

**GENDER PERSPECTIVES OF MOTORCYCLE MODE OF TRANSPORT ON MALE  
AND FEMALE USERS IN KISII COUNTY, KENYA**

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**A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF HUMANITIES AND  
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**SEPTEMBER, 2018**

**DECLARATION**

I confirm that this thesis is my original work and has not been presented in any other university/institution for certification. The thesis has been completed by referenced works duly acknowledged where text, data, graphics, pictures or tables have been borrowed from other works including the internet; such sources have been accurately referred to in accordance with anti-plagiarism regulations.

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**DEDICATION**

This study is dedicated to my husband Eric Mobisa, my children; Beaver Kerongo, Gad Kebwaro and Ruth Moige.

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**ABBREVIATIONS**

ABS	:	Anti-Lock Braking System
AIDS	:	Acquired Immuno Deficiency Syndrome
GAD	:	Gender and Development
GDP	:	Gross Domestic Product
HIV	:	Human Immuno Deficiency Virus
KNBS	:	Kenya National Bureau of Statistics
KDDP	:	Kisii District Development Plan
LDC	:	Least Developed World
MDGs	:	Millenium Development Goals
NHTSA	:	National Highway Traffic Safety Administration
NPA	:	National Police Agency
SPSS	:	Statistical Package for Social Sciences
WIEGO	:	Women in Informal Employment Globalizing and Organizing
WHO	:	World Health Organisation.

## OPERATIONAL DEFINITION OF TERMS

<b><i>Bodaboda-</i></b>	A term that used to refer to motorcycles. Before the emergence of motorcycle transport, bicycles were the main means of transportation across the border-that is from Kenya to Uganda or between Kenya-Uganda borders. The term was then adopted by the motorcycle operators both across the boarder and within the towns and villages of Kenya though there no boarders to be crossed. It is actually an English name (border) that has been localised to <i>boda</i> .
<b>Gender-</b>	Behaviors, roles and relationships of male and females in regard to the usage of motorcycle mode of transport
<b>Gender perspectives-</b>	Taking into account gender-based differences when looking at any social phenomenon, policy or process it focuses on making women's as well as mens concerns and experiences an intergral dimension of aventure so that both men and women benefit equally
<b>Gender sensitive strategies-</b>	Acknowledging and highlighting existing differences between men and women in an effort to improve the motorcycle mode of transport.
<b>Health challenges-</b>	Medically related illness associated with the usage of motorcycle mode of transport
<b>Motorcycle customers-</b>	These are men, women, who frequently use motorcyces as a means of transport.
<b>Motorcycle drivers-</b>	The male and females who operate the motorcycles. In this study the terms motorcycle drivers and operators will be used interchangeably to refer to those people who transport passengers using motorcycles.

**Motorcycle taxis-**

These are the motorcycles that are used as taxis since they do not have definite destinations. Indeed almost all the motorcycles in the transport sector are used as taxis since they do not have designated destinations.

**Safety challenges-**

Risks involved in the usage of motorcycle transport

**Socio-economic-**

Analysis of the likely effects of motorcycle mode of transport on the daily lives males and females

**ABSTRACT**

Motorcycles have become a popular means of transport in most parts of the world. Indeed, in the last 10 years the number of motorcycles has doubled in many developing countries. The purpose of the study was to examine the gender perspectives of motorcycle transport in Keumbu sub-county, Kisii County. The objectives of the study were to establish the demographic characteristics of customers of motorcycle mode of transport in terms of gender, examine the socio-economic effects of motorcycle transport on men and women; explore safety and health problems that afflict men and women who use this mode of transport and to identify gender sensitive strategies to mitigate the negative effects of motorcycle transport in Keumbu Sub-County, Kisii County. The study employed descriptive survey design. The study utilised purposive sampling technique to select respondents. The study was guided by A Social Role Theory. Data collection instruments included, interview schedules and focus group discussions guide. Data collection techniques included administration of interviews and focus group discussions to the respondents, secondary data was gathered in the period between 2011 to 2015. Data was analysed using the Statistical Package for Social Sciences (SPSS) and was presented in form of frequencies, percentages, tables and figures. The findings indicated that the frequent users of motorcycle transport in Keumbu Sub-County, Kisii County were school going boys and girls and male and female adults who engaged in trade and professional duties. The socio-economic issues that emanated from motorcycle transport include moral decay, drug abuse and school drop out. The safety and health problems associated with motorcycle transport included criminal activities, respiratory diseases and impotence. The gender sensitive strategies to curb the negative effects of motorcycle transport included sensitization of motorcycle users on health risks and security measures and institutionalization of gender sensitive policies and regulations to ensure proper utilization of motorcycles. The conclusions of the study were that motorcycle transport was a popular mode of transport and had social, economic, safety and health challenges affecting male and female residents of Keumbu Sub-County, Kisii County. The study recommended the adoption of the following strategies; promotion of protective clothing, sensitization on appropriate security measures and timely medical care for motorcycle users. The areas for further study include a similar study in other parts of the country to increase generalizability of the study findings across Kenya and a study aimed at improving the operations of motorcycles in order to attract more women operators.

## CHAPTER ONE

### INTRODUCTION

#### **1.0 Background of the Study**

Transportation in the rural setting is recognized as a basic means for sustaining agricultural growth and with it the rural economy. Throughout the world, rural areas are home to three in every four people living on less than \$ 1 a day. With the new poverty line of \$ 1.25 a day that was announced by the World Bank in 2008, and the fact that over three billion people throughout the world live below that amount, it is obvious that the number of rural people living under poverty is set to go up even further. A majority of this rural poor live in the developing and Least Developed Countries (LDC). It follows that quick access to markets in agriculturally driven economies is central to poverty reduction. Such aims can be achieved through improvements in gender equity and gender mainstreaming of the rural transport infrastructure and means.

In the past, transport planners, geographers, economists and policy makers all over the world have increasingly recognised that the differences in travel and activity patterns between men and women are central and a recurring feature in transportation systems all over the world (Porter 2007). It is therefore necessary to put mechanisms in the motorcycle industry to ensure there is no gender biasness in the transportation systems. Indeed, transport is inherently central to development of nations, it is not only a necessity of life but has a resultant effect on all aspects of our existence including mobility needs.

However, Porter (2007), noted that, rural transport falls short of the required quantity and quality in existing infrastructure expected to provide for individual or households' mobility needs. The rising rates of unemployment and poverty has spurred a rapid growth of motorcycle transport sector in the rural areas. Notwithstanding this global trend, there is paucity of data on the gender perspectives of motorcycle transport services, both men and women have sought this form of transport because of its quick accessibility. Young men have sought this form of employment because of its ability to reduce poverty levels. Infact, riding motorcycle is associated with poverty and lack of employment options (Women in Iformal Employment Globalizing and Organising, 2013).

According to the World Health Organisation (2007), Motorcycle transportation has increasingly gained popularity in many parts of the world. The motorcycles have become a major means of transport which is key for the economic growth of any country. Therefore, in order to enhance development, the motorcycle transport sector requires equal participation of men and women. Unfortunatety, road safety has worsened with motorcycle motorization. It is now believed that motorcycle use has become a very dangerous mode of road travel since the motorcycles have much high power- to- weight ratios and are capable of high speed.

With the advent of motorcycle transport, the quantity of fatalities by road accidents is now 10 times that of 5 years ago (World Health Organisation, 2007). According to the World Report (2007), The World Health Organisation (WHO 2004) and The World Bank (WB2007) have advised that care should be taken to avoid adoption of policies which could encourage the growth of two-wheeler traffic since they are the leading causes of accidents.

Studies from many parts of the world show that access to intermediate means of transport such as wheelbarrows, motorcycles and animals are heavily gendered and women are mainly sidelined. Malmberg-Calvo (1994) found out that motorcycle ownership was entirely a prerogative for men.

In the Pudukkothi district in the Yamil Nada estate in India, motorcycle mode of transport is widely used and hence the usage of motorcycles by women was included in the rural development programme. Admittedly with a larger, strategic goal of empowering women. More than 50,000 women learned to ride motorcycles in one year alone (Rao 1994 & Doran 1996).

A decade ago, use of motorcycles on rural roads was well established in many South east Asian countries and a number of African countries. Though motorcycle numbers were low, they have been steadily increasing ever since. For instance in Tanzania, registered motorcycles have increased by a remarkable 40,000% from 2000 motorcycles to over 8000,000 in 2014 (Bishop and Amos 2015).

Jacobs (1993) pointed out that, in Africa traditional gender roles still have some influence on individuals, this explains the minimal participation of women in the operation of motorcycles. He further adds that years ago the expectations were that women were supposed to get married and stay at home to raise a family. The man was expected to go out to work to support his family. Today there is more sharing of family and household responsibilities and both male and females are working in less traditional careers.

Ahmed (2000) holds that women's transport needs in less developed countries are hardly sufficiently documented. There is need for much greater awareness of the social-intra-household dynamics that dictate accessibility, control and ownership of transport where women should be targeted as a special group. He further adds that motorcycles enable women entrepreneurs to travel rapidly to and from markets, however, surveys undertaken in rural household patterns reveal the predominance of female patronage in rural transport; however, men rather than women, are the main beneficiaries of appropriate transport technology. Women's disadvantaged position in transport is apparent throughout (Ahmed, 2000).

Porter(2007) points out that in much of the rural Africa, women's principal means of livelihood is through agricultural production and associated trade. In areas with poor or expensive transport services, women face particular constraints in accessing markets. He further adds that women's marketing mobility may be restricted not merely because of limited resources to pay for fares to markets for themselves and their goods, but also because their male family members are suspicious of their travelling long distances from home (Porter 2007).

In Africa more than elsewhere in Nigeria the road network suffers from lack of regular maintenance plans. For instance motorcycles in Liberia are responsible for up to 60% of all motorized transport in Monrovia (Zegras & Gakenheimer 2006). However, motorcycle transport has actually not solved mobility of women to markets since they are not independently involved in its operation. Therefore, there is urgent need for women to be allowed to access motorcycle transport fully in order to realize development (Human Rights Watch Report, 2007).

In Nigeria, motorcycle transportation has become a choice of most of those who cannot afford their own motorcycles or cars, majority of whom are women (Human Rights Watch Report, 2004).

However, one of the disadvantages of commercial motorcycles is the frequent accidents caused by rough driving. Added to that is the unlady like nature of climbing and disembarking from the motorcycles, indeed it is not a good sight seeing a woman falling off from a motorcycle with most of her body exposed because of the general nature of women's wrapper and skirt dresses, this issue has always touched the sensitivity of the general public in Nigeria and has been an outstanding gender issue related to motorcycle service ( Human Rights Watch Report, 2004).

Nakiyimba (2011) explains that in Uganda motorcycle passengers are more often injured than operators and women are prone to motorcycle accident since they sit on the *bodaboda* with their feet hanging on one of the sides making it difficult for the motorcycle to balance, the moment there is an accident involving the *bodaboda* they fall off.

Rutto (2010) established that in the operation of motorcycle business women are the main customers while men are the riders. However, no extensive study has been carried out with a focus on the gender perspectives of motorcycle transport.

The removal of the importation tax on motorcycles by the government of Kenya in 2008, saw the number of motorcycles leap from 3,759units in 2005 to 91,151units in 2009 (Kenya Bureau of Statistics, 2009). Motorcycles are common in rural areas due to inaccessible roads and scarce employment opportunities for the rural youth.

According to the Kenya Economic Survey (2012), the motorcycle transport is a key economic and social pillar since it is an income generating activity and a source of employment. Mbugua (2011) in his study on the socio-economic effects of motorcycle revolution in Kenya, established that the motorcycle taxi business holds an economic potential to households yet they pose major dangers to health and safety of road users when traffic rules are not enforced by traffic officers. However, in this study the gender perspectives of the motorcycle transport were not taken into consideration.

A survey done by ThePriceWaterHouseCoopers in 2011 showed that in Kisii town there were close to 6,000 *bodaboda* motorcycle taxis which made it increasingly difficult for pedestrians walking along the town's road. The study established that women engaged in small businesses were the main users of motorcycles followed by school going children. Primary school male teachers were also identified as frequent users of the motorcycles. However, the survey did not indicate the differential effect of the motorcycle industry on men and women like while motorcycle transport offers a source of income for male operators it puts female users at a risk of being wooed by the male operators.

In Keumbu Sub-County, Kisii county, the use of motorcycle transport is very rampant, as there are few tarmaced roads and other feeder roads are not easily accessible to motor vehicles. Although this industry has created employment for many male youths, it is not clear how the industry affects children, female youths, women and men.

Further, there are other gender related challenges of the motorcycle industry that are experienced in this area that have not been researched on. This study therefore sought to examine the gender perspectives in the motorcycle transport sector.

### **1.1 Statement of the Problem**

The motorcycle transport industry is a relatively new phenomenon which is rapidly gaining popularity in many parts of the world. Some researches conducted related to the industry focus majorly on the role of motorcycles in economic growth and raise concerns on the ever increasing accidents.

The emergence of *bodaboda* motorcycles as a means of transport in the village paths has brought dimensions of suitability, sensitivity and gender awareness of this mode of transport . Although gender sensitivity has been a concern, only a few gender sensitive studies have been conducted to address the challenges emanating from the motorcycle transport.

Nyachio (2015) noted that emergence of motorcycles as a means of transport brought a new dimension on the safety of *boda boda* transport, she further pointed out that motorcycles pose a threat to the structure and functioning of a society. Although transport needs in rural areas have necessitated the use of motorcycle mode of transport the gender related challenges emanating from this mode of transport among its users have not been considered.

Karimi (2016) on her study found out that, *bodaboda* business has socio-economic benefits which include financial independence, ability to provide for families and employment opportunities for the youths, she also added that, *bodaboda* business was dominated by the males in terms of drivers and owners.

Motorcycle mode of transport seems to solve travel needs in the rural areas, though concerns have been raised on their safety and socio-economic benefits; no studies have been carried out to investigate the gender perspectives of this mode of transport. This study therefore, sought to examine the gender perspectives of motorcycle mode of transport.

## **1.2 Research Objectives**

The main objective of the study was to examine the gender perspectives of motorcycle transport in Keumbu Sub-County, Kisii County.

The study was guided by the following specific objectives:

- i. To establish the demographic characteristics of customers of motorcycle mode of transport in Keumbu sub-county Kisii County, from a gender perspective.
- ii. To examine the socio-economic effects of motorcycle transport on men and women in Keumbu Sub-County, Kisii County.
- iii. To explore the health and safety challenges that affect men and women who use motorcycle transport in Keumbu Sub-County, Kisii County.
- iv. To identify gender sensitive strategies to improve motorcycle transport in Keumbu Sub-County, Kisii County.

### **1.3 Research Questions**

The study was guided by the following research questions:

- i. What were the demographic characteristics of the customers of motorcycle mode of transport w in Keumbu sub-county Kisii County, in terms of gender?
- ii. What were the socio-economic effects of motorcycle transport on men and women in Keumbu sub-county, Kisii County?
- iii. What were the health and safety challenges that affected men and women who used motorcycle transport in Keumbu Sub-County, Kisii County?
- iv. What gender sensitive strategies could be used to improve the motorcycle transport in Keumbu Sub-County, Kisii County?

### **1.4 Assumptions**

The following were the assumptions of the study:

- i. The respondents would be willing to answer to the questions asked in the research instruments.
- ii. There would be truthfulness and honesty from the respondents in giving the required information.
- iii. The data collected would be useful in improving motorcycle transport in Keumbu Sub-County, Kisii County.

### **1.5 Significance of the Study**

The study may inform on the gender perspectives of motorcycle transport in Keumbu Sub-County. The study findings may also inform the motorcycle customers and drivers so that they can come up with strategies to maximize the benefits and curb the negative effects of motorcycle transport in Keumbu Sub-County and other rural areas in Kisii County and Kenya in general.

The findings from this study may shed light on the aspects of motorcycle transport that needs regulations in order to function appropriately. Such findings form the basis upon which the government and local authorities set policies to improve motorcycle transport in Keumbu Sub-County, Kisii County and other rural areas in Kenya.

To the academia and researchers, the study may contribute to the wealth of knowledge and identify other areas for further studies in relation to the study topic because Keumbu Sub-County has socio-economic factors similar to other regions in Kenya.

### **1.6 Justification of the Study**

Currently, motorcycle transport is popular in Kenya more especially in rural areas which have hilly terrains and poor feeder roads making social amenities like hospitals and schools not to be easily accessible by motor vehicle transport. Keumbu Sub-County in Kisii County is a typical rural area in Kenya with hilly terrains and poor feeder roads.

In this area many motorcycles can be seen transporting men and women to their places of work as well as school going children to their various institutions. This industry has therefore contributed immensely to economic development in Keumbu Sub-County, despite many accidents that have occurred in this region killing many people and maiming others.

In Keumbu sub-county almost all motorcyces are owned by men and all the drivers are men, even though both males and females use this mode of transport in running their daily errands. This scenario created a need to examine the gender perspectives of motorcycle transport in the rural areas of Kenya with a focus on Keumbu Sub-County, Kisii County, this area was chosen to represent other areas where this kind of transport is common.

### **1.7 Scope of the Study**

This study focused on the gender perspectives of motorcycle transport in Keumbu Sub-County in Kisii County. The study population included adult male and female customers as well as motorcycle drivers. The study collected data for the period between 2011 and 2015. The period was appropriate due to accessibility and availability of related information from the Kisii District Development Plan (2008-2012) and Kisii County Development Plan (2012-2016).

### **1.8 Limitations and Delimitations of the Study**

Some motorcycle drivers, women and girls were hesitant to get involved in the data collection session. Others felt that some findings might incite stringent traffic rules against them. However, the researcher assured them that data collected was only to be used for the purpose of research hence convincing the hesitant women and girls to participate in the data collection exercise.

In addition, the researcher explained to the motorcycle drivers that the findings of the study might positively improve their industry hence, convincing them to participate in the data collection exercise.

The researcher worked with the motorcycle drivers who were willing to participate in the study until the end even during peak hours.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.0 Introduction

This chapter reviewed literature related to the gender perspectives of the motorcycle transport, it also documented theory related to the demographic characteristics of users of motorcycle transport mode of transport, socio-economic effects of motorcycle transport and also safety and health challenges related to the motorcycle transport. In addition, theoretical framework and conceptual framework were also documented in this chapter.

#### 2.1 The Demographic Characteristics of Users Motorcycle Mode of Transport

In China motorcyclists are predominantly male- about 85% of motorcycle licence holders are male (UltraFeedback, 2010). The UltraFeedback report further pointed out that there were differences between male and female motorcycle riders, the mean age for women riding motorcycles was 40 yrs compared to 43 yrs for men. In addition three times more women than men rode scooters, women were likely to own a motorcycle with an engine capacity of 126cc and 260cc whereas men were three times likely to have a motorcycle of more than 750cc.

According to the 2013 Report on characteristics of motorcycle riders in Australia, almost half; 49 % of motorcyclists are aged between 40-59 years, 23% aged 26-39 years and 14% aged 16-25years. On average these riders have been riding for 16 years including 30% with over 20 years and 27% with less than 6 years. The report further points that, 42% of riders in Australia ride almost daily, 32% ride only on weekends and a further 9% ride only on week days. They ride on average approximately 7 hours per week

Duprey (2017) asserted that women represented 14% of all motorcycle owners in 2014 up from 6% in 1990 and 10% in 2009. He further pointed out that, the middle aged males who own motorcycles have decreased in % from 94% in 2009 to 86% in 2014. This is an indication that the gender roles have been changing in the western society in recent decades and they have generally become more flexible (Jacobs, 1993).

Santrock (2005) pointed out that, gender determines what is expected and allowed in a man or woman in a given context. In most societies there are gender differences and inequalities between men and women as appertains to responsibilities assigned and activities undertaken. Gender is therefore part of socio-cultural context, this explains the minimal participation of women in the operation of motorcycles

Nyachio (2015) observed that, *bodaboda* operators in Kisumu County in Kenya were young males and a large number were married, she also noted that most *bodaboda* riders were literate, the majority having a secondary education, she further pointed out out that, passenger sitting style is a gendered issue where women are expected to be modest and hence they are expected to sit 'properly' on a motorcycle, it is on this ground that women in Kisumu sit across the motorcycle for purposes of decency. This has discouraged some of them from using the motorcycle mode of transport.

According to the Human Rights Watch Report (2004) the motorcycle transport is not convenient for female customers due to the unlady like nature of climbing and disembarking from the motorcycles, indeed it is not a good sight for a lady to fall off from a motorcycle with most of her body exposed because of the general nature of women's wrapper and skirt dresses.

The Human Rights Watch Report further points that, in order to enforce public morality, the practice of men and women sitting very close to each other should be stopped.

Ochieng and Egessa (2003) pointed out that most of the bodaboda operators in both Busia and Mwea are primary school drop-outs. According to Nyachio (2012) Majority of the *bodaboda* operators in Kitenga are young people aged between 20-29years, she also added that majority of the bodaboda operators did not own the motorcycles they rode.

## **2.2 Socio-economic Effects of Motorcycle Transport**

Like many economic activities that are intensive in infrastructures, the transport sector is an important component of the economy impacting on the development and the welfare of populations. When transport systems are efficient, they provide economic and social opportunities and benefits that result in positive multipliers effects such as better accessibility to markets, employment and additional investments. When transport systems are deficient in terms of capacity and reliability, they have economic cost such as reduced or missed opportunities. (Mbugua, 2011)

The motorcycle transport has rapidly increased the mobility of women entrepreneurs to and from markets. Hole et al (2006) in their study of benefits of motorcycles among women in India indicated that motorcycles offered speed and convenience. Transport carries an important social and environmental load, which cannot be neglected, however, in policy documents gender equality is mainly addressed as a quantitative problem where gender division is at least 40% of one gender and 60% of the other gender. This discourse takes its point of departure from organisation research where minority groups are stereotyped and excluded from decisions.

Elliot, M.A, Baughan, C.J., Broughton, J. and Chinn, B. et al., (2010) point out that mobility is the most fundamental and important characteristic of an economic activity as it satisfies the basic need of going from one place to another. They further observed that economies that possess greater mobility are often those with better opportunities to develop than those suffering from scarce mobility. Reduced mobility therefore impedes development while greater mobility is a catalyst for development. Therefore, where they exist, motorcycle taxis provide huge social and economic benefits in rural areas

According to World Bank (2008), women and men can ride motorcycles and benefit from the mobility that they provide. However, due to the socio-economic, gender- power and cultural reasons, almost all the the motorcycles used in the transport sector are owned by men. Accordingly, most motorcycles are owned and operated by men (World Bank, 2008). The World Bank(2008) also points out that in some countries including, Laos, Vietnam and Burkina Faso many women own and ride motorcycles, but seldom are 30% of urban motorcycles driven by women and the rural percentage is much lower.

Commercial motorcycles provide employment for many youths in some African Countries, in Lagos for example, commercial motorcycles provide jobs for a large number of people, unemployment is cited as a major reason for getting into the '*okada*' business (Kumar 2011). Similarly in Doula Cameroon, Commercial motorcycle taxis provide employment for the unemployed youth.

Almost all motorcycle taxis are operated by men in Cameroon (Kempstop and Starkey 2013). They also point that, motorcycles offer young men attractive livelihoods while stimulating employment in supply and maintenance services, since motorcycle taxis are replaced regularly, second hand markets enable greater diversified adoption of much higher maintenance service demand.

Recent surveys in districts in Tanzania (Willio and Starkey, 2013) and in Cameroon (Kempstop and Starkey, 2013) indicated that the only motorised transport services that people can rely on are motorcycle taxis hence rural people rate them very highly, Kempstop and Starkey (2013), also pointed out that motorcycle taxis provide rural employment for young men.

According to Howe (2010) in his study on Uganda's rural urban low capacity transport services, *bodaboda* business offers job opportunities to the youths and therefore is a form of earning livelihood. Employment is thus stimulated by the economic benefits of passenger mobility and marketing opportunities, indeed motorcycle taxis enable some women entrepreneurs to travel rapidly to and from markets since they are more available and timely (World Bank, 2008).

Hisam (2006), observed that the motorcyclists in Nigeria claim that female customers pay better than male customers. In his study on the socio-economic effects of commercial bikes in Sierra Leone he, asserted that the youth are increasingly determined to improve their socio-economic status through labour. The study found out that commercial motorcycle driving was a catalyst for development through provision of employment especially for the male youth category. These studies however, didn't focus on how motorcycle mode of transport can benefit women in terms of providing employment especially for young women.

### **2.3 Safety and Health Challenges Associated with Motorcycle Mode of Transport**

According to (Hole, G.J., Tyrell, L. and Langham, M. (2006) Transport services need to be understood from the perspective of the passengers of different genders and types, hence operators and regulators and development agencies need to put different perceptions into consideration. He further adds that, some people view motorcycles as archaic, unsafe and inappropriate means of transport, such sentiments are common among the ruling authorities in several South African nations, Columbia and China. It was such attitudes that led to motorcycle taxis being made illegal in Ghana. Women themselves are eager to venture into the male dominated areas though they are also very conscious of the social perceptions for instance in Malawi, women use motorcycles to load carries by simply pushing them and not getting on (Transport Report 1996).

Burn (1996) points out that, rural women are inhibited from owning or using certain types of intermediate transport such as motorcycles since bicultural beliefs ascribe such transport modes to men. Tavis (1992) argues that, some women will not use public transport for fear of sexual harassment. Similarly in Keumbu sub-county, social perception may be a challenge to women in their attempt to adapt the usage of motorcycle mode of transport.

Starkey (2012) points out that, motorcycles and motorcycle taxi present many problems on safety, regulation and enforcement. Young men operating motorcycles are often risk takers, motorcycle taxis are also risky due to poor consideration by other road users, their lack of user protection and their instability when balance is impaired by potholes, loads, speed and knocks.

He further points out that, human behaviors cause many motorcycle accidents and hence education and awareness campaigns supported by consistent and fair enforcement are appropriate.

UltraFeedback report (2008) points out that, drivers of other vehicles tend to overlook motorcyclists when using the road, they also believe that motorcyclists are not easily seen in traffic, this situation compromises the safety of users of motorcycle transport. According to Starkey (2012) motorcycles are by their nature, less stable than four wheeled vehicles.

Braking too hard can destabilise a motorcycle which can lead to the front or rear wheel locking causing the bike to overturn or slide. Motorcycle Anti-lock Braking Systems (ABS) are relatively recent innovations by motorcycle manufacturers to counteract these problems. Whatever the safety problem encountered by car occupants, it is far exceed by the much more dangerous situation facing motorcyclists, bicyclists and pedestrians.

Walking is especially dangerous in the indian cities, where over half of all traffic fatalities are pedestrians (Jacobs & Cutting, 1986). That is twice as high as the pedestrian share of traffic fatalities in China (25%) and is probably attributable to lack of sidewalks, pedestrian crossing and pedestrian traffic signals in the Indian cities.

According to Perco (2008), motorcycles pose interesting challenges in the developing countries that are not faced by the rest of the world, first of all the basic health and safety measures are absent in the motorcycle transport sector, secondly long and irregular work hours under high stress are also common and finally the work conditions are dangerous which include; poor roads,

unhealthy working conditions such as inhalation of fumes, lack of protection against rain, sun, heat as well as lack of basic facilities, there is also the risk of contracting HIV/AIDS.

Ochieng and Egessa (2003) observed that early marriages, teenage pregnancies and HIV/AIDS menaces are rampant in Busia which have been closely attributed to cross border trade and *bodaboda* business. Drummond & Hansford (1992); Hao and Cherlin (2004), in their various studies, pointed out that adolescent pregnancies is the major reason cited by female secondary school for dropping out of high school. It was obvious that adolescent pregnancy affects the teens (Fox 2011).

The research by World Health Organisation (2007) shows that Carbon Monoxide which is released through motorcycle exhaust can result in drowsiness and inability to concentrate, and prolonged exposure can lead to unconsciousness or even death. The study also found out that inhaling gases or particulate matter released in motorbike exhaust can trigger asthmatic attack, even among those who are not chronic sufferers of the condition.

Everret, S.A., Shults, R.A., Barriers, L.C., Sacks, J.J., Lowry, R. And Oeltmann, J. (2001) examined national trends in transportation related injury risks and safety behaviors of US high school students, they found out that many young people place themselves at unnecessary risk from motorcycle related crash and fatalities because of improper use of safety equipment. Amino (2001) points out that, *bodaboda* operators and customers are exposed to sexual harassment and that motorcycle accidents are a major challenge.

Motorcycling has always been seen as a dangerous activity which causes a myriad of health problems. To start with, low sexual urge in male motorcycle riders is blamed on the many hours of riding the motorcycles in a sitting position. In addition, motorcycle riding has been associated with respiratory diseases like Pneumonia and chest pains (Elliot et al 2010). Indeed, this fear has even caused some people who value cycling to confine their experience on paved roads while avoiding the off roads as much as possible (WHO, 2007).

Maino (2002), asserted that motorcycle riders do not get proper diet thus their health deteriorates acutely and due to dusty roads they easily contract pneumomia, acute flu and some even develop kidney stones as a result of their bodies emptying alot of acid.

However, for all its supposed dangers, studies have also found that off road motorcycling offers a lot of social, mental and physical benefits to its riders. To start with, in the social front, motorcyclists are more likely to expand their social network because it opens up opportunities for meeting new people. In addition, their personal and social confidence will also improve significantly because of their experiences (WHO, 2007).

Secondly, due to riding of a motorcycle regularly, the cyclists' body and mind coordination skills are always exercised. This keeps their brains' motor function active. It also gives them a practice in mental alertness and concentration (Perco, 2008). Lastly, regular motorcycling particularly on unpaved roads, makes a good alternative to exercise. The vibration of the motorcycle gives the riders' muscle cells a good shakeup, working them out to burn the fat.

In addition, the riders would get to enjoy the scent of fresh air and excitement of the fast ride that would elevate their heart rate, giving their hearts a cardiovascular exercise (Perco, 2008).

Nonetheless, these studies hardly focused on the differential effects of motorcycle transport on the safety and health of both men and women.

## **2.4 Motorcycle Accidents**

Motorcycles can cause physical injury or even death during transportation. Elvik and Vaa (2004), note that approximately 80% of motorists killed on European roads sustained head impacts and in half of these cases the head injury was the most serious. Mannering and Grodsky (2005) surveyed motorcyclists likelihood of being involved in accidents in Australia and concluded that motorcyclists have a reasonable grasp of factors that increase the likelihood of accident involvement.

Injuries to the legs of motorcyclists occur in approximately 80% of all the crashes. Elliot et al (2010), points out that improved design and wider use of protective clothing could make a significant contribution to lessening the severity of motorcycle injury.

The World Report (2004) shows that, a great number of motorised two wheeler users die in Europe each year, the risk of death for motorcyclists is 20 times that of occupants. Motorcycles tend to have much higher power-weight ratios than cars, and an increasing number of motorcycles are capable of very high speeds and accelerations.

Worldwide there are around 500,000 fatalities and 15 million injuries per annum as a result of road accidents. National Highway Traffic Safety Administration (NHTSA) Traffic Safety Facts (2004), points out that motorcycle fatalities have been steadily increasing in the United States of America (USA).

A study on the socio-economic impact of the commercial use of motorbikes on the youth in Sierra Leone by the World Organisation Traffic Fact (2004), revealed that individuals from disadvantaged socio-economic groups or those living in poorer areas are at greatest risks of being involved in road traffic crash.

According to the 2010 statistics from the traffic headquarters in Kenya, over 300 people were killed across the country in road accidents in the month of May 2010. During the same month, 1000 people suffered serious injuries due to reckless driving and laxity in compliance to traffic regulations by motorists (Rutto, 2010). Wesonga (2013), points out that *bodaboda* transport has become the leading cause of deaths on the roads, he adds that female passengers are always reluctant to wear helmets claiming that they are dirty and interfere with their hairstyles. This has contributed to the injuries and deaths caused by the *bodaboda* transport on our roads.

The Kenya Statistical Abstract 2011 depicts a high number of accidents caused by motorcycles since 2005 as shown below:

<b>Year</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>No. of Accidents</b>	363	346	432	688	1,292	825

**Source:** Kenya Bureau Statistics (2011p. 95)

According to the survey, the persons principally responsible for these motorcycle accidents are:

<b>Responsible Persons</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Drivers	5,444	5,646	5,433	5,087	6,075	5,284
Pedestrians	3,035	2,676	3,089	2,577	2,450	947
Pedal Cyclists	1,545	1,408	1,288	1,343	1,257	1,159

**Source:** Kenya Bureau Statistics (2011p. 97)

These accidents have severely affected the economic sector in the country. According to the Kenya Economic Survey (2012), there were 19,093 traffic accidents in the year 2011 where 3,302 people lost their lives; 8,647 were seriously injured and 7,144 were slightly injured. This has hampered effective participation in activities geared towards development. Consequently, high poverty incidences have been realised in areas where these accidents are rampant.

Cook, J. Kerns, T., Burch, C., Andrea, M.S. and Bell, E.(2009) conducted a research in Washington, DC on Motorcycle Helmet Use and Head and Facial Injuries. The findings showed that of the 104,472 motorcyclists involved in accidents, 89% were identified as being motorcycle riders while the remaining 11% were passengers. The study also established that 85% of the motorcycle riders were male while 52% of the pedestrians were also male.

Sabey and Tylor (1980) conducted a study on the different ways of reducing road accidents in London; they established that embracing all road safety will incredibly reduce the rate of road accidents; They also observed that, children from a larger proportion of road accident fatalities in the developing world than in the industrialised countries. However, these studies hardly considered the gender perspectives of the motorcycle transport with regards to accidents.

## **2.5 Theoretical Framework**

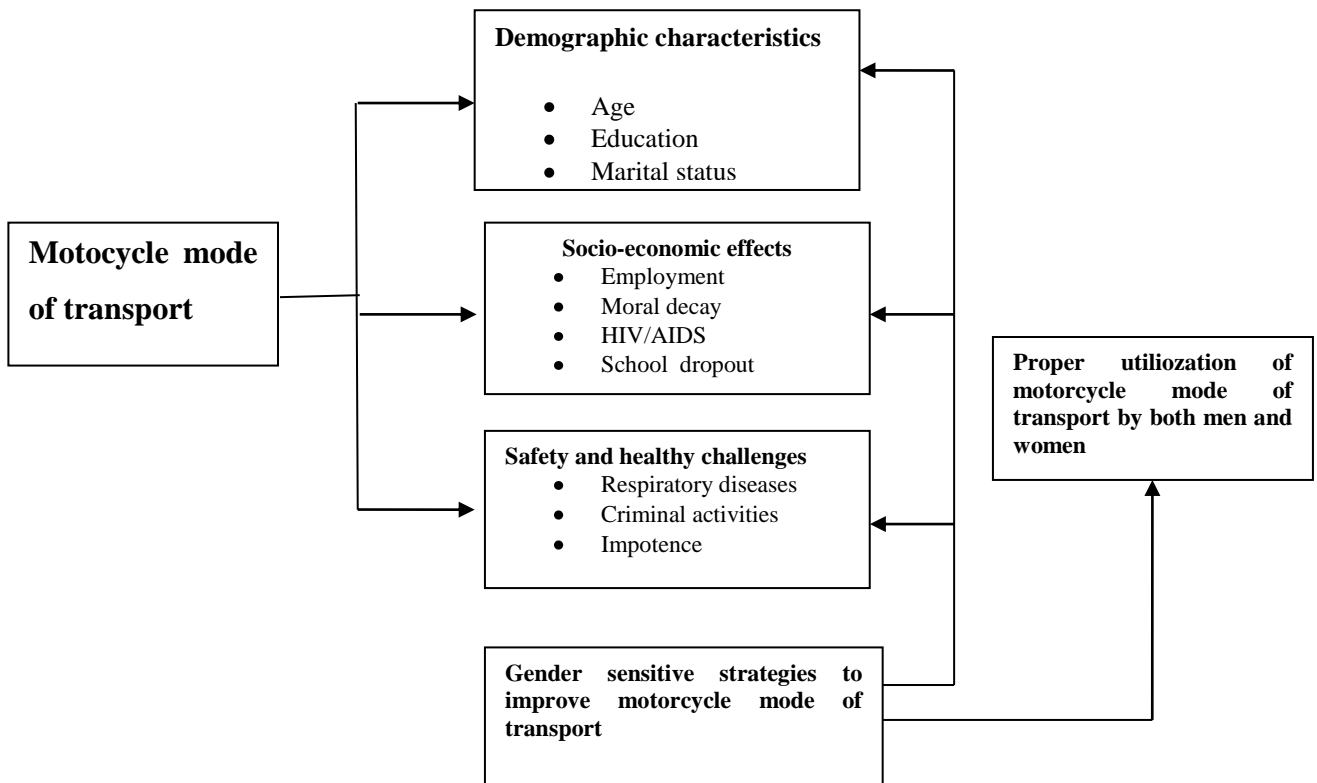
This study was guided by Social Role Theory which was propounded by Eagly in 1997, the theory emphasizes that women are likely than men to perceive specific hypothetical business practices as unethical. The theory also accounts for greater gender differences in non monetary issues than in monetary issues, this explains why gender differences vary across types of behaviors. Despite real progress, women remain rare enough in elite positions of power that their presence still evokes a sense of wonder.

The Social Role Theory can be used to examine the systems and processes in the motorcycle transport industry where the women seem to be sidelined in terms of ownership and operation of the motorcycles since the business is dominated by men and women are merely ferried by the male operators to their various destinations, the theory can also be used to suggest appropriate policies and strategies to improve the motorcycle transport and hence enhance gender mainstreaming and increase of gender equity in the motorcycle mode of transport.

This theory can be used to contribute to ensuring that a development process promotes gender equality, it can also be applied in examining the gender related challenges associated with the use of motorcycle mode of transport so that clear objectives can be articulated in an attempt to reduce the challenges that emanate from the use of motorcycle mode of transport from a gender perspective.

## 2.6 Conceptual Framework

Figure 2.1 Gender Perspectives of Motorcycle mode of Transport .



The motorcycle transport business has various gender perspectives including, the demographic characteristics of male and female users, socio-economic effects of motorcycle transport on men and women, safety and health challenges that affect men and women who use the motorcycle mode of transport transport.

## **2.7 Summary and Research Gap**

The above foreseen empirical studies focussed on the demographic characteristics of motorcycle transport users, effects of motorcycle transport on the safety and health of the users, motorcycle accidents, socio-economic effects and usability of motorcycle transport. They established that motorcycle transport was predominantly a common mode of transport used by both men and women and that motorcyclists were also predominantly male, they also observed that motorcycle transport poses safety and health challenges on all its customers which may include among others the risk of accidents and exposure to respiratory diseases like chest pains and pneumonia. This study therefore sought to examine the gender perspectives of motorcycle transport in Keumbu sub-county Kisii County.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.0 Introduction

This chapter discussed research methodology that was used in this study. It focused on the research design, research site, target population, sampling technique and sample size, research instruments and data analysis and presentation techniques.

#### 3.1 Research Design

This study employed descriptive survey design which described the state of affairs as it existed. Orodho (2005) points out that descriptive survey design can be used when collecting information about peoples' attitudes, opinions, habits or any of the variety of education and social issues. The motorcycle transport has various gender perspectives hence necessitating the use of descriptive survey design in this study.

#### 3.2 Research Site

The study was conducted in Keumbu Sub-County, Kisii County which is in the western part of Kenya. In Keumbu Sub-County, there are 17 secondary schools with the student population of 6800 (Kisii District Development Plan, 2008-2012).

Motorcycle transport has been steadily on the rise in Keumbu Sub-County where both men and women, are making use of this mode of transport. Indeed, it has become the main means of transportation in this region.

This is due to the fact that there is only few tarmacked road while the other feeder roads get washed away by heavy rains leaving the residents with no other option of transport.

Keumbu Sub-County has an equatorial climate resulting into a bimodal rainfall pattern with average annual rainfall pattern of 200mm which is highly reliable. The area receives two rainy seasons: Long rains in February and June and short rains in September and early December (Kisii District Development Plan, 2008-2012). Agriculture is the main economic activity in the area. Majority of the people depend on agriculture for their livelihood. There is high production of bananas, maize, pineapples and sugarcane. Brick making and lumbering are also part of the economic activities. Most of these are hampered by poor infrastructure, hence many young people have embraced the operation of motorcycle business as an additional income generating activity, also there is trading of the surplus crop production and animal husbandry which is evidenced in the many trading centres in the region which include: Nyabisabo, Keumbu, Birongo and Taracha (Kisii District Development Plan, 2008-2012).

### **3.3 Target Population**

According to Borg & Gall (2009), target population refers to members of a group of people, events and objects to which a researcher intends to generalise the results of the research. In Keumbu Sub-County, the total population is approximately 365,745 persons with the adult population being 296,945 (Kisii District Bureau of Statistics; Education Office 2013).

Keumbu Sub-County had a total of 456 motorcycles (Kisii District Bureau of Statistics; Education Office 2014). Within Keumbu Sub-County only, in 2013 there were 160 motorcycle drivers and approximately 600 adults use the motorcycle transport, (Kenya National Bureau of Statistics, 2014).

The study targeted the 300 adult male customers of motorcycle transport and 300 adult female customers of motorcycle transport as well as 160 male motorcycle drivers who operate from Keumbu Shopping Centre to various markets and institutions within the Sub-County.

### **3.4 Sample Size and Sampling Technique**

The study used purposive sampling technique since it targeted reliable people for the study (Kombo and Tromp, 2006). Purposive sampling was used to sample 10% of the target population at Keumbu Shopping Centre which constituted of 300 adult female customers and 300 male customers and also 160 motorcycle drivers. This translated to 30 adult female and 30 adult male customers of motorcycle transport.

However, only 28 male customers of motorcycles participated in the study. In addition, 10% of the target motorcycle drivers who operate from Keumbu Shopping Centre to various destinations, this translated to a total of 16 motorcycle drivers.

Therefore, the total sample size was 74 respondents (30 females and 44 males) which ensured that the respondents were adequate to provide a gender perspective of motorcycle transport in Keumbu sub-county, Kisii County.

### **3.5 Research Instruments**

The study used structured interview schedules, which entail fixed format interviews in which all the questions are prepared beforