crucial, as it will help in providing important information about the risks of motorcycles as a mode of transport to act as a reference for members of the public in making informed choices regarding their safety as they use this form of transport. Finally, the study would be a key pillar and of importance in contributing to the existing literature to guide policymakers in developing appropriate interventions regarding the changing dynamics of crimes in Kenya. The research will also provide essential information to generate programs, policies, strategies, and best practices to address the safety challenges in the public motorcycle transport sub-sector.

### Significance of the Study

Once this research is complete, it will not only benefit residents of the area of study but the same recommendations can equally be applied and adopted by institutions and organs such as the NTSA and the NPS in areas where Motorcycle transport has been a menace and major cause of Insecurity. The motorcycle riders, the pillion passengers will equally benefit from this research more so those in legitimate business of transport and growing the economy of the nation as their business will not be

interrupted and face numerous accusations of malpractice once they have all been adequately accounted for, closing all loopholes.

#### Assumptions of the study

It was assumed that the respondents would provide accurate information to the best of their knowledge. The study further assumed that the data collected would be enough to inform what the study aims to achieve in addition to it being a true representation of the entire population under study, and that all the required approvals would be granted.

#### Scope of the Study

The study focused on three wards of North Imenti sub-county: Ntakira East, Ntakira West, and Municipality ward. The target population of the study was motorcycle operators who were in the public transport business where there was a high concentration of motorcycle operators and many crime-related incidents arising from the same being documented. The year 2008-2021 is the timeframe under which this study will focus on. This is the period which the government issued a zero rate tax on all motorized engines below 250cc that saw a spike in demand for motorcycles.

#### Limitations and Delimitations of the Study

In the process of undertaking this study, some drawbacks were experienced. Among them was language barrier, especially since one of the areas of study was a municipality where people of different dialects live. To overcome this, the researcher engaged the services of a translator.

Secondly was the challenge of booking appointments with the respondents some of whom are officials such as Police commanders, OCS and the OCPD who were constantly busy. To overcome this, the researcher agreed to meet them at their convenient time and place. For Interviewees who might have been reluctant to

participate, this would be mitigated by creating a good rapport with the respondents beforehand.

Security, most of the motorcycle operators in the public transport industry who were the target group in this research were those that operate from evening to late night when the demand is high as they ferried clients from their workplaces back home, this might have been a challenge with all the security threats that come with nightfall more so when collecting data to myself and/or my research assistant. This was mitigated by seeking the services of a security personnel to accompany us during the said hours for purposes of providing security.

Lastly is postponement or even cancellation of scheduled appointments or interviews, where some officials might have been engaged and became busy which is understandable. This was delimited by preferably scheduling out-of-office hours or even having to work extra time to get the much-needed information.

#### Definition of Terms

*Bodaboda*: In this study, this refers to a motorized bicycle commonly referred to as a Motorcycle. The term was developed from the English word “border” thus “*Boda-Boda*” or border. With its origins emanating from Uganda along near the border with Kenya. The term was used to refer to men on bicycles who smuggled people and goods across the borders. Although the Motorized bicycles initially provided bicycle transportation, the term was later used to include those that offered motorcycle transportation services (Adesanya, 1998). A *Boda-Boda* in this study is a motorcycle but referred and known by many residents of North Imenti as a motorcycles.

**Motorcycle Operator**: This is the person/personnel who operates and rides the motorcycle for purposes of transporting people and goods using a motorcycle. In this

study this are individuals who have either hire or own the motorcycles for purposes of public transport.

*Matatus:* Privately owned vans and minivans offering public transportation services.

*Nyumba Kumi:* This is community policing, an initiative by the Kenyan government to help curb insecurity, where every citizen takes up the task of being vigilant. In this study, *nyumba kumi* is equally employed by the different Sacco's where the area manager receives any intel of a new motorcycle in the neighbourhood.

*Pillion:* An individual who is being ferried or carried by the motorcycle. In this study these are individuals who pay to be ferried by the motorcycle from one point to another.

*Safeboda:* This is a mobile application that links a motorcycle rider to a potential pillion client.

*Security:* Security can best be described as freedom from fear or want, where humans relate and carry out their activities in a secure environment (Buzan, Wæver, Wæver, & De Wilde, 1997). In this study, security refers to the safety and well-being of the residents of north Imenti where they live and conduct their businesses without any threat emanating from the motorcycle's operations.

## Summary

This chapter has given the introduction and the background of the study, Problem statement, the purpose, the rationale and objectives of the study, significance, and the definition of terms as used in the study.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

The chapter assesses the existing literature in this study. It entailed reviewing secondary literature from published books, journals, newspapers, reports, articles, and program reports. This chapter is organized under the following themes: Theoretical framework, general literature, empirical literature, deriving a conceptual framework, and lastly a summary of the chapter. According to Mugenda and Mugenda (2003), a literature review is as a process that involves systemic identification of documents containing any relevant information concerning the subject of interest that is under study in the research problem. A literature review should be extensive in nature so that it can provide detailed information regarding the subject matter under investigation. In addition, Kothari (2004) stated that the primary objective of the literature review is to assist the researcher to get an in-depth of the studies or investigations that have been carried out by other researchers and more so, to help the researcher avoid unnecessary duplication of studies.

#### Theoretical Framework

There is no doubt that research into security or threat of security has extensively and largely been done by many scholars such as Barry Buzan who happens to be the father of securitization theory that will be analysed and used as a focal theory for this study. Buzan et al. (1997) defined security as the ability to avert threat and maintain independence against hostile forces that threaten the freedom and identity of individuals within the society. Security as a term has for a long term existed and as a result, has resulted to modernized definitions. Security can be said to be divided into two, the traditional and non-traditional concept of security which, Jeff Huysmans and

Andrew Dobson (2009) examined the concept of security by exploring some of the approaches in the field of security studies. He contends the field of security studies has been broadened through a shift in focus from the traditional aspects of security to broaden the security agenda by including aspects such as environmental security and human security. However, these approaches fail to diversify the security agenda and its changing dynamics. Of equal importance is to understand that security is a broad subject that entails environmental security which focuses on maintaining the natural surroundings which serve as an essential support system in maintaining and sustaining human life and human activities. On the other hand, societal security entails the sustainability of the society through the provision of ideal conditions which uphold cultural, political, and national identities. Political security is linked with state stability and systems of governance and ideologies that form a legitimate state. Finally, economic security refers to the availability of resources, markets, and finances that provide support to the welfare of the citizens and maintain the state's economic power.

It is with no doubt that security as a term implies the feeling and state of being secure and free from harm. However, security as a term has largely been a contested concept and no one definition can be said to be correct over others and vice versa. Clifford Smith (2012) asserted that the concept of security is not objectively definable and its exact meaning is still disputed. Holtrop and Kretz (2008) defined security as the provision of protection against harmful acts of other people and the loss created through these acts thus affecting the quality of life of individuals (Hessami, 2004). Thus, there is no doubt that like many concepts, which have no agreed or one meaning, security as a concept is context-dependent; its meaning changes following

changes in what people perceive to be a threat or danger. For instance, Baldwin (1997) stated that initially, the concept of security was limited to the security of the individuals. However, after the Second World War, the perception shifted from the security of the individual to the survival of the state mainly threatened by the escalation of intra-state wars directly relating with state centric security and human security. Where state centric security focuses on all threats that pose significant threat to the state to the point where by it has to retaliate by either being defensive meaning it puts up measures to protect its boundaries, or chooses to face the threat head on through offensive nature to protect its territory and neutralize the threat. On the other hand, Human security according to Catia Gregoratti (2018).

The concept of human security represents a departure from orthodox security studies, which focused primarily on the security of the state where else in human security, the subjects are individuals, and its end and primary goal is the protection of people or its citizens from traditional aspects such as the military and non-traditional threats such as hunger and disease.” Human security does not seek to replacing state security, but rather involves complementing and building on it. Additionally, the dynamics of security also changed after the Cold War with a focus on the peace and stability, upholding the rights of individuals and the robustness of the society. As a result, new concepts of security such as human security, homeland security and societal security were introduced.

#### Securitization Theory

The concept of S\securitization referred to as securitization theory was developed by the Copenhagen School of Barry Buzan. According to Buzan et al. (1997), security cannot be discussed without reference to the theory of securitization which forms its

backbone. Cutting across years, scholars have been challenged to reconceptualize security, thus making efforts to try and broaden the definition of security in a way that it encompasses all aspects associated to security, and not only leaning to the limited understanding of state and military security or threats that are militaristic in nature. Copenhagen has made significant strides and contributions to the debate regarding how best security can be defined and viewed as.

The concept of securitization formulated by Buzan et al. (1997), in his work: “Securitization and Desecuritization”, describes that an issue is “securitized” when it becomes a threat. According to Buzan et al. (1997, p. 35), “something is a security problem when the elites declare it to be so, and something becomes securitized when it has been declared a security problem and this problem is accepted by the audience.” This previous statement introduces the concept of speech act which is a component of the securitization theory. Buzan et al. (1997) described it as being central to securitization theory, thus affecting the approach of an issue and escalating the issue above politics. This is what we call a speech act – “by saying the words, something is done, like betting, giving a promise, and even naming a ship” (Buzan et al., 1997, p. 53).

A great example to depict the speech act is for instance, in this particular study when one says that motorcycles have become a death trap, this describes it simply as one, but to portray it as a dangerous industry inhabited by lawlessness and under regulation. So, the words not only describe reality but also entail the reality itself which often triggers certain responses. Fierke (2015) agreed that security is a debatable concept that cannot be solved by referencing empirical evidence because the concept contains clear ideological elements that defy the accepted definition.

Thus, the theory argues that security is a contested issue and its definition cannot be considered universal, but its context and subject depend on what angle/perspective one is defining and analysing it.

The theory of securitization sought to expand and widen the scope of security by questioning the aspect of security when the concept is used in reference to other aspects beyond the state. In essence, security was now not only to be viewed as threats posed to the state from a military perspective but all other threats that prevent individuals i.e. citizens of the state from achieving their full potential. In the securitization theory, a referent object refers to an entity facing a threat and needs to be protected (Mcglinchey, Walters & Scheinflug, 2017). Therefore, securitization theorists determined five sectors including “the economic, the societal, the military, the political, and the environmental sectors” whereby in every sector, a specific threat affects the referent object. For instance, identity is the referent object in identity and in this case the people or residents of Ntakira east, west, and Municipality wards. On the other hand, the ecosystem and endangered species act as the referent objects in the environmental sector while the state is the referent aspect in military security. By ‘sectorising’ or better put as fragmenting security, “we understand that existential threats are not objective but instead relate to the different characteristics of each referent object” (Mcglinchey, et al., 2017, p. 474). In this study, the referent object that is under threat is the society at large from the effects of public motorcycle transport which in itself is a threat.

Securitization theory seeks to pinpoint the object under threat and the threat itself. Securitization shows that it is not incorrect to talk about issues such as terrorism,

increased motorcycles, or unregulated motorcycle transport industry in this case as if they affect all people equally. Buzan et al. (1997) talked about the approach of understanding the referent objects by asking questions such as “security for whom? Security from what? And Security by whom?” Therefore, an issue can be securitized when the audience unanimously agrees on the nature of the threat and supports measures to approach the issue at hand. For instance, “if the audience rejects the securitizing actor’s speech act, it only represents a securitizing move and the securitization of it has failed. In this respect, the focus on the audience and the process requires considerably more than simply ‘saying security’” (Wæver, Kelstrup & Williams, 2000, p. 152).

Under securitization theory, to say that an issue has not or has been politicized is to simply say, that the public is well aware of the issue at hand and is discussing and debating on how it should be addressed. In this study one of the objectives is to find out what policies have been put in place to help regulate the motorcycle industry and indeed in reference to this theory, the issue has not once but severally been debated by the public on how to best regulate the motorcycles but ends up being politicized. Securitization theory argues that the media think tanks, academia, and Non-governmental organizations are essential as they shape the discussions about the existential nature of an issue that could be a threat, hence leading to its adoption and securitization. For instance, numerous reports by the local media and even the police report National Police Service (2018) have helped to bring the discussions to the table on matters that need a different approach in this case the much-needed regulation of the motorcycle transport industry.

This is the case in Kenya, Motorcycle transport has been securitized in the sense that people and institutions have started, and are having conversations about the challenges and threats posed by the increase of motorcycles used for public transportation, to the extent that before one boards a motorcycle they are keen to observe the behaviour and most often will prefer a trusted rider/operator out of concern for their security. Securitization theory helps this research focus on motorcycle transport from a securitized perspective, not disregarding all other aspects of the transport industry but questioning them from a point and intent of fears and threats posed.

#### Constructivism Theory

Constructivism theory can best be described as ‘A world of our making’ according to (Onuf, 2012). Hence the social world is what we make of it, the policies made, laws, and regulations are what will make the world what it is today. This theory helps analyse this study on why is it that motorcycle transport is not effectively regulated causing a threat to security despite it being ranked second to terrorism Mosoku (2018) and a, big industry and player in the economy. Alexander (1995) offered an ideal explanation of how reality is constructed based on the example that the United States would perceive 500 British nuclear weapons as less threatening compared to five North Korean nuclear weapons. Therefore, the identification and the perception of threat, in this case, is not caused by the nuclear weapons (*the material structure*) but rather by the meaning assigned to the material structure. In the example of United States, Britain and North Korea, the United States the social relationship is perceived differently and this determines how the states relate with each other. This means that nuclear weapons have no threat unless they are understood in a social context. It is in this same line of thought that this study seeks to bring to light that the motorcycles

themselves as simply a two-wheeled bicycle with a motorized engine have no problem, but how they are regulated in terms of how they operate is the issue of concern. The motorcycles can increase, but only in a regulated manner meaning oversight, establishment of new policies and laws to guide how they operate, etc. to ensure security and sanity is restored.

This theory well illustrated the 'siege mentality' earlier elaborated by Olvera, Plat, Pochet, & Maïdadi (2012) which is held by many *boda boda* operators who often have the notion that motorists are against them thus carrying a negative attitude of arrogance and aggression towards them. This is not the case when dealing with their fellow *boda boda* operators. Returning to Wendt's example discussed above, "this means that the social relation of enmity between the United States and North Korea represents the intersubjective structure (that is, the shared ideas and beliefs among both states), whereas the United States and North Korea are the actors who can change or reinforce the existing structure or social relationship of enmity." Therefore, this reinforcement depends on the ideas and beliefs created by both states. If there is a change in the ideas and beliefs then the social relationship can be reconstructed and changed, to one of friendship.

On the other hand, despite the motorcycles operators having a certain mind-set towards other road users, it is subject to who they interact with, in this case, it can be argued that they feel bitter towards people with what can be said to have the high-end vehicles or simply driving as they blame them for their current situation, on the other hand, they might be slightly friendly to people who drive less expensive cars, supported largely by the statement where they say "*sasa umenigonga sababu uko na gari kubwa*" translating to mean you have hit me because you have a big/expensive

car insinuating that other motorists look down on them as lesser beings. Individual identities and interests also form a central issue in the constructivism perspective. In this case, multiple state identities can be created from interactions with other actors. Therefore, “identities are representations of an actor’s understanding of who they are, which in turn signals their interests” ( Mcglinchey et al., 2017).

This theory helped inform this study about the social and collective meaning, understanding, and perception that has been assigned to the motorcycle transport industry. For instance, money is just a piece of paper with ink, but what gives it the value to be exchanged for goods and services? This theory helped inform what collective meaning and perceptions people have on motorcycles that makes them highly valued, convenient, and even high targets for theft. Having an understanding of the socially constructed collective meaning of the motorcycle transport industry is crucial to the study.

## General Literature Review

### Introduction

This section captured general literature review under schemes such as nature of crimes associated with the use of motorcycle, modes of transport in Africa, efforts in trying to regulate and register the motorcycles in the public transport industry, initiatives employed to curb motorcycle related crimes from a global perspective narrowing down to the regional view.

### Global View

Motorcycle as a means of transportation is one that has been adopted globally, from the developing countries to those that are developed. This is largely because of their relatively low cost in maintenance and fuel consumption as compared to all other

existing modern means of transportation. According to the National highway traffic safety administration, (2007) report, it was estimated that the US alone had about four million registered motorcycles whereby a majority of them have been registered for personal use or recreational purposes and with a registration success of about 85%, meaning that out of every 10 motorcycles 8 are well registered and documented by the authorities. In the same line of thought, in China Zhang, Norton, and Tang, (2004) described motorcycle ownership in China as having grown exponentially between 1987 and 2001, where it increased from 23% to 63% with a similar increase in the number of fatalities related to motorcycle accidents.

Paying attention to developing countries, they have seen a surge in numbers of motorcycles, according to Peden et al. (2004). This is justified by the fact that due to the rising levels of unemployment. The youths have been pushed towards this ready form of employment which is riding the boda bodas as they are readily available and a ready form of employment, that has close to minimal prerequisite requirements. This trend is argued to have started back in the 90s when big industrial countries like China and other Asian countries started manufacturing medium-cost motorcycles for the general public. Starkey (2016) observed that nearly thirty years ago, motorcycles that roamed the streets were very expensive and mainly owned by the elites for their self-leisure ride and by the police for administrative duties. Chambers (1983) argued that a motorcycle is an efficient form of transport that provides economic and social benefits to all parties involved as a result of the multipliers effect which includes but is not limited to employment, especially for youth. On the contrary, every coin has two sides, and this study aims to flip the coin and show the colours of the other side which

are the security effects or shortcomings that are as a result of the use of motorcycles for public transportation.

This study, therefore, aimed to showcase that it is imperative to note that any transport system is crucial to the social well-being of a community and not only the economic value. As is currently in Kenya where so long as a business venture or enterprise is making a profit or is viable, all other factors mainly negative directly relating from it are intentionally ignored or dismissed.

#### Regional View

Regionally Kenya can be assumed to have more motorcycles compared to any other country in the region, since private vehicle ownership is low resulting in a very high dependency on public means of transportation. In a country where the majority earn and live from hand to mouth creates a huge gap for the reliance on public transportation which at many times is relatively cheaper. Initially from the years just after independence to the early 2000s the public transport system was very efficient and organized, but due to the mismanagement and performance of government systems and policies, the public transport industry ended up in chaos due to minimal regulation, as a result of the situation citizens found themselves in need of alternative forms of transportation. It was crucial for the market to develop alternative solutions to help address the daily and frequent travel demand, which metamorphosed to the huge demand and uptake of motorcycle consumption either for public transport or private mobility which has today seen the increase of motorcycles.

In addition to the earlier mentioned zero-rating of motorized engines below 250cc (Nyachio, 2012). Going by the statistics from the KNBS, Kenya is said to have an

estimated 1.35 Million registered motorcycles. This study pays attention to the word estimate which scientifically and by the oxford dictionary definition of estimate means by approximate calculation. The use of the word approximate is ambiguous and misleading, thus it cannot conclusively be said that is the exact number of motorcycles in the country, giving room and a gap that indeed there is a gap in the control and management of motorcycles. The argument here is, you cannot budget accurately for your household domestic consumption if you have no idea how many people reside in that particular house.

A study conducted by Bishop and Amos (2015) showed the increase of motorcycles in Tanzania from the year 2003 where motorcycles in Tanzania were less than 100,000 and in a span of a decade the motorcycles increased upwards of 800,000 plus around the year 2014.

This is the case in Kenya, as predicted by Nyachieo (2012) Kenya would see a surge and significant increase in the number of motorcycles from the year 2008 onwards. This stresses the need to have the industry not only regulated but also the need to formulate new policies that will see the industry play by the rules for the betterment of the society at large, where individuals will enjoy a more secure environment.

## Empirical Literature Review

### Introduction

This section of empirical literature review will operationalize the objectives and research questions informed by the literature.

### Nature of crimes associated with motorcycle use

Solomon (2018) stated that commercial motorcycle users capitalize on the ease of navigation on motorcycles to engage in crime through armed robberies, kidnapping incidents, rape, smuggling drugs, and weapons, snatching and mugging, and stealing valuables from their passengers. Thus, many pose or operate under the disguise of genuine riders who are in the industry to offer public transportation services. This statement by Solomon collaborates with that of Ukwai, Agba and Michael (2013) that motorcycle riders are a law unto themselves. In other words, they operate with little regard to the rule of law.

He argues that criminals have also infiltrated the motorcycles transport sub-sector and use it to commit both petty and major criminal activities. Rogue motorcycle riders have also been linked with extreme violence by killing 'suspected' criminals, some of whom could actually be innocent. Some riders have also taken the law into their hands in addressing accidents related to a motorcycle rider and some vehicles have been set ablaze on the accident scene. Some of the motorcycle riders thrive on lawlessness and some have turned into vigilantes by lynching people 'suspected' to be criminals. The operators also disregard the traffic rules including traffic lights and zebra crossings. They are also inconsiderate of the other road users' right of way and they ride on pedestrian pavements and footpaths. As reported by Abich (2010) the Standard newspaper, captured an image in the form of a shell of a burnt bus that was set ablaze by motorcycle riders in Homabay county when their fellow rider got into an accident with the bus ferrying passengers from Nairobi. The motorcyclist commonly referred to as boda boda riders without concern or care set ablaze the entire bus into ashes.

In spite of the numerous benefits associated with the use of motorcycles in public transport, the industry has been linked with a surge in motorcycle related-crimes and accidents in the country (Manyara, 2013). A study on 'Motorcycles Economy' by Omolo (2015) noted the upward trajectory in crime trends encompassing motorcycles in Kenya This is supported by the report from National Police Service, (2018) which stated that Motorcycle operators in the public transport industry are also mobilized during campaigns to act as perpetrators in political violence in addition to the siege mentality has seen a rise in situations where motorists involved in accidents with Motorcyclists flee accident scenes, for fear of being lynched or having their vehicles torched as is evident with the passenger bus that was set ablaze enrooted from Nairobi.

To help understand the implications motorcycles used for public transport have on security is a study by Nantulya et al. (2001) who observed that, similar to the matatu culture that was, as a result of lack of labour protection and adherence to the set regulations the situation is similar within the motorcycles community. The system provides a powerful incentive against reckless driving, over speeding, overloading, and even engagement in unlawful activities that has contributed immensely to what is seen of the Motorcycle transport industry today, an unregulated informal industry. Nantuyla cast no doubt that whereas, majority of Motorcycle operators are legitimate and conduct their trade without engaging in crime, the sub-sector has been infiltrated by criminal gangs hiding under the umbrella of public transportation business. National crime research center (2018) conducted a study and established among other reasons for the involvement of public transport motorcyclists in crime were unemployment and idleness, poverty, drug and substance abuse, the absence of regulatory policies in the motorcycles sub-sector, and greed for money. Other factors

include, weak law enforcement by police officers, illiteracy levels, peer pressure, the ease of access to firearms and the high cost of living which forces the individuals to engage in criminal activities.

Equally, theft of motorcycles and motorcycle spare parts contributes to unsafe public motorcycle transport. Ojedokun and Ogundipe (2017) observed that theft of motorcycles is rampant which impacts the social, physical, and economic aspects of those that depend and rely on the mode of transportation. The injuries caused during the occurrence of a motorcycle theft are at times very severe and even lead or cause death, thus compromising the safety of this means of transport. On the other hand, those that don't put a fight when the robbery is being perpetrated end up being rendered jobless due to loss of their source of livelihood.

Bishop and Amos (2015) noted that criminals using motorcycles are an evolving threat to not only security but national security, terming them a time bomb since they have revolutionized what constitutes of national security. A study conducted by Nyaga, (2017) on the impact of motorcycle taxi transport noted that Kenya is faced with insecurity challenges that involved armed robbers who pose as motorcycle riders but later harm or rob their passengers. Therefore, the security agencies find it difficult to distinguish between the legitimate motorcycle operators and the criminals who now dominate the industry. Gangs on motorcycles also conduct robberies on Mpesa shops, in estates and malls with motorbikes acting as convenient gateways from the crime. Major challenges not only for the law enforcement agencies but also to the general public and road users. Ojedokun and Ogundipe (2017) noted that some of the factors that contribute to theft of motorcycles include the use of unregistered motorcycles,

inadequate parking spaces or planning causing operators to park their motorbikes in unsecured and poor lit areas negligence, ineffective policing and transporting passengers at wee hours of the night.

Lastly, as a result of the existence of many motorcycles due to the high demand, it results in overzealous competition with predatory behaviour where it becomes a competition over who gets what client and for how much. This over-competition for a limited number of customers or pillion passengers creates a demand for the motorcycles making them targeted assets for robbery.

It was evident from past studies and recorded incidents, that motorcycles operators and more so, those engaged in the public transportation industry are linked to almost all crimes that are perpetrated, either as get way mode of transport, smuggling of weapons such as guns, hooliganism, etc. It is crucial to cut the link between and ensure that motorcycles are purely used for one purpose alone which is offering alternative legitimate public transport.

#### Extent of Motorcycle Registration

Motorcycle transport is not just an invention of the modern-day century, but its use can be traced back to when it was first developed, by one Sylvester Howard Roper among others back in the 19<sup>th</sup> century in Europe (Georgano, 2002). Its dependability, manoeuvrability, and reliability made it a mode of choice for American and European armies during World War I and II. Since then, the use of motorcycles for transportation has increased and continues to increase. According to a study done by Weiss, Dekker, Moro, Scholz, and Patel (2015) on the performance of the two-wheelers, they noted that by 2007, there were about 500 million motorcycles worldwide and the number was expected to double by the year 2020. In addition to a recent study by the World Health Organization and Ministry of Public Health and

Sanitation, (2011) on pollution estimated that motorcycles registered worldwide as of the year 2011, were 455, 490,566 Million accounting for 30% of all known and registered motor vehicles worldwide.

A study conducted by Nyachio (2012) indicated that the increased motorcycle ownership and use can be linked to the high unemployment rates among the youths. It can also be attributed to the inefficient transport system in Kenya whereby motorcycles are preferred as a fast and convenient form of transport. Besides, in 2008, Kenya introduced a zero-rating policy for motorized engines below 250cc which led to a decrease in the costs of motorcycles and an increase in their importation. Guillen & Ishida (2004) stated that the increased motorcycle use for transport has particularly affected the urban transport planners in developing countries. While motorcycles are considered an alternative mode of transportation providing both efficiency and reliability, some of the issues raised against motorcycle use include unregistered motorcycles, traffic congestion and the safety related to the use of motorcycles. This can truly be attested by the booming business of the motorcycle transport industry that has recently even seen a creation of mobile applications that help in hailing motorcycles. Examples are Safeboda, and Uber ride. Thus, many Kenyans consider joining the business either as owners or even hire the motorcycles and since very little incentive either technical or otherwise is required to join the industry. Kumar (2011) shared similar thoughts on the logic behind the rising number of motorcycles in the public transportation business and he attributes it to the decline in state provision of alternative modes of public transport which led to the increase in the use of non-conventional means of public transportation such as the two and three-wheeled motorcycles. As a result of the weak enforcement of laws and poor policy frameworks governing the motorcycle industry aspects such as registration are not fully adhered

to, which has seen a big number of motorcycles in the country unregistered and untraceable

According to the standard newspaper as reported by Nyamori (2020) the president launched an investment scheme/Sacco that targeted 1.4million riders in the public transportation industry across Kenya, to help them save and invest their earnings. The scheme was launched after an agreement was signed between the *BodaBoda* Association of Kenya (BAK) and other financial institutions. To illustrate how big the industry is the president said “the motorcycles community carries approximately 22 million people a day, that means close to a half of the people use this means of transport,” in addition, “1.4 million registered riders in the country collect an average of Sh980 million daily, which amounts to Sh6.8 billion in a week” (Standard, 2020, pp. 23-24). A clear illustration of how important of a player the motorcycle transport industry is to the economy which could to some extent help answer the question of why the industry is left unchecked and the need to have it effectively regulated and operate by the rules of the book.

In the same line of thought, a report by the National crime research center, (2018) indicted other factors that resulted in the increase of motorcycles in public transport were “availability of financing institutions for motorcycles at (3.4%); low maintenance cost at (2.1%); peer influence (0.9%); lackluster enforcement of laws governing the acquisition of motorcycles (0.4%) and the capability of motorcycles to be used in all seasons throughout the year/all-weather (0.3%) among others.

Lastly by nature and way of nature human population is on the rise, cities and urban centres are becoming congested by the day, this is evident by the increase in traffic

pile-up in major cities such as Nairobi and other towns. Until recently Meru is equally a culprit of traffic snarl-ups. As projected by UNDESA (2019) United Nations department of economic and social affairs, the urban population will increase to nearly 66% by the year 2050, with 90% of the growth being witnessed in Asia and Africa. The challenge here being that with the increase in population, coupled with the planning failures of the transport network in Kenya and weak motorcycles registration frameworks, this will definitely contribute to a greater surge and uptake of motorcycles as the main medium of transportation causing a proportional threat to security

In conclusion, from studies conducted and figures projected, motorcycle transport remains to be one of the modes of transport with hope for the future. This comes with the low costs involved, which translates to an increase in the manufacturing of more motorcycles. There is a need to develop best policies that will help with regulation and registration, thus ensuring safety, and bringing sanity to operators engaged in the public transportation industry.

#### Existing Measures

In relation to establishing what measures have been put in place and implemented to help curb motorcycles related crimes, a study conducted by Mulwa, Chepchieng, and Kyalo (2012) established that in terms of the execution of Motorcycle related crimes, the study indicated that a high percentage of riders hired casually or based on commissions committed crimes related to the motorcycles; however, the riders who owned the motorcycles had a lower incidence of crime. In this case, it is evident that most of those who hire the motorbikes are the ones involved in crime, and the owners may even willingly hire them out knowing they will be used for criminal activities

and because of the little or absent regulation/policing it can hardly be traced back to them by the security personnel who are equally corrupt. The study ranked regulation by Motorcycles Sacco's/Associations which is in existence only that it may be failing in implementation, as the most effective in addressing motorcycles related crimes, followed by erecting police roadblocks which are meant to check compliance by the riders, then community policing/ or the Nyumba Kumi Initiative where members of the community are aware and know the owners of *bodabodas* in their respective areas and raise a concern or take note of any new *bodaboda* in the community among others.

In Kenya, there are almost adequate laws that define and clearly spell out how the motorcycle industry should operate to ensure effective regulation and safety of its users in addition to institutions charged with the responsibility of implementing and enforcing the laid down laws. Some of the policies and legislation laws include the 2010 constitution of Kenya, Integrated National Transport policy of 2009, NTSA regulation on the operation of motorcycles 2014, Traffic Act of 2009, Curriculum for training, testing and licensing drivers of 2014, and Road design and construction manuals that provide design specifications and procedures among many others.

There was a need to revamp some of the existing policies, and even develop new ones in order to strengthen institutions charged with ensuring public safety and providing oversight to operators engaged in the business of public transportation. There is no doubt that not enough extensive research has been carried out into how best motorcycles can best be regulated to help reduce or manage related crimes arising from their use.

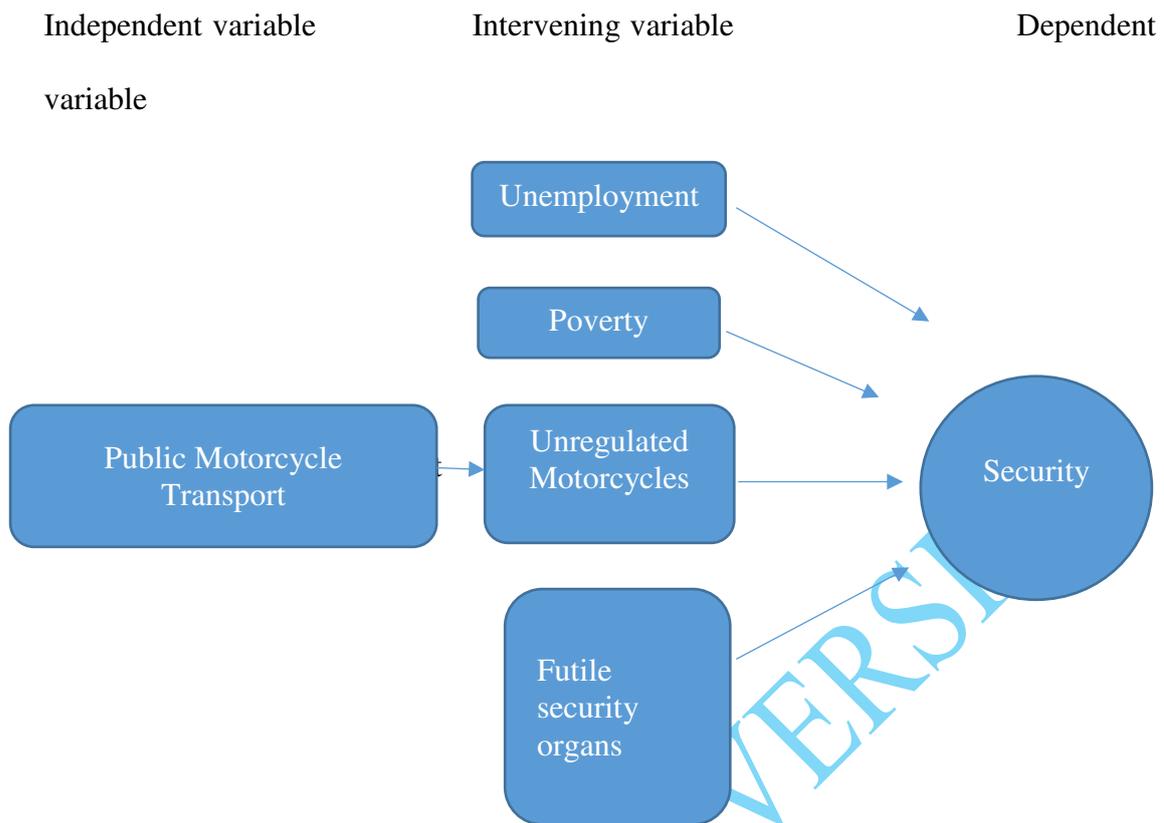
### Conceptual Framework

Denzin (2017) defined a conceptual framework as a tool or illustration that helps to understand the place of and inform the direction of a research project. Simply put Miles and Huberman (1994) explains a conceptual framework as a visual illustration of the essential aspects of a study, the variables, and the relationship between them.

In this study, the conceptual framework below linked the variables, i.e. the independent, dependent, and intervening variables, and showed how they relate.

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*Figure 2.1: Conceptual Framework*  
Source: Author (2021)

### Discussion

The above framework is an illustration of how the variables in this study interact and co-relate. Security in this study being the dependent variable, is greatly dependent on the use of motorcycles for public transport which is the independent variable. With the use of motorcycles for public transportation in North Imenti, Meru sub-county there are many risks posed such as crime perpetration which have an implication or effect on security. While the intervening variable are factors that influence and fuel the increased use of motorcycles for transportation while also having an impact on the dependant variable security.

### Summary

This chapter has reviewed information on the motorcycle transport system from a global perspective and narrowed it down to Kenya and even further to the area of

study. It began with a brief overview of motorcycle transport then picked out the impact and challenges it has had and continues to have on security interlinking it with previous studies that have been conducted. This chapter expounded on two theoretical frameworks that would be utilized in the study and their application in relation to the various concepts captured in the study. The empirical literature of the study has also been discussed in the chapter. Additionally, this chapter also presented the conceptual framework of the study and further, established a knowledge gap in the available literature.

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## CHAPTER THREE

### RESEARCH METHODOLOGY

#### Introduction

Research methodology is a stage in research that involves or illustrates the steps and procedures that are used in collection, assembling, and evaluation of data. Kothari (2004) defined research methodology as a systemic process of solving a research problem. This chapter of the study will look at step by step process of how data will be collected and evaluated to make this research credible and factual. Some of the stages that are keenly elaborated in this chapter include the research design, population, target population, sample size, technique to be employed in sampling, data collection tools and procedures, a pilot study, data analysis plan, ethical considerations, and lastly a summary of the chapter.

#### Research Design

A research design refers to a framework that has been formulated to help find answers to the research questions posed. In addition, according to Zikmund (2010), a research design includes the procedures as well as the procedural framework necessary for obtaining the data and information needed to structure and solve a research problem.

This study used descriptive research design as its blue print in trying to answer the research questions of the case under study. Dulock (1993) defined descriptive research as an attempt to systematically describe facts and characteristics of a given population or area of interest, or to provide an accurate portrayal or account of characteristics of a particular individual or situation as a means of discovering new meaning or describing and determining the frequency with which something occurs. Descriptive being the plan that guided this research. Utilized under both qualitative

and quantitative research methods. Quantitative is the use of data and statistics. Kothari (2004) defined quantitative data as the type of data that can be measured by assigning numbers which are then evaluated numerically by assigning unique values to each set of data. Walliman (2018)'s definition collaborated with that of Kothari as he defined quantitative data analysis as the interpretation of numerical data using mathematical formulas to investigate their properties. The data obtained can be measured in three ways; using ratios, intervals, and in the ordinal form. He further went ahead to explain that quantitative data serves purposes such as to measure, compare, examine relationships and make predictions, and test hypotheses, which also helps in the construction of theories, exploration, and in providing explanations. This study gathered quantitative data in the form of close ended questions which will be presented in the form of bars & pie charts.

On the other hand, qualitative data best describes qualities or characteristics that are mainly gathered either through interviews, questionnaires, or even observation, which mostly appears in the form of narration according to (Treiman, 2018). Additionally, qualitative data is research that is based on data expressed mostly in the form of words that describe feelings, opinions and give accounts on the events rather than numbers (Walliman, 2018). In the same line of thought, this study relied on secondary data achieved through desk research which was retrieved from books, published academic journals, newspapers, and reports to complement the primary source of data acquired from the sample element respondents who are residents of North Imenti, Meru sub-County.

## Population

The population under study were the *bodaboda* riders of North Imenti a sub-county in Meru County. A National Police Service (2018) crime report indicated that Meru county has a high number of criminal activities with 5,682 cases reported to the police as of the year 2018.” The choice for this location was thus influenced by the fact that Meru has had and continues to have a prevalence in criminal activities that is directly related to stem from the use of *bodaboda* motorcycles in the public transportation industry. A publication by Securex agencies limited a security solution provider titled the *Bodaboda* Industry: Boon or Bane? (“*Bodaboda* Thugs | Securex Agencies Ltd,” n.d.) Noted that as per their database, “5% of the overall crime noted countrywide in the past six months involved the use of motorcycles or *bodaboda* operators themselves.” The publication further claims that the rate of crime increased in November 2017, when 8% of the crime reported outside Nairobi involved and were as a result of the increase and use of *bodabodas*.

## Target Population

The study was conducted in three wards of North Imenti constituency. North Imenti is an administrative constituency constitutive of five wards. This study, therefore, targeted *bodaboda* riders/operators from the Municipality ward, Ntima east, and Ntima west wards, since the area is predominantly vibrant and market-driven as a result of the booming motorcycle transport business and accounted for a larger population of the constituency as compared to the other two wards which are sparsely populated accounting for only 37% of the constituencies population and not as economically vibrant (Infortrak, 2019).

The target population for this study were motorcycles riders in the stated three wards, with key informants to the study being security personnel such as the traffic

commander, Officer in Charge of Station (OCS) Officer Commanding Police Division (OCPD), NTSA officers and *bodaboda* area managers who will provide meaningful information.

### Sample Size

Mugenda, and Mugenda (2003) defined a sampling size as a selected portion of the population under study that is presumed as the correct representation of the population. Simply put, a sample is the subset of the population and since it becomes almost impossible to collect information from each and every resident of the area under study, it becomes important to derive a sample size who will act as the key informants and representatives of the bigger population under study

Meru county as a whole has a population of about 1.5 Million people and North Imenti sub-county has roughly 177,000 people distributed as 88,000 males and 89,000 females according to (Kenya National Bureau of Statistics, 2019). Therefore, by narrowing down to the three wards namely; Municipality, Ntakira East, and Ntakira West as the study areas, each has about 37,000, 33,000, and 40,000 respectively (Infotrak, 2019) totalling to 110,000. With this information, Gay (1981) suggested that ten percent of the accessible population under study is presumed as a good enough representation of the entire population under study. The respondents of this study range from *Bodaboda* riders, pillion passengers, *bodaboda* area managers, the area OCS or OCPD, and the traffic commandant to the junior/mid-level and senior NTSA officials.

A sample of 110 respondents was picked/selected randomly, averaging 36 people per ward to represent the entire area under study. Which translates to at least 60 motorcycle operators, 35 pillion passengers who will be issued with questionnaires and

3 samples to be engaged under key informative interviews and 12 under focus group discussions. 12 samples under the FGDs will comprise of 6 boda boda area managers translating to 2 from each ward, and 6 junior to mid-level officials from the NTSA. Interviews will equally be done in phases for each category as follows; the area OCS or OCPD, 1 traffic commandant and 1 senior official from the NTSA. As guided by Gay on research methods, a sample size can be arrived at by a continuous deduction of 10% of the entire population under study until a reasonable and practical sample size is arrived at. Therefore this study will take 10% of the total 110,000 samples which is 11,000 and further subdivide a 10% from it, thus arriving at 1,100 sample size. The 1,100 will be further narrowed down to 110 respondents which is within a reasonable range with a ratio of 1:1000 representation sample size as of the entire area under study.

#### Sampling Technique

Sampling technique is the process by which units of a sample have been selected. This research employed simple random sampling technique. Kothari (2004) defined random sampling as sampling that is based on randomized selection of the samples. In other words, with randomization selection, it ensures that every element stands an equal chance or has the same probability of being picked and being part of the study. Under random sampling, the simple random sampling method was deemed best for this study as it was mainly centered on the *bodaboda* industry which is huge and constituted by thousands of riders, hence randomly selecting the participants would be beneficial to the study by giving each an opportunity to participate and contribute to the study, For NTSA officials, pillion passengers, *bodaboda* area managers and the security personnel i.e. the OCS and OCPD random sampling technique was employed. In this case, the researcher went ahead and randomly picked or selected

boda boda riders and pillion passengers who were then issued with the questionnaires, where else the , boda boda area managers, and NTSA officials will be invited for the FGDs. The area OCS or OCPD and a senior official from NTSA were engaged under interviews as they were crucial informants in providing the much-needed information for the study. This sampling technique best suited the intention of the study.

### Data Collection Instruments

This study utilized Questionnaires, conducted Interviews and FGDs to gather primary data in order to ensure the research was factual and well-grounded. The primary data was collected using a questionnaire which are a set of typed questions with both open and closed ended questions that the respondents will be expected to fill, they will be distributed to *bodaboda* riders and pillion passengers. Interviews being a set of questions that the principal researcher will utilize to form an inquiry and gather response from the respondents being area OCS or OCPD, traffic commandant and a senior official from NTSA. Additionally, FGD were equally utilized to get relevant and useful information from the BAK area managers, and junior to mid-level NTSA officials who constituted part of the small group that helped to raise response to the questions asked by the researcher. Open and closed-ended questions were directed to the respondents with the aim of obtaining both qualitative and quantitative data for analysis. Secondary data was equally gathered and this was achieved through desk research from journals, reports, books, articles, etc., were equally utilized to ensure coherence and guidance of existing knowledge with the study that was being undertaken.

### Interviews

The interview method of obtaining data is guided by use of interview guide which helps in the presentation of verbal questions and obtaining verbal responses (Kothari, 2004). This study employed unstructured interview questions where the researcher opted not to follow any certain set form of questions arranged in any particular manner, which allowed the researcher to have a flexible approach to questioning. The researcher interviewed 3 key informants who consisted of 2 police men i.e. OCS or OCPD, and the traffic commandant, and 1 senior official from NTSA who would be crucial in the study and purposively selected. The senior police officers would-be in the best position to give in detail as to why regulation of motorcycles has been a challenge and the impact increased motorcycles have had on security. The interviews proved to be very efficient for thorough and rigorous investigation since they enabled the researcher to pose follow-up questions to the respondents and even gather information through their expressions.

#### Questionnaires

A questionnaire refers to a set of questions with either open-ended or closed questions where the respondent is expected to give their feedback or response in form of writing. The questionnaire is issued to respondents who then read and interpret the questions and later respond in the allocated space for the questions (Kothari, 2004). Importantly the respondents have to answer the questions on their own in order to ensure independent and non-coerced response. The questionnaires were issued to 95 respondents in total, broken down as 60 *bodaboda* riders and 35 pillion passengers. The questionnaires were be used to gather both qualitative and quantitative data that would be be used for analysis. The open-ended questions allowed the respondents to air their views and opinions in written form while closed questions gave them an option of either agreeing to or not. Questionnaires proved very efficient and useful in

this study as a lot of useful information was gathered in a short period as compared to interviewing every sample at a time.

### Focus Group Discussions

A focus group discussion involves identifying and gathering a small group of people usually one that each and every individual of the group has a chance of voicing out their opinion, who have a common background and share similar experiences to discuss a specific topic. Kothari (2004) stated it is a form of qualitative research which is guided by a moderator, where questions are asked about their perceptions attitudes, beliefs, opinion or ideas, in a loosely structured discussion of various topics of interest. The focus group targeted a total of 12 respondents, consisting of 6 *bodaboda* area managers and 6 junior to mid-level NTSA officials. This would help the research have an informed true perspective of the sample elements opinions, and thoughts.

### Data Collection Procedures

The principal researcher formulated a research schedule that outlined the time frame under which data would be collected once all the research permits had been acquired. In the same line of thought the researcher would be actively engaged in data collection such as interviewing the interviewees and recording the response. The principal researcher made use of a research assistant whose sole responsibility was that of lending a helping hand such as handing out the questionnaires, scheduling interviews and organising the FGDs with the targeted sample elements for face-to-face interviews that equally aimed at collecting both qualitative and quantitative data. The research assistant was well informed beforehand on the contents of the

questionnaires and how best they were to be answered, the research assistant proved helpful in assisting the respondents who did not understand clearly what the question demanded of them or how to answer the questions. After which the raw data was synthesized and analysed thereafter. As a result, this made the data collection process run smoothly and efficiently.

#### Pretesting

Kothari (2004) stated that it is always advisable to conduct a 'pilot study' (Pilot Survey) to test the efficiency of the data collection tools. He further goes ahead to state that, a pilot survey is in other words, is "a replica and rehearsal of the main survey." Kothari (2004) further states that a pilot study enables the researcher to identify the weaknesses of the data collection tools and improve on these to facilitate the efficiency of the research. Particularly, Mugenda and Mugenda (2003) stated that reliability is a measure of the accurate degree to which the research tools used, yield the same results over and over in repeated trials under the same circumstances. A pre-test was conducted on 10 *bodaboda* riders within my residential area, where they were issued with questionnaires to fill in order to obtain whether any question needed some revision and an estimate of how long it would take for purposes of scheduling adequate timing for data collection. The researcher further requested one colleague to sit in for an interview where the researcher ran through the interview guide. This helped with ascertaining that the questions asked were objective and not leading. Once the pre-test was complete necessary corrections were effected and the researcher was ready to proceed to the field for actual data collection.

#### Reliability and validity

To ascertain the reliability, validity, and quality of the questionnaires and interview guide questions, and their content, the researcher administered the questionnaires and

interview guide to 5 known residents of Meru county who are literate and have graduated with an undergraduate or post graduate degree, and based on the pilot study some questions would be paraphrased to be more concise and clearer, spelling mistakes would be corrected if any, and all leading questions would be restructured to ensure objectivity.

#### Data Analysis Plan

Data collected from the field in this research was mainly and solely from the questionnaires, interview guide posed under interviews, and FGDs and in line with the aim of operationalizing the three objectives. This study utilized both descriptive and inferential methods of analysis where quantitative data was to be represented and summarized in numbers while inferential method would help in using sample data to draw and inform conclusions. Data collected was both qualitative and quantitative in nature and thus was well analysed through the use of bar graphs, pie charts, and tables. The data was further interpreted by use of Statistical Package for Social Sciences commonly referred to as (SPSS) version 27.0.1.0 which was easy to use in that, it had a user-friendly interface, had efficient data conditioning meaning it reduced time spent in data preparation by identifying invalid values and also viewing patterns of missing data. Lastly, it was quick and reliable and most importantly offered data security which is crucial for any research. As for the secondary source of data, it was subjected through an analytical lens to ensure relevance and accuracy to the subject under study.

#### Ethical Considerations

The researcher took it upon himself to ensure that before commencing data collection, all the relevant institutions were aware and that permission had been granted. This included an introductory letter from the relevant department, clearance from the

Daystar Ethics Review Board (DU-ERB), a permit from the National Commission for Science, Technology, and Innovation (NACOSTI), a letter of research and authorization from the Ministry of education (MOE) and an official stamp from the County Commissioners office.

This study made it a priority to ensure that the respondents' permission was first sought before being interviewed or given the questionnaires to fill ensuring that the respondents gave information at their own accord and voluntarily without any form of coercion. The researcher explained to the participants what the study entailed, and its end benefit to the society at large once the study was complete, it was strongly emphasized that the information they give would remain confidential. In addition provisions for participant's withdrawal was provided and well explained to them should any participant have wished to withdraw from participating in the study at whichever stage, they would be allowed to and without any consequence or intimidation. Fouka and Mantzourou (2011) stated that once all research ethics are adhered to, the study can be relied upon as truthful and factual.

#### Summary

This chapter has provided an in-depth look at the methodology used to conduct the research. Who the population for the study is, how the target population was identified and how the sample size was arrived at, In addition to what techniques and instruments were used for the data collection.

The chapter also captured the data analysis plan and the ethical considerations that were put in place before and while undertaking data collection. This chapter was the heart of this research as it embodied a very instrumental aspect of data which is what informs the purpose of this study making its data reliable and factual.

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## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### Introduction

In this chapter, the findings of the research are presented, analysed and well interpreted so as to get a better understanding of the Motorcycle transport in Kenya and the implications it has on security in North Imenti Sub County. The data presented, was collected through the use of questionnaires, key informative interviews and focus group discussions which were the main tools of primary data collection for this study. The respondents for the study were identified using the stratified random sampling in order to give each potential participant an equal chance of participating in the study. The data has been analysed using the SPSS data analysis software and finding presented inform of tables and pie charts. In consideration of ethical principles that guided this study, consent was granted from the respondents as they were assured that the study was only for academic purposes and information given/shared would strictly be treated with utmost confidentiality. The questions were framed in view of the objectives of the study in order to provide the study with the much need information which was later analysed, interpreted and presented as follows.

#### Analysis and Interpretation

The questionnaires were distributed randomly to 95 potential respondents, whereby the researcher managed to get back 50 verified and well filled questionnaires free from errors from 37 male *bodaboda* riders and 13 pillion passengers who constituted of 7 males and 6 females. The focus group was to be constituted of 12 participants but engaged 10 participants, 8 males and 2 females with 2 apologies. 6 were *bodaboda* area managers representing two from each of the three wards, and 4 junior-mid level

NTSA officials. The researcher managed to conduct 3 interviews with 2 males and 1 female. Two of the interviews were conducted at the Meru town police station located in Municipality ward, where the researcher interviewed the OCS and the traffic commandant while the other interview was conducted at the NTSA offices where the 1 female interviewee was the senior NTSA official. Accounting for a 57% response rate.

#### Distribution by Gender

The study sought to identify the gender of the respondents and the results are as illustrated in Figure 4.1.

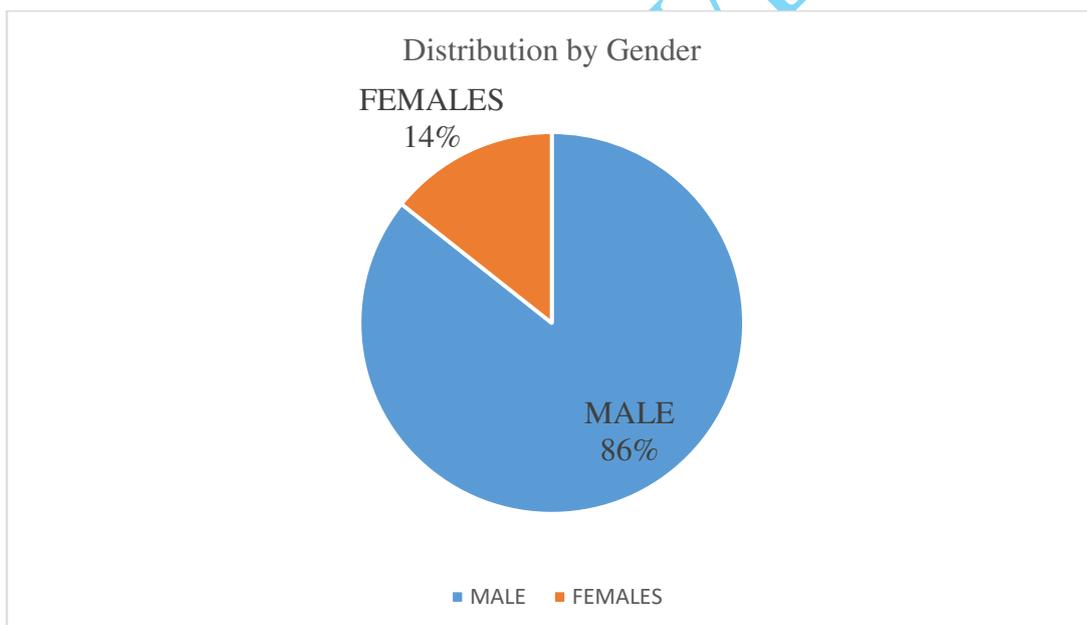


Figure 4.1: Distribution by Gender

The study findings indicate that majority of the respondents were male representing 86% and females 14%.

#### Distribution of the Respondents by Age

The study examined the distribution of the respondents by age bracket. The results are highlighted in Table 4.1.

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*Table 4.1: Distribution of Repondents by Age*

Respondents Age	Frequency	Percent
18-22	10	15.87
23-27	44	69.84
28-32	2	3.17
32 & Above	7	11.11

The study findings had respondents from the ages of 18 to 32 and above with a majority of respondents being between the ages of 23-27 a clear indication of a prime age that would be actively engaged in formal employment but to the contrary, that tough economic times due to lack of alternative employment opportunities had pushed the youths to other forms of employment such as riding the motorcycles for public transportation.

#### Distribution of Respondents by Occupation

The study sought to find out the occupation of the respondents and the findings are as shown in Table 4.2.

*Table 4.2: Distribution by Occupation*

Occupation	Frequency	Percent
<i>Bodaboda</i> rider (Full time)	30	47.61
<i>Bodaboda</i> rider (half time)	7	11.11
Police Officer	2	3.17
Civil Servant	5	7.93
<i>Bodaboda</i> area managers	6	9.52
others	13	20.63

According to the findings, most of the respondents were full time boda boda riders accounting for 47% while 20% rode *bodabodas* part time. About 58.73% in total of the respondents were actively involved in riding *bodaboda* for commercial purposes or for public transportation. The respondents who filled the questionnaires were further asked if they owned the motorcycles they use for transportation or were employed and as illustrated below 86% turned out to be employed by the *bodaboda*

owners, with only 10% actually owning the *bodabodas* and a further 4% had hired or leased the *bodabodas*.

#### Motorcycle Ownership

The study sought to find out how the respondents acquired the motorcycles. The findings are as shown in Figure 4.2

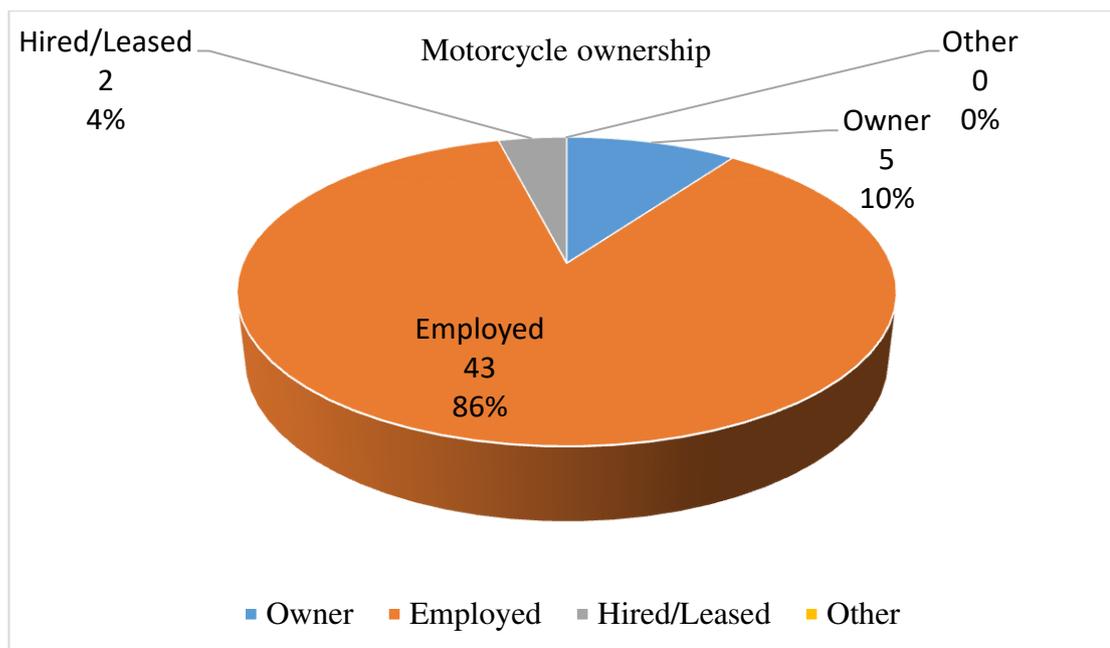


Figure 4.2: Motorcycle Ownership

The findings revealed that majority 86% of the *bodabodas* were employed by the owners, 10% owned the motorcycle, 4% hired or leased.

#### Mode of Purchase

The researcher sought to find out the mode of purchase for the motorcycle. The findings are as as illustrated in Figure 4.3.

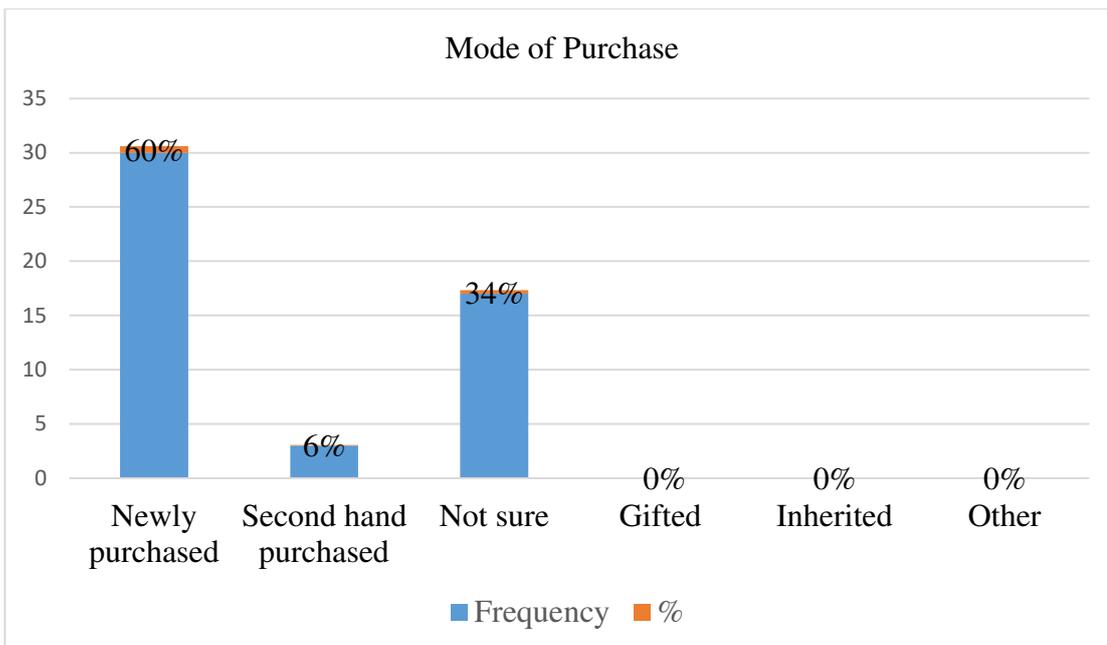


Figure 4.3: Mode of Motorcycle Purchase

The findings revealed that 60% of the *bodabodas* were newly purchased with 34% not being sure how they were acquired while another 6% revealing that they were purchased second hand.

#### Riding License Authenticity

In the same line of thought, to ascertain the level of regulation in the public motorcycle transport industry, the respondents were asked if they had a valid driving license. The findings are as shown in Figure 4.4.

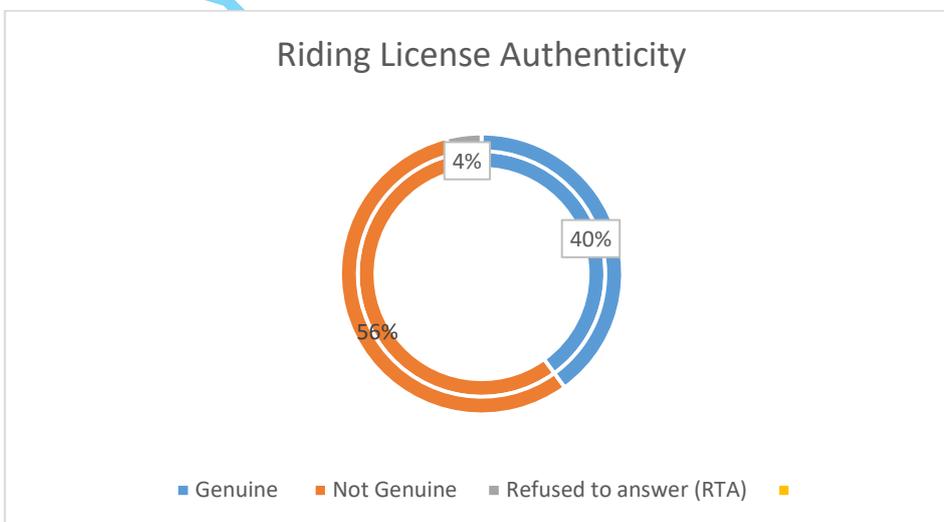


Figure 4.4: Riding License Authenticity

Interesting enough, the findings showed that 94% of the riders had a valid riding license with only 3 riders accounting for 7% who did not have a riding license. Upon further inquiry on whether their riding license was indeed genuine, The researcher discovered that 28 of the 50 respondents accounting for 56% of the riders had fake documentation or riding license leaving only 44% with genuine riding licenses.

#### General Opinion on Motorcycle Registration by Relevant Bodies

The respondents engaged under Interviews, FGDs and those administered questionnaires were asked of their general opinion on what they thought matters registration of motorcycles by relevant authorities such as the NTSA, whether they were registered or not. The results are as shown in Figure 4.5

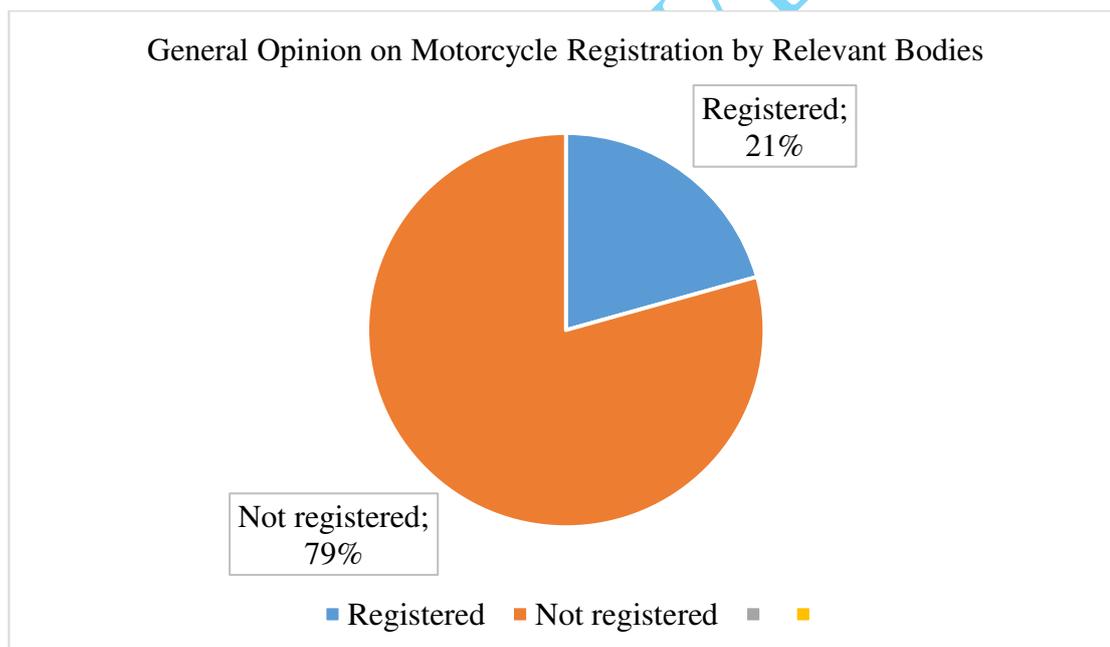


Figure 4.5: General Opinion on Motorcycle Registration by Relevant Bodies

The findings showed that majority of them accounting for 79.36% doubted if the motorcycles were rightfully registered, while 20.63% were of the opinion that *bodabodas* were registered.

A 28 year old pillion passenger who now runs a small shop said:

*Hii biashara ya bodaboda hata mimi nimefanya, na ninajua kuna njia nyingi sana za mkato, kabla nianze hii biashara ya duka, nilikuwa mwendeshaji boda wa kubeba abiria, na pikipiki yangu nilinunua na hakuna paperwork nilifanya na nilikuwa nabebea meru town, sasa niambie wangapi wako registered huko mashinani?*

Clearly the man pointed out that he once was engaged in transporting passengers in his acquired motorcycle which didn't not have any paper work at. He strongly doubts if majority of the *bodabodas* are registered. In the process of data collection one 25 old man admitted to me that corruption is the biggest hindrance when it comes to motorcycle registration since he himself was equally once a *bodaboda* operator and his boss instructed him to always have a 200 Kshs aside incase an impromptu crackdown was conducted he would have to bribe since the motorcycle was clearly not registered.

Upon further inquiry, in order to establish the second objective on why motorcycle operators do not strive to have their motorcycles registered the researcher asked the respondents what factors they thought, had led to motorcycles not being registered. The respondents that filled the questionnaires 54% argued that it was due to lack of enforcement by the relevant institutions in that they do not enforce the measures to ensure that all motorcycles are registered. The researcher further asked the same question in the focus group discussion and one of the male *bodaboda* area managers argued "Why do I need to spend extra money to have the motorcycle registered and nobody is going to check whether the motorcycle is registered or not?" Clearly the intention or need to have the *bodabodas* registered is only if the relevant authorities will enforce or carry out crackdowns on unregistered *bodabodas*. While 26% translating to 13 respondents argued it was solely because of the high cost of

registration. The researcher posed a similar question to the junior to mid-level NTSA officials in the FGD and one had this to say:

*The cost of registration has for a long time not been reviewed, it has remained constant for the past 10 years or so.*

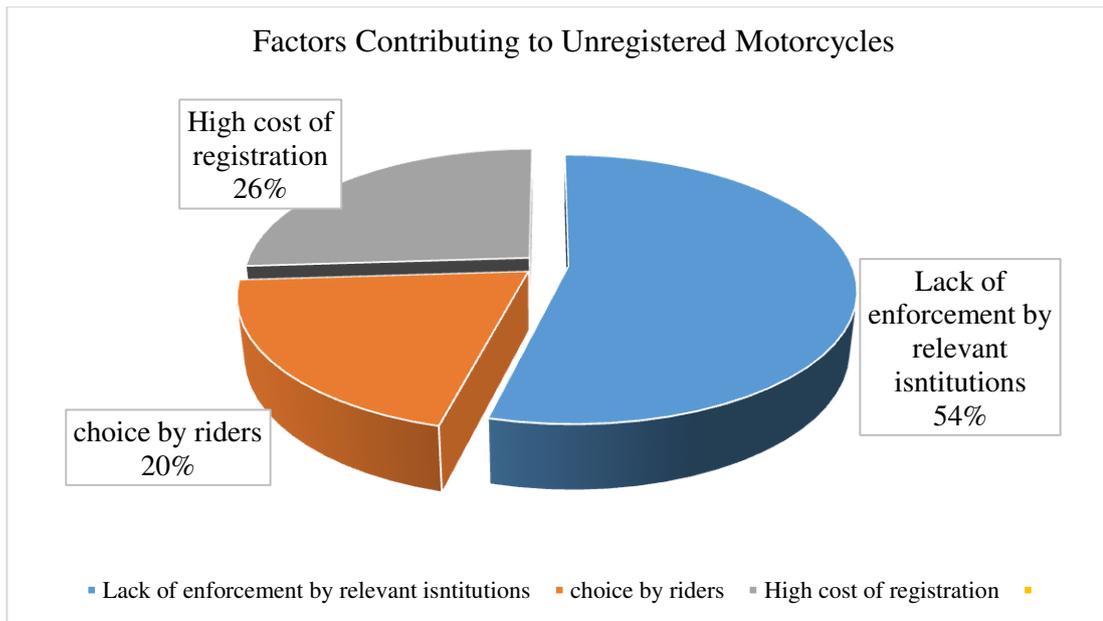
The researcher further inquired to know what the charges are and he responded by saying:

*It ranges anywhere from Kshs 1000/= to Kshs 1,500/=.*

. One of the *Bodaboda* area managers interrupted by saying

*Kwa uhakika, ukiangalia biashara ya uendeshaji bodaboda, mwenye bodaboda anatengeneza takriban shilingi mia tano na ikipanda sana siku nzuri, atatengeneza shilingi mia nane, kwa nini basi atumie mapato ya siku tatu hivi kuregister bodaboda ilhali bado haitazuia pikipiki ile kuibwa na kuuzwa mahali pengine.*

In translation he said, exactly, if you look at a *bodaboda* business model, the operator roughly makes between Ksh 500 to Ksh 800 on a good day in profit, then why will they have to give three days earning for registration which serves no purpose, in the sense that it will not prevent the motorcycles from being stolen and sold elsewhere. The traffic commandant, Mr. Mwenda, argued that it was mainly a choice by the *bodaboda* operators, he attributed majorly to the fact that since some of the *bodabodas* are bought second hand, and some illegally smuggled into the country, it is highly likely that they were stolen elsewhere and sold in the area where they are being used. However for many newly purchased *bodabodas*, many and a majority are registered.



*Figure 4.6: Factors Contributing to Unregistered Motorcycles*

The respondents were further asked if they had used *bodabodas* within a timeframe of the last three months, and evidently all respondents had used *bodabodas* in the last three months accounting for 100% which clearly indicates that the use of motorcycles in this particular region is common and widespread. 74% of the questionnaire respondents used them as commercial riders, 12% to transport goods and 14% as pillion passengers.

Due to the easy maneuverability, and relatively cheap cost charged as fare for transportation, the use of *bodabodas* seems to be preferred by many as a quick and convenient mode of transportation.

All the respondents were asked what they thought of the use of motorcycles for public transportation, if they had contributed positively or negatively in the locality and interesting enough the response was quite captivating as the respondents issued with questionnaires 50 out of 50 translating to 100% agreed that *bodabodas* have

contributed both positively and negatively. This was a clear indication that indeed with all the benefits that come with the use of bodabodas, it was evident that they did not shy away from the fact that it had equal impacted them negatively. The same question was posed to respondents under FGDs and they all agreed that bodabodas used for public transportation having impacted positively and negatively.

Upon further enquiry, one of the female junior to mid-level employee said:

*Since the zero rating of motorcycles back in the year 2008, motorcycles have been on a steady growth in terms of number of motorcycles registered and imported per year and with this, crime has equally been more rampant.*

She added:

*In fact late last year we visited the meru police station to ascertain if the bodabodas under the police custody were registered and to our surprise, 70% of them were not registered, mind you this are the same bodabodas that were being used to perpetrate crime and used as gate away rides.*

One of the male bodaboda area managers identified as Mutuma had this to say:

*Ile shida tumekuwa nayo mwaka nenda mwaka rudi, ni kuongezeka kwa wizi wa pikipiki na hii ni kwa sababu nyingi ziko na fake registration, juzi, nakumbuka tulikuwa na kesi ya wizi, na wale ambao waliona wizi ukitendeka, waliweza kuchukua number plate ya hiyo bodaboda, lakini tulipoenda kufanya search kwa ofisi za NTSA, tulipata mshtuko kungundua hiyo number plate ilikuwa fake pia.*

Translated as the only challenge we are currently struggling with, is the rampant cases of motorcycle theft which has continuously and yearly increased because a number of motorcycles used in this locality are not registered, and if registered many are using fake documentation, he further went ahead to give a scenario of a case where witnesses had captured the number plates of a motorcycle that was involved in a robbery, but upon checking the registration details with NTSA to help establish the owner, the registration happened to be fake. So as to get the perspective of those institutions charged with ensuring citizens have a safe and secure

environment, The researcher asked the OCS the same question during an interview and he had this to say:

*They have contributed positively by the fact that areas that were once inaccessible have now opened up because of the use of bodabodas for public transportation, secondly traffic in Municipality ward has been and continues to be a nightmare since the population is growing with many foreign investors visiting the town. To answer why they have contributed negatively, on a daily we receive no less than 20 cases on bodaboda related theft issues, in fact before you walked in, I was dealing with an issue that involved murder of a bodaboda owner and his boda boda ridden away to no trace.*

The upshot of this interpretation is that indeed the residents of the the three wards have had to live with the fruits and yet deal with the negative challenges associated with the increased use of bodabodas.

As a follow up to previous question, respondents issued with the questionnaires were asked whether either by themselves or people they knew in the past 12 months whether they had experience or witnessed motorcycle related crimes and 88% answered in the affirmative while 12% had not experience, witnessed or knew anybody that had. This is an indication that indeed a majority of the respondents had a close shave or interaction with bodaboda related crimes a strong indication that indeed it is a security challenge that needs to be addressed. To better help examine the first objective which sought to examine the nature of crimes associated with the use of motorcycles for public transportation, respondents were asked if they thought that motorcycles operators were involved in crime as active perpetrators or participants and the response was that 20 respondents accounting for 40% agreed that bodaboda operators are active participants in perpetrating bodaboda related crimes. A female pillion passenger upon clarification of the questions asked proved quite informative and said:

*Wao ndio wanabeba wezi na kupanga njama mahali wataiba.*

In other words she did blame the bodaboda operators as actively engaging in crime by planning and transporting or aiding the thieves to get away.

Another middle aged man said:

*Wote wako kimoja, mchana wanafanya kazi ya kubeba watu, usiku wanaingia kazi ya wizi, hawana tofauti.*

Translated as bodaboda operators work as genuine commercial riders during the day and engage in crime at night. While 60% of the respondents disagreed that bodaboda riders are involved as active participants in motorcycle related crimes, meaning they had no association or direct involvement whatsoever in crimes associated with the use of motorcycles used for public transport.

#### Nature Of Crimes Associated With Motorcycle Use

The study sort to further establish the nature of crimes associated with the use of motorcycles in order to establish what type of crimes are mainly perpetrated by the use of motorcycles.

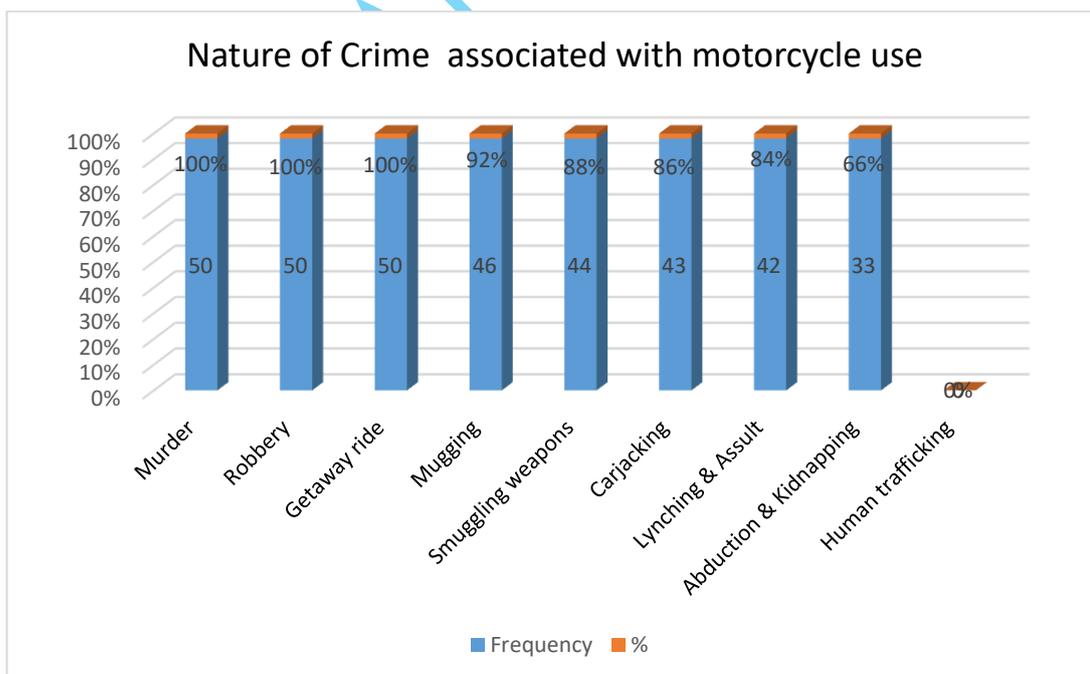


Figure 4.7: Nature of Crimes Associated with Motorcycle Use

The findings indicated that the crimes were listed as murder, gateway ride and robbery which accounted for 100% as all 50 respondents agreed all agreed or answered in the affirmative that bodabodas were used to perpetrate the said crimes. Mugging came in second with 46 of the 50 respondents accounting for 92% as a crime which was perpetrated by bodaboda operators. Smuggling and transporting of illegal weapons came in third with 88%, carjacking accounted for 86%, followed by lynching and assault at 84% abduction/kidnapping accounted for 66% with 33 respondents citing bodabodas being used to abduct people as illustrated in the table chart above.

On the same issue, the researcher asked the OCS on the nature of crimes that are reported in the locality associated with the use of motorcycles, and his response was quite informative. He said:

*Most of the crimes reported in this station 80% to 90% have a direct link to the use of motorcycles, Today it is a murder case where the bodaboda owner has been killed and motorcycle stolen, tomorrow is mugging, and very often we deal with cases where lynching and assault is the order of the day, motorcycle operators have become a law by themselves whereby they set ablaze everything and anything that they get into a disagreement with on top of being abusers of the hard drugs such as bhang so reasoning with them at times is hard.*

In addition he said:

*And to make matters worse, the challenge is that even if someday walks into my office today, with a bodaboda registration number the likelihood of my officers arresting or even tracing that particular motorcycle is almost impossible since many have not just one but many registration numbers that they change at will.*

Upon further probe, the questionnaires administered, further asked the respondents whom they thought was mostly involved in perpetrating motorcycle related crimes with an aim of establishing who exactly was in the business under the disguise of

operating as a genuine motorcycle operator with a hidden intent of committing crimes such as mugging, carjacking etc. the response was that motorcycle owners accounted for 4% in terms of being involved in crimes, riders hired by owners accounting for 46%, riders who had leased or hired bodabodas accounting for 40% and pillion passengers 10%.

This particular information was quite interesting and the researcher further sought an explanation as to why riders hired by owners would likely be more than motorcycle owners for instance, The Traffic commandant, Mr Mwenda had this to say:

*When an owner gives a rider a motorcycle whether employed or leased for commercial purposes, the rider has a daily target that they should remit to the owner usually about 500Kshs per day. So regardless of whether the rider had a client or not, the agreement stands, for this case the rider is highly likely to engage in crime related activities which is a quick way to make money, so the rider will most likely engage in crime in order to raise the amount that need to be remitted to the motorcycle owner.*

In addition he said:

*Siku hizi, pia unapata abiria ambaye amebewa anafanya uhalifu kama vile kumnyanganya simu mtu, na hivyo inabidi mwendeshaji bodaboda atoroke naye kwa kuhofia hali yake ya maisha.*

Translated as it happens that at times the pillion passenger is the criminal posing as a genuine client who seeks to be transported from point A to B, but instead ends up snatching a phone forcing the motorcycle operator to help them get away for fear of being lynched or even arrested as an active participant.

The respondents were further asked who they thought were the main targets by the perpetrators of bodaboda related crimes and all segments given seemed to receive their fair share. It was clear from the response that business owners or people who had enterprises such as shop keepers, mpesa agents and generally people who ran

businesses are mainly the main targets, which accounted for 64%. The same question was posed to the OCS who equally mentioned business people since they are more likely to have money with them. Motorists or other people who have cars are equally targeted accounting for 20%, and residential homes accounted for 16%. The OCS in conclusion had this to say regarding the question of who are mainly targeted:

*The robbers posing as riders will target people who are likely to have cash in transit, rather than people who are less likely not to have money with them or the common mwananchi, as of the cases that are reported usually involve large sums of money indicating they are well targeted.*

The study further sought to know what periods bodaboda related crimes are committed and it was clear that night time accounted for 96% while day time accounted for 4%. The researcher sought further explanation to this from the area OCS who said:

*90% of the cases reported here that involve bodabodas are reported early in the morning after a night of victims being targeted and actively robbed or mugged, bodaboda riders use this tactic because they know they are less likely to be seen reducing the chances of even being followed.*

He went on to explain:

*Remember also that at this time is when most of the business people and many motorists are heading home from work hence the reason why they choose to strike when evening dark starts to fall.*

#### Factors Encouraging Motorcycle Related Crimes

In an effort to make sense out of the findings, the study further sought to find out, what factors would encourage motorcycle related crimes. The findings are shown in Figure 4.8.

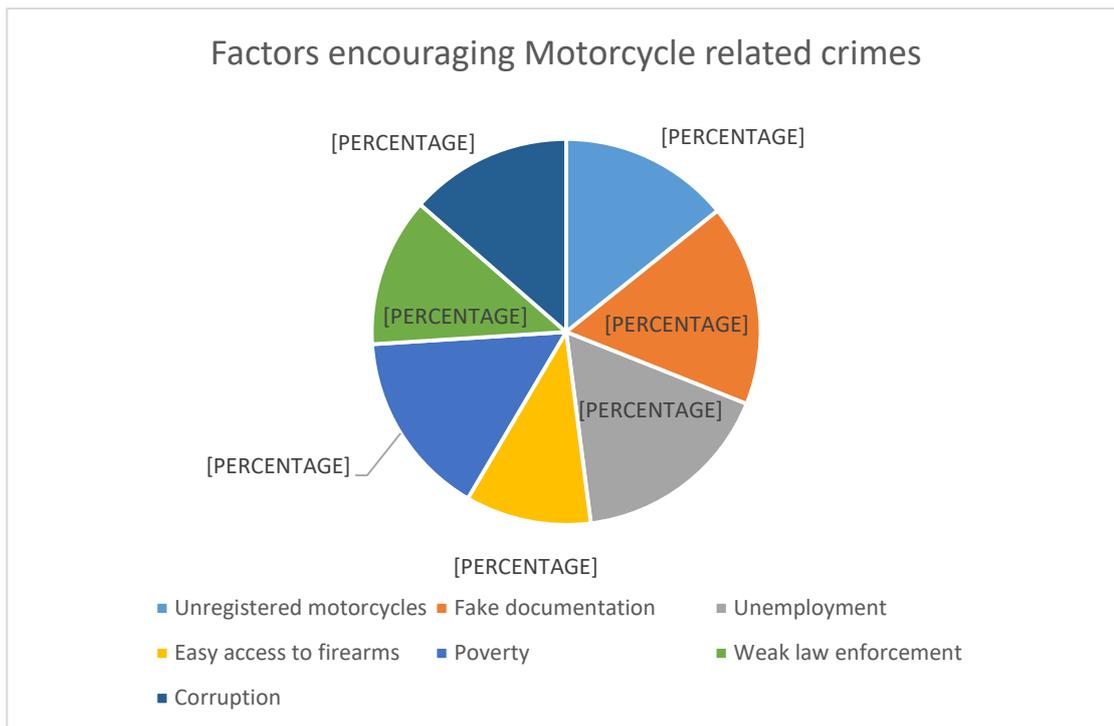


Figure 4.8: Factors encouraging Motorcycle Related Crimes

The findings showed that all 50 respondents pointed out as illustrated in Figure 4.8 that fake documentation and registration, and unemployment accounted for 17%, poverty accounted for 16%, unregistered motorcycles 14%, corruption 14%, weak law enforcement 12% and easy access to firearms at 10%.

According to several respondents engaged under the questionnaires, 96% denied knowing or being aware of any measures put in place by the county government to address motorcycle related crimes, while 4% acknowledged or knew measures that have been put in place by the county government to address motorcycle related crimes.

The questionnaire further prompted those who answered in the affirmative to state which measures they were aware of, and the two respondents wrote down:

*“kushikwa na maafisa wa Meru youth service kwa kukosa liseni”*

This can be translated as the meru youth service had somewhat been deployed to help regulate and arrest those *bodaboda* operators that do not have the required or legitimate license. The same question was posed to the senior NTSA official and the traffic commandant. The NTSA official stated:

*As you are aware, taasisi yetu iko chini ya national government, so if our policies are not complimented by those of the county governments, then all good plans overlap each other, but I commend the Meru county government, led by the governor Mheshimiwa Kiraitu for giving us officers from the Meru youth service to help with the crackdowns that help u root out unregistered motorcycles, and motorcycle operators.'*

This was seconded by the Traffic commandant, Mr. Mwenda who said:

*With the help of the National transport and safety authority, we have conducted crackdowns and arrested a number of unregistered motorcycle operators and detained their motorcycles for lack of compliance with the set regulations.*

Indicative of the efforts and measures put in place by the county government in an effort to curb and address motorcycles related crimes. In the same line of thought, the respondents were asked if they thought the institutions charged with the responsibility of ensuring safe practices by the motorcycle operators have been effective in discharging their mandate and 80% were of the opinion that the relevant institutions are not as effective or up to the task while 20% answered in the affirmative. The same question was posed to those engaged under the FGDs and one of the female junior to mid-level NTSA official said:

*No single institution works independently, we must rely on our brothers and sisters from other government administrative agencies like the NPS since they have arresting power for us to be effective as mandated, just the same way KRA equally needs the enforcement of police officers and so on and so on.*

One of the male *bodaboda* area managers in regards to the same said:

*Ukweli nikwamba, taasisi ambazo zimkwekwa kulinda na kuhkikisha wanabodaboda wanafuata sheria, wao wenyewe ndio wameharibu hii sekta ya bodaboda, kwa mfano, hapa town ukiangalia bodaboda nyingi ni za maafisa wa polisi, sasa unawezaje wewe kama ofisa wa NTSA report bodaboda flani kwa polisi, unafikiri wataishiwa ama kufungua mashtaka?*

The *bodaboda* area manager was clearly in support of the fact that the institutions charged with the responsibility of ensuring safe operations by the motorcycle operators had equally failed, since for instance if the NTSA, reports a certain bodaboda to the NPS no action will be taken as many of the bodabodas in municipality ward are owned by the same police officers that are expected to ensure they abide by the set laws and policies.

#### Efficacy Levels

The study had anticipated the need to be sector specific about the general opinion in terms of which relevant institutions were effective as opposed to having a blanket assumption, the respondents were provided with a table which had different institutions where they would tick against it on whether it was effective, somehow effective or not effective at all. The response is as illustrated in Figure 4.9

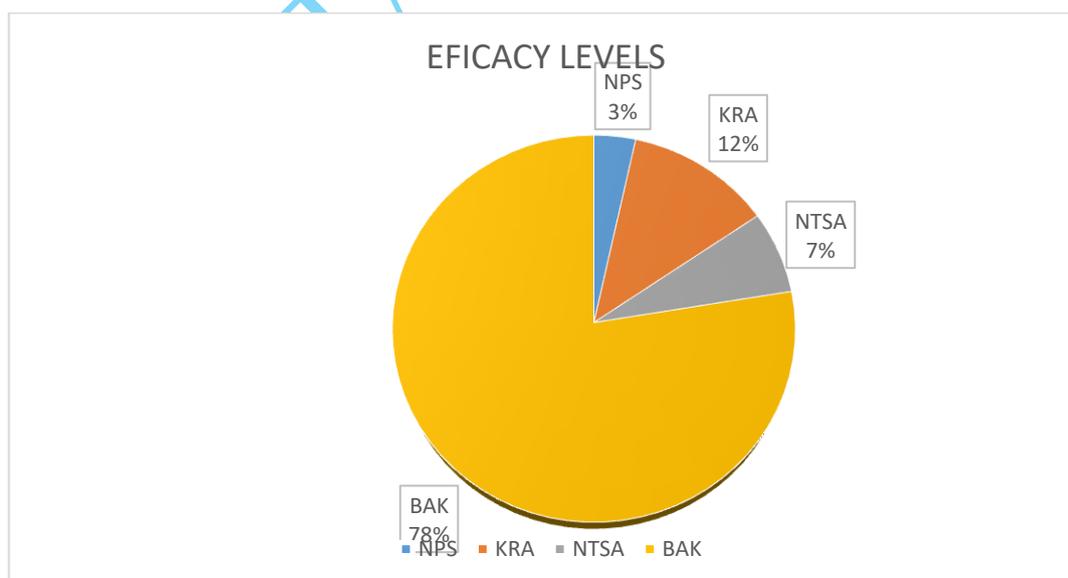


Figure 4.9: Efficacy Levels

The findings showed that NPS 4% thought it was effective, NTSA 14%, KRA 8% and the BAK 90%.

All the respondents were presented with statements that they were expected to either agree with or not. This would later form part of the recommendations and it was the researcher's way of finding out, how many would agree with the recommendations if they were proposed and possibly adopted for enforcement. The first statement was that all motorcycles be registered afresh and 84% disagreed with only 16% agreeing with the statement, hence an indication that the majority were comfortable with the industry staying as it is. Two of the Bodaboda area managers engaged under the FGD, shared a similar opinion by saying that would not be possible as it would be very tedious to get all the bodaboda riders, again it would be a waste of time and money to have those which are already registered go through the process of re-registration.

The NTSA officials revealed that in fact they had a project in conjunction with the ministry of interior dubbed 'mapping' whose sole intention was to register all the motorcycles afresh country wide, and the project was to start soon spearheaded by the local area chiefs in order to have an accurate number of how many motorcycles are in each sub county, in which the data acquired would be beneficial in determining and knowing for sure how many unregistered motorcycles roam the streets. The second statement read that all motorcycles should be fitted with a unique code, engraved on both the motorbike and safety vest of rider or operator making in visible to everyone, such that it can be searched using a short USSD code to reveal the name and details of the rider, 66.% agreed with the statement and 32% disagreed.

The senior NTSA official had this to say:

*In fact that is what we are about to recommend to parliament for it to be adopted as law, that will help a lot in curbing theft of motorcycles equally important is that a potential purchaser will be able to quickly gather information about a particular motorcycle and if the sellers are genuinely the owners, secondly it will increase safety of pillion passengers as they will be able to quickly check the registration details of the bodaboda they so wish to ride, which Sacco it is operating under etc. which will give no room for criminals posing as genuine motorcycle operators.*

One of the male *bodaboda* area managers mentioned that it would definitely be helpful in addition to the physical records they have of their members and registration details which can easily be tampered with, the digital footprint might not be easily manipulated.

The third statement suggested that *bodaboda*'s offering public transport industry should all be fitted with a tracking chip that shows real time location to relevant security agencies, without a second thought, 100% of respondents disagreed with the statement, the traffic commandant citing it as a breach of privacy, the *bodaboda* area managers terming it as over enforcement, one of the managers said:

*Hiyo nayo itakuwa kutumia mamlaka kwa nguvu zaidi, manake kama ni hivo, basi hata gari zote nchini ziwekwe hizo vifaa kwani si bodaboda peke yake zinahusika na uhalifu.*

The female NTSA official said that would be next to impossible to monitor the *bodabodas* in realtime given the constraint in human resource among others.

The fourth statement touched on having regular and impromptu inspections and crackdowns to ensure adherence to the set regulations. 77% of all the respondents answered in the affirmative, with 23% disagreeing with the statement. The senior NTSA official stated:

*We have been carrying out impromptu crackdowns, and not much has been achieved through that, since as we discovered in one way or another, word gets out to the riders that the crackdown is happening*

*which makes the intended goal not to be achieved as such, I don't want to blame the NPS as we work closely with them for enforcement purposes but they equally have vested interest in the motorcycle industry.*

All the bodaboda area managers unanimously agreed that impromptu crackdowns are a good way to enforce and ensure that bodaboda operators abide by the law and have the proper documentation. One said:

*Kama sasa, tangu corona ikuje, vijana wengi wameacha shule na wanafanya kazi ya kuendesha bodaboda hata bila leseni na mafunzo bora, tumejaribu kuwaonya lakini tumeshindwa, ikiwa hiyo crackdown itafanyika mara kwa mara itasaidia kuwaondoa barabarani.*

Translated as the crackdown is indeed a good thing, as it will be of help in rooting out the youngsters operating some of the motorcycles without valid driving licenses. In the same line of thought, The senior NTSA official commented by saying:

*Employment haiko kwa vijana, na vijana pia hawataki kazi ngumu, so mtu anafunzwa nduthi for one hour na ananunua anaingia kwa barabara kubeba abiria, unapata ana overtake the wrong side sababu hakufunzwa.*

One of the statements read that working hours of commercial motorcycles be regulated in that they have a limited period of time to work over the night, this statement was met with different opinions, as 49% agreed with the statement while 51% disagreed. The traffic commandant had this to say regarding that statement:

*Ikiwa wewe ni mwendeshaji bodaboda, na umeshinda kazi siku mzima, kama binadamu wa kawaida pia unahitaji masaa ya kupumzika, kwa hivyo ni nani hao ambao unaweza sema unabeba wakati wa saa sita usiku? Hao sasa ndio wanafanya kazi ya kutekeleza wizi.*

The traffic commandant argued that realistically speaking, if one has been operating during the day, just like any other human being, they need to rest over the night in order to resume, what business would one legitimately say they are doing ferrying

passengers at wee hours of the night other than aiding in crime related activities. On the contrary the boaboda area managers stated that:

*Unajua pikipiki nyingi unaona, ni za mikopo, kwa hivyo lazima waendeshaji boda, wafanye kazi hadi dakika ya mwisho ndiposa waweze kulipa mikopo hiyo otherwise pesa wanazopata mchana ni kidogo sana kuwa mapato ya kila siku.*

He argued that most of the motorcycles are acquired on loans, and if the riders don't utilize the day and night hours to earn a good living, then they will not be able to repay the loans and still yet make a reasonable earning for the day.

With an aim of establishing the main factors that attributed to the rise or increase of motorcycles in the locality or meru sub county, the OCS attributed it to the fact that so many shylocks had been established offering much cheaper loans with lower interest rates than commercial banks which give out loans for as low as Kes 10,000 deposit, one is able to acquire a new motorcycle. He further pointed a finger at the shylocks for putting little to no enforcement on paperwork required, hence even underage and convicted criminals are able to put them hands on motorcycles that are used to further perpetrate this crimes.

In conclusion the researcher asked respondents engaged under the FGD and Interview session on what they recommended as the best approach that needed to be adopted that is yet to be done or achieved, to ensure a safer environment with the continued use of motorcycles.

The OCS said:

*Watu wakusanywe pamoja na wasomeshwe zaidi, if they are empowered and more informed on what steps to follow after one purchases a motorcycle matters registration and all whether new or second hand, then they will likely cope with regulation.*

The senior NTSA official equally touched on increased sensitization, of the bodaboda operators on importance of registration as well as dealing firmly with corrupt public officials in charge of registration who work closely with the importers at the point of entry in order to manipulate information or input inaccurate details or information of a purchaser to ensure the motorcycle is not traceable which in return are used to perpetrate most of the crimes. He equally recommended an enforcement that all motorcycles in the public transport business be put in clusters for easy identification and regulation.

#### Summary of Key Findings

North Imenti, Meru Sub County is a small portion representing what the entire country, Kenya has had to and is dealing with in terms of security implications associated with Motorcycle transport, commonly referred to as bodabodas. This study had three main objectives which guided and developed its blueprint and were operationalized by the research questions in a quest to find out what exactly the ramifications motorcycle transport has on security. The research questions were framed in a very objective and systematic way in a manner that they probed further into what meets the eye.

From the study it emerged that most accounting for 86% of the bodaboda operators in Ntakira east, Ntakira west and municipality ward were employed and did not own the said bodabodas a clear indication of how big of a business or industry it is with 8 out of every 10 motorcycles creating employment which is a good thing. Of concern was that 94% of the riders operating as commercial transporters had riding license which is good and commendable but way over half accounting for 56% were not genuine riding licenses. This was an astonishing discovery that the enterprise of making fake riding licenses actually existed and very vibrant. To add salt to the wound, the riders

dared say that even the enforcement officers could not tell the difference hence the commonality of the not genuine licenses.

It was indeed interesting to discover that all the respondents had used the bodabodas in the last three months a great indication that if motorcycle transport is a booming enterprise in North Imenti, Meru sub county. In an effort to establish the reason for the continued increase of bodabodas in the locality, it was discovered that one does not need the full amount to own a motorcycle, instead with as little as Ksh 10,000 as deposit, one can get their hands on a motorcycle thus the reason for the increased number of bodabodas visibly in Meru county equally driven by the huge demand from pillion passengers as a fast and convenient means of transportation. A clear indication of a booming business in the motorcycle trade enterprise that was propelled by the high demand for motorcycles that can easily and cheaply be acquired with minimal capital unlike other businesses that require high capital as start-ups.

It was unearthed that the nature of crimes associated with the use of motorcycles ranged from committing murder to robbery to carjacking, to mugging, smuggling and transportation of weapons and lynching and assault all which had their fair share. High cost of registration coupled with riders own choice and lack of enforcement by relevant authorities accounted for the reasons why most of the bodaboda operators did not strive to have their motorcycles registered. Lack of enforcement by the relevant authorities accounting for 54% was quite surprising, the researcher dug deeper only to discover that this was fuelled by corruption or rather corrupt officials from the relevant bodies that are required to register the motorcycles and enforce registration.

Of great concern were the minimal to no initiatives employed by the county government to help curb motorcycle related crimes. The only measure that seemed to

have been put were regular crackdowns by the Meru youth service who act as the county governments enforcement officers in conjunction with the police and regional NTSA which had almost no impact. However, it was exciting to discover that a national mapping exercise was being organized in conjunction with the ministry of interior and coordination to help conduct a re-registration exercise of motorcycles.

#### Summary

From the fact finding mission guided by objectives of what the study aimed at achieving, operationalizing the objectives using the research questions with an aim of establishing the implications motorcycle transport has and continues to have on security is a necessary study that is expected to impact greatly not only meru sub county but many localities in Kenya where motorcycle transport is a challenge.

It is evident from the study that Meru sub county residents continue to have security related challenges arising from the use of motorcycles for public transportation. Security in itself as a term is broad covering a wide range of issues. But this study sought to define any threat that was posed to the residents of Meru Sub County and prevented them from achieving their full potential by interfering with their peace and operations as a security challenge. It cannot be denied that with the increased use of motorcycles for transportation employment opportunities have been created, as well as opening up areas that were once inaccessible but the implications or effects but also be announced and dealt with the same zeal.

Upshot of this chapter, is that indeed motorcycle transport has security implications to the residents of meru Sub County which need to be addressed by good policy proposition to help ease and cushion the residents from the negative unintended consequences of motorcycle transport.

## CHAPTER FIVE

### DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

From the presentation, analysis and interpretation of the data collected, this chapter guided by the objectives of the study, seeks to discuss the findings, and equally recommend on the next course of action that needs to be taken to ensure the same discourse of proposing measures for the safe operations by motorcycle operators.

Evidently from the findings of this study, that motorcycle transport used for public transportation commonly referred to as bodaboda has a huge impact on security of the residents of North Imenti, Meru Sub County. With the emergence of motorcycles for transportation, criminals have taken advantage of them and instead used them to perpetrate and get away from crimes such as mugging, murder, carjacking, smuggling of weapons and other related activities due to their nature of easy maneuverability.

In the same line of thought factors that caused or influenced the riders not to strive to have their motorcycles registered came to light, and some actually disclosed it was by choice since the law enforcement regarding motorcycle registration seems to have some loopholes. This is a huge concern not only to the residents of Meru or Kenya as a whole but plays a role in driving out potential investors as security or a secure environment is key and crucial for any potential investor or even citizens who have

intentions of setting up businesses consider a secure environment as a top priority in that they will reach their full potential without any interference or threats.

In view of analysing existing measures little has been done to help regulate the motorcycle industry in Meru county, thus this chapter will be crucial in coming up with recommendations that are best suited for North Imenti in order to help regulated the bodaboda industry which if left unchecked just like the matatu industry it might evolve into a mafia type of industry governed and ruled by cartels who have no regard for the rule of law.

#### Discussions of Key Findings

The study, sought to find out, what implications, motorcycle transport has on security. The study established that indeed motorcycle transport commonly referred to as bodabodas had actively contributed to insecurity within the sub county of Meru. A majority of residents associated or linked the Boda bodas to crimes such as murder, robbery, mugging, carjacking, lynching and assault which has equally gained momentum not just in meru but country wide with cases reported almost on a daily whereby the bodaboda operators gang up against a motorists and torch down their cars. It was established that the motorcycles were used for abduction and smuggling of illegal weapons. Of equal importance is the easy availability of illegal drugs such as bhang which is commonly abused by a majority of the bodaboda operators according to the area OCS. It was discovered that at most times, even when the motorcycle operators were apprehended by authorities, many were found not fit to stand trial due to their mental capacity as a result of the extent to which they had abused hard drugs. This equally contributes to them engaging in crime related activities as it gives them the courage to perpetrate crime in the broad light of the day.

The study further sought to investigate reasons why motorcycle operators do not strive to have their motorcycles registered and it was evident that a majority attributed it to the fact that there was no enforcement by the relevant authorities or institutions to ensure the bodabodas are registered. Many operators seem not to bother to have their motorcycles registered because whether they do or not, there will be no enforcement to ensure registration is carried out thus many will operate without due care, simply because no action is likely to be taken against them. Another aspect was the high cost of registration which seemed to make many riders shy away from the activity because the cost of registration of a motorcycle was not commensurate with the returns the motorcycle will get if engaged in public transportation business. From the average daily income of a motorcycle operator who is more likely to be employed as compared to owning the motorcycle based on what the study discovered, then asking them to put aside money for registration and still carter for fuel, service, insurance and all, then it becomes a matter of priority and registration seems not to be one of them as it does not prevent the motorcycle riders from operating. Ignorance about registration processes stood out since many of the motorcycle operators were discovered not to have genuine riding license a clear indication that a majority home-schooled thus were not conversant with the laws and policies regulating the motorcycle industry. Had they been to a formal and approved riding school, then many would be familiar with the benefits of purchasing a registered motorcycle, relevant documents to ask for when purchasing a motorcycle and all due diligence protocols.

In an effort to access some of the initiatives employed by the county government in view of proposing measures for the industry's safe operations, it was unearthed that, a majority were familiar with the initiative by the county government enforced by the

Meru youth service which is an enforcement wing of the county's by laws in conjunction with NTSA and the National police service to help apprehend unregistered motorcycles and motorcycles operators. Which to a great extent seemed not to be effective as it was later discovered that a good number of the motorcycles were owned by police men hence enforcement seemed to be a big challenge as it was equally a source of their livelihood. Corruption equally played a big role in ensuring initiatives employed were not effective as those arrested and apprehended would later ride out scot free in their unregistered motorcycles after having parted away or bought freedom with a few shillings as little as Kes 500. Corruption seemed to be quit a contributor to the lawlessness of the motorcycle industry as riders in Sacco's parted with Kes 50 every day for each motorcycle to sort of guarantee them some immunity from police harassment, leaving other institutions such as the NTSA as a toothless dog which can only bark without not biting. However if corruption was firmly dealt with, the law enforcement would greatly be effective and motorcycle operators would more likely than not adhere to the set rules and regulations knowing well there was no room for buying immunity from arrest or the rule of law.

In conclusion, the study established that indeed the motorcycle operators in Meru County were becoming a force that needed to be regulated. Additionally it was established that there were plans by the Ministry of Interior and Coordination which is in charge of security in conjunction with other agencies such as the NTSA and local government administration were in the process of conducting a nationwide exercise dubbed as 'project mapping' to ensure, that the government has a true detailed record of all motorcycles in the country and their owners. The re-registration exercise is aimed at curbing motorcycle related crimes especially those engaged in transport business to a great extent before the motorcycle transport industry gets out of hand.

## Conclusion

Motorcycle transport in Meru and in Kenya generally is not a new concept, but if left unchecked then bit by bit it may get to a point of no return where regulation may become a challenge. There is no doubt that motorcycles themselves have not contributed positively, in fact they have to a great deal by opening areas that were once considered hinterlands which were not accessible by cars or public service vehicles. Kenya being an agricultural state or rather relying greatly on farming, farmers in the interior are now able to transport their farm produce and citizens can now afford to move from point A to B at a convenience since the transportation cost is much cheaper and faster owing to the ease at which the motorcycles manager, in addition to not being affected by traffic jams which was evident in the study with all respondents admitting to having used motorcycle in the past three months a clear indication of how widely the transport industry has been embraced, grown and readily available. In the same line of thought, employment opportunities have been created, empowering the many jobless youths as discovered by the study, that a majority of the motorcycle operators are actually employed and who now depend on the business of transporting people using their motorcycles as their only source of income in which otherwise the untapped energy would have equally been used to commit crimes.

On the flip side the same motorcycles have posed a significant threat to residents of North Imenti County preventing them from achieving their full potential. The study established that a majority of the riders are youths aged between the ages 23 to 27 a clear indication that many have not advanced their education to tertiary institutions. Lives have been lost by the riders through accidents, crime related incidents and so on which would have otherwise served and prospered the county to greater heights.

Conclusively and backed by the findings of this study, is that motorcycle transport in Kenya and more so in North Imenti, Meru sub county is hugely ungoverned evident by the high numbers of unregistered motorcycles which in turn have caused more harm than the intended good, as established by the study and owing to the high number of cases reported on a daily emanating from motorcycle related crimes, then the harm seems to outweigh the benefits, being a mode of transport that has been embraced by many evident by the ever increasing number of motorcycles, more danger looms in the future with the expected increase in their use and operations.

As illustrated in the image (Appendix G and Appendix H) , Motorcycles or bodabodas are what we make of them, just like guns are objects which don't kill people, it is people who kill people with guns, and so is the same with motorcycles. If necessary policies and measures are put in place to help regulate and govern the industry then most of the security threats emanating from their use will be reduced to a great extent.

#### Recommendations

The study proposes numerous action points that need to be adopted by different government agencies, active and key player stakeholders as well as key security installations to help regulate and govern the motorcycle industry to ensure it operates within a controlled environment that equally guarantees a safe environment for those around. The first recommendation is to the relevant body in charge of registration of motorcycles which is the NTSA, to ensure that a re-registration exercise is conducted however painstaking slow it may be in order to have an accurate data base that is factual of how many motorcycles are in each sub county, their respective owners etc. This will be crucial as it will help with proper planning either by the national or county government or any other institution as for a good plan to be effective, relevant factual information is always key. In line with a re-registration exercise, a proposal as

good as having all motorcycles grouped into clusters commonly referred as Sacco's be issued with a unique code, that is visibly engraved on the motorcycle and the bodaboda riders safety vest and helmet that can be searched using a short code to help reveal the details of the rider such as which route they ply, their name etc. This will help pillion passengers to avoid boarding those without a code, and if it is visible then riders posing as genuine operators will shy away since they have no code.

The second recommendation is for the county government of Meru to work hand in hand with other relevant bodies such as the NPS and the regional NTSA officers in order to ensure proper orchestration and coordination of activities and initiatives aimed at enforcing laws in the motorcycle transport industry. It was evident from the study that lack of coordination between the county government enforcement officers referred to as Meru youth service, the NPS and NTSA officials made some of the crackdown operations futile.

The study recommends that police officers should equally be well remunerated to ensure that they are able to take care of their needs without having to solicit for bribes from the riders. This is key since they are the enforcers of the law with arresting power and if they cannot be manipulated by bodaboda operators then the rule of law will prevail and the sector which is largely known for disregarding the law will equally abide by the set policies and regulations. In the same line of thought is frequent trainings to be done to the police officers and NTSA officials to help keep them abreast with the documentation requirements as it was evident from the study that some officers were incapable of telling apart a genuine from a fake riding license, In addition is a law to be passed by the National assembly and be constituted in the National Police Service charter that all active police officers particularly those in the

traffic department should not be allowed to invest or run a business in the transport industry I.e. to own matatus, motorcycles, used for public transport service so as to serve the public objectively and subjecting all law offenders to the rule of law. In addition the officials need to be well remunerated to help reduce the desire of easily falling prey or victims and perpetrators of corruption. In the notion that the higher they get paid they are less likely to take small bribes which in return will make the bodaboda riders abide by the set laws and regulations in fear of paying much higher bribes. You should also raise an issue on police involvement in corruption that allows for non-adherence law enforcement on the roads.

The national government equally should strive to ensure 100% transition of students from primary schools to secondary schools and from secondary to tertiary institutions since the study established that a majority of the bodaboda operators were aged between the ages of 18-27. Lack of employment needs to be looked at keenly and addressed as many ended up operating or being employed as motorcycle riders since they could not get much better jobs, and as a result of trying to earn a living which at times just like any other business the income is too little hence the only option left is to engage in crime related activities in quest to make a quick and good earning.

The county government in partnership with the NTSA, and the NPS should ensure that they carry out sensitization workshops and training for the bodaboda operators on the importance of abiding by the set laws and policies which in return will increase the public confidence in the industry, increasing their client base which will translate to more money changing hands and as a result they might not engage in crime to earn extra coins as they will already be making good profit margins.

In addition the law enforcement officers in the county, the county government should formulate and implement by-laws in partnership with the bodaboda area managers who represent the different Saccos, set timelines under which the bodaboda riders can operate. In this case no bodaboda should be allowed to operate in the wee hours of the night which will help to drastically reduce motorcycle movements at night and any rider caught operating or contravening the law at the said hours to be prosecuted for breaking the law, In view of the fact that the study discovered most crimes are perpetrated at night.

Lastly is the area of origin who are dealers and sellers of motorcycles. They should be sensitized on the importance of registering their motorcycle and capturing relevant details of the purchasers since if the motorcycle leaves the dealership without being registered and them capturing relevant information, the likelihood of the motorcycle being used to perpetrate crime is high because it can basically not be traced or linked to anybody. In conclusion existence of fake documentation has been and is a big industry driven by cartels in all forms of enterprise in the county be in the issuance of tile deeds, log books etc. The best solution would be to completely move away or transition to a paperless system which is less likely to be manipulated. This should encompass the registration of motorcycles, motorcycle operators riding licenses etc.

#### Recommendation for Further Research

This study, having focused on only three wards in Meru County, recommends two areas of studies that can be embarked on. First the study established that lack of employment played a leading role as to why a majority of young people were actively engaged in riding commercial motorcycles who would have otherwise be engaged in meaningful formal employment or other start-up businesses, therefore a further study

on the socio-economic implications of joblessness among the youth would be timely. Secondly a further and extensive study on the implications motorcycle transport has on security but in a widened scope to capture others regions of the country. With the current projections motorcycle are expected to increase. In that view, this will help in formulation of area specific policies as each locality might be experiencing a unique challenge that might need a different approach. As security is paramount for the wellbeing and survival of any human being or citizen for that matter, all threats limiting any human being from achieving their full potential needs to be addressed, in this case motorcycles used for public transportation pose a significant threat that needs to be scrutinized with equal measure as any other significant security threat.

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## APPENDICES

## Appendix A: Researcher's Letter of Introduction.

Dear Respondent,

My name is Evans Mugambi, a student at Daystar University pursuing a master of arts in Diplomacy, Development, and International security. Conducting a research study is a requirement that I must meet to graduate, that is why it is crucial for me to collect data that will help inform my study. My research seeks to study Motorcycle transport in Kenya and its security implications. I, therefore ask for your time out of your busy schedule, to spare some minutes and answer/respond to the following questions. Your response and any information collected will be treated with utmost confidentiality. I humbly request that you read the questions carefully, and respond to them sincerely to the best of your ability.

Your time and input are much appreciated.

Respondent agrees to participate                      YES [ ]                      NO [ ]

Signature of respondent.....                      Date.....

Yours Sincerely

Evans Mugambi (15-1708)

## Appendix B: Questionnaire for Respondents

## Section A: Demographic question

## 1. Gender

Male [ ] Female [ ]

## 2. Age

a) 18-22 [ ]

b) 23-27 [ ]

c) 28-32 [ ]

d) 32-above [ ]

## 3. Occupation

a) Bodaboda rider (Full time) [ ]

b) Bodaboda rider (half time) [ ]

c) Business owner [ ]

d) Other (specify)

## 4. Level of education

a) Primary [ ]

b) Secondary [ ]

c) College/university [ ]

d) Adult literacy [ ]

e) Other (specify)

f) None [ ]

## Section B

## 1. Which of the following applies to you regarding motorcycle ownership

a) Owner [ ]

b) Employed [ ]

- c) Hired/leased [ ]
- d) Other (specify) [ ]
- e) None [ ] (If (e) **skip** to qn 3)

2. How did you acquire your motorcycle?

- a) Newly purchased [ ]
- b) Second hand purchase [ ]
- c) Not sure [ ]
- d) Gifted [ ]
- e) Inherited [ ]
- f) Other (specify) [ ]

If second-hand purchased, gifted, or inherited, did you bother to confirm whether the motorcycle was registered?

- a) Yes [ ]
- b) No [ ]

3. Is anyone in your household a bodaboda rider?

- a) Yes [ ]
- b) No [ ]

If Yes in (3)a above, how did he/she train on riding the motorcycle?

If No in (3) above, **Skip** to Qn 6

- a) Homeschooling [ ]
- b) Professional riding school [ ]
- c) I don't know [ ]
- d) Other (specify) [ ]

4. Do you hold a valid riding license?

- a) Yes [ ]

- b) No [ ]
- c) Not sure [ ]

5. Is your valid riding license genuine?

- a) Yes [ ]
- b) No [ ]
- c) Not sure [ ]

6. In your opinion generally, are motorcycles registered or not registered in this locality?

- a) Registered [ ]
- b) Unregistered [ ]

7. If unregistered in (Qn 6) what factors do you think have led to the motorcycles not being registered? Tick all that apply.

- a) Lack of enforcement by relevant institutions [ ]
- b) Choice by riders [ ]
- c) High cost of registration [ ]
- d) Other (specify) [ ]

8. Have you used a motorcycles in the last three months?

- a) Yes [ ]
- b) No [ ]

If yes in question 8, for what purpose?

- a) As a pillion passenger [ ]
- b) To transport goods [ ]
- c) As a private rider [ ]
- d) As a commercial rider [ ]

If as a pillion passenger above, did you adhere to the set regulations of safety?

a) Yes [ ]

b) No [ ]

9. Do you think motorcycles have contributed positively or negatively to this locality?

a) Positively [ ]

b) Negatively [ ]

c) Both [ ]

Please explain

10. In the last 12 months or so, have you or anyone you know experienced or witnessed motorcycles related crime?

a) Yes [ ]

b) No [ ]

If yes, what was the nature of the crime?

11. To the best of your knowledge, would you say Motorcycle riders are involved in crime as active perpetrators or participants?

a) Yes [ ]

b) No [ ]

12. kindly tick the nature of crime associated with the use of motorcycles (Tick all that apply)

13.

Nature of CRIME	RESPONSE	
	YES	NO
Murder		
Abduction/kidnapping		
Robbery		
Carjacking		
mugging		
Human trafficking		
Getaway ride		
Smuggling and transportation of illegal weapons		
Lynching and assault		
Others (specify) [ ]		

13. Who do you think are mostly involved in perpetrating motorcycles motorcycle-related crimes?

- a) Motorcycle owners [ ]
- b) Riders hired by owners [ ]
- c) Riders leasing or hiring motorcycles [ ]
- d) Pillion passengers [ ]
- e) Other (specify) [ ]

14. Who would you say are targeted in motorcycles related crimes?

Tick all that apply

- a) Men
- b) Women
- c) Motorists
- d) Business owners

- e) Residential homes [ ]
- f) Others (specify) [ ]

15. At what hours are bodaboda related crimes MAINLY perpetrated?

- a) Day [ ]
- b) Night [ ]
- c) Both [ ]

Kindly explain your choice above

16. Which of the following factors, do you think, encourage motorcycle-related crimes?

Tick all that apply

- a) Unregistered motorcycles [ ]
- b) Fake documentation and registration [ ]
- c) Unemployment [ ]
- d) Easy access to firearms [ ]
- e) Poverty [ ]
- f) Weak law enforcement [ ]
- g) Corruption [ ]
- h) Others (specify)

17. Are you aware of any measures put in place by the county government to address motorcycles related crimes?

- a) Yes [ ]
- b) No [ ]

**If YES** above, please state some of the measures

18. In your opinion, do you think institutions charged with regulating and ensuring safe practices by Motorcycle operators have been effective in discharging their mandate?

- a) Yes [ ]  
 a) No [ ]

Kindly fill in the table above on the effectiveness of these institutions concerning the regulation of the motorcycles industry.

### Section C

Please respond to the following statements;

1. All motorcycles should be registered afresh

- a) Agree [ ]  
 b) Disagree [ ]

2. A	INSTITUTION	EFFECTIVENESS		
		EFFECTIVE	SOMEHOW EFFECTIVE	NOT EFFECTIVE
1	National Police Service (NPS)			
1	National Transport and Safety Authority (NTSA)			
	Kenya Revenue Authority (KRA)			
1	Bodaboda Association of Kenya (BAK)			

Motorcycles should be issued with a unique code, engraved on both the motorbike and safety vest of the rider to ensure it is visible, that it can be searched using a short code to reveal the name and details of the rider/owner.

1. Agree [ ]  
 2. Disagree [ ]

3. That bodabodas offering public transport service should be fitted with a tracking chip that shows real-time location to relevant security agencies.
  - a) Agree [ ]
  - b) Disagree [ ]
4. Regular impromptu inspections and crackdown to be carried to ensure adherence to the set regulations.
  1. Agree [ ]
  2. Disagree [ ]
5. That working hours of motorcycles to be regulated.
  - a) Agree [ ]
  - b) Disagree [ ]
6. What do you think are the challenges facing the motorcycle industry when it comes to regulation? Kindly explain.
7. Any other relevant comment/response

### Appendix C: Interview Guide

Dear interviewee,

I seek to conduct an interview on Motorcycle Transport in Kenya, and it's Security Implications, A case of North Imenti, Meru sub-county.

Your time and input are much appreciated.

Interviewee agrees to participate YES [ ] NO [ ]

Signature of respondent/interviewee.....

Date.....

Yours Sincerely

#### Evans Mugambi (15-1708) Interview Questions

1. In your opinion, what is the nature of crimes associated with the use of motorcycles for public transportation?
2. What factors can you attribute to the rise or increase of motorcycles in this locality?
3. Do you think the motorcycle industry in the county is well regulated?
4. What are some of the challenges faced, when it comes to regulating the Motorcycle industry?
5. In your line of duty and experience, on average how many cases do you receive or are reported to you concerning motorcycles related crimes every quarter?

6. Who would you say accounts for a bigger percentage of perpetrators of motorcycles related crimes? Age-wise, gender, and ownership (Motorcycles owners, employees, or those that lease/hire the motorcycles).
7. Who would you say are mainly and most often targeted by the perpetrators of these motorcycles related crimes?
8. Based on your experience, at what hours of the day or night are these crimes rampant?
9. What do you think is/are the major reasons as to why motorcycle operators do not strive to have their motorcycles registered?
10. Do you think the county government has put enough measures in place, to curb motorcycle related crimes in Meru?
11. Kindly comment on some of the measures that have been put in place to curb motorcycles related crimes if any?
12. In your opinion, to what extent have the following institutions/organs been successful in regulating motorcycles and in addressing Bodaboda-related crimes?
  - ✓ NPS
  - ✓ NTSA
  - ✓ KRA
  - ✓ BAK
13. What best approach would you recommend that needs to be done, that has not been done, to effectively regulate the bodaboda motorcycle industry to ensure a safer environment?
14. In your opinion, have motorcycles contributed positively or negatively in this locality? Please explain.

## Section B

1. All motorcycles should be registered afresh
  - c) Agree [ ]
  - d) Disagree [ ]
  
2. All motorcycles should be issued with a unique code, engraved on both the motorbike and safety vest of the rider to ensure it is visible, that it can be searched using a short code to reveal the name and details of the rider/owner.
  3. Agree [ ]
  4. Disagree [ ]
  
3. That bodabodas offering public transport service should be fitted with a tracking chip that shows real-time location to relevant security agencies.
  - c) Agree [ ]
  - d) Disagree [ ]
  
4. Regular impromptu inspections and crackdown to be carried to ensure adherence to the set regulations.
  3. Agree [ ]
  4. Disagree [ ]
  
5. That working hours of motorcycles to be regulated.
  - c) Agree [ ]
  - d) Disagree [ ]
  
6. What do you think are the challenges facing the motorcycle industry when it comes to regulation? Kindly explain.

7. Any other relevant comment/response

Demographics

1. Do you mind telling me your age?

- a) 18-22
- b) 23-27
- c) 28-32
- d) 32-above

2. Gender

- a) Male
- b) Female

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## Appendix D: Interview Guide for FGDs

## Section A: Demographic question

## 1. Gender

Male [ ] Female [ ]

## 2. Age

e) 18-22 [ ]

f) 23-27 [ ]

g) 28-32 [ ]

h) 32-above [ ]

## Section B: Interview guide

## 1. What are your general opinion regarding motorcycle registration in this?

a) Registered [ ]

b) Unregistered [ ]

## 2. If unregistered in (Qn 1) what factors do you think have led to the motorcycles not being registered?

## 3. Do you think motorcycles have contributed positively or negatively in this locality?

## 4. What factors, do you think, encourage motorcycle-related crimes?

## 5. In your opinion, do you think institutions charged with regulating and ensuring safe practices by Motorcycle operators have been effective in discharging their mandate?

## 6. What measures or initiatives are you aware of that the county government has put in place to help curb motorcycle related crimes?

## 7. Do you think the NTSA is effective in regulating the motorcycle transport industry?

8. What functions roles do the Bodaboda area managers play?
9. What best approach, would you recommend that needs to be done, that is yet to be done to effectively regulate the bodaboda motorcycle industry to ensure a safer environment?

### Section C

1. All motorcycles should be registered afresh
  - e) Agree [ ]
  - f) Disagree [ ]
2. All motorcycles should be issued with a unique code, engraved on both the motorbike and safety vest of the rider to ensure it is visible, that it can be searched using a short code to reveal the name and details of the rider/owner.
  5. Agree [ ]
  6. Disagree [ ]
3. That bodabodas offering public transport service should be fitted with a tracking chip that shows real-time location to relevant security agencies.
  - e) Agree [ ]
  - f) Disagree [ ]
4. Regular impromptu inspections and crackdown to be carried to ensure adherence to the set regulations.
  5. Agree [ ]
  6. Disagree [ ]
5. That working hours of motorcycles to be regulated.
  - e) Agree [ ]

f) Disagree [ ]

6. What do you think are the challenges facing the motorcycle industry when it comes to regulation? Kindly explain.

7. Any other relevant comment/response

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## Appendix E: Ethical Clearance

**VERDICT: APPROVAL WITH COMMENTS**

Daystar University Ethics Review Board

Our Ref: DU-ERB/12/08/2021/000560

Date: 12<sup>th</sup> August 2021

To: Evans Mwirigi Mugambi

Dear Evans,

**RE: MOTORCYCLE TRANSPORT IN KENYA AND ITS SECURITY IMPLICATIONS:  
A CASE OF NORTH IMENTI, MERU SUB-COUNTY. (2008-2021)**

Reference is made to your ERB application reference no. 210721-02 dated 21<sup>st</sup> July 2021 in which you requested for ethical approval of your proposal by Daystar University Ethics Review Board.

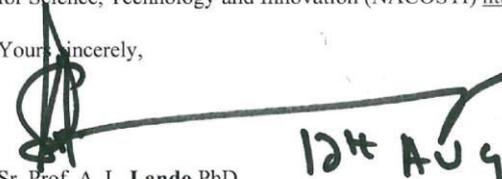
We are pleased to inform you that ethical review has been done and the **verdict is to revise to the satisfaction of your Supervisors before proceeding to the next stage**. As guidance, ensure that the attached comments are addressed. Please be advised that it is an offence to proceed to collect data without addressing the concerns of Ethics Review board. Your application approval number is **DU-ERB-000560**. The approval period for the research is between **12<sup>th</sup> August 2021 to 11<sup>th</sup> August 2022** after which the ethical approval lapses. Should you wish to continue with the research after the lapse you will be required to apply for an extension from DU-ERB at half the review charges.

This approval is subject to compliance with the following requirements.

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by Daystar University Ethics Review Board.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to Daystar University Ethics Review Board within 72 hours of notification.
- iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to Daystar University Ethics Review Board within 72 hours.
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of a signed one page executive summary report and a closure report within 90 days upon completion of the study to Daystar University Ethics Review Board via email [duerb@daystar.ac.ke].

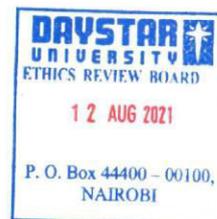
Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and other clearances needed.

Yours sincerely,

  
Sr. Prof. A. L. Lando PhD  
Chair, Daystar University Ethics Review Board

12<sup>th</sup> AUG 2021

Encl. Review Report



Appendix F: Research Permit


  
**REPUBLIC OF KENYA**


  
**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION**

**Ref No: 569183**
**Date of Issue: 23/August/2021**

**RESEARCH LICENSE**



**This is to Certify that Mr.. Evans Mwirigi Mugambi of Daystar University, has been licensed to conduct research in Meru, Nairobi on the topic: MOTORCYCLE TRANSPORT IN KENYA AND ITS SECURITY IMPLICATIONS: A CASE OF NORTH IMENTI, MERU SUB -COUNTY. (2008-2021) for the period ending : 23/August/2022.**

**License No: NACOSTI/P/21/12465**

**569183**

**Applicant Identification Number**

  
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Appendix G: Image Showing the Intended use of *Bodaboda*



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Appendix H: Image of *Bodaboda* being used to Commit Crime



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## Appendix G: Plagiarism Report

## Evans Mugambi Thesis - 25th October 2021

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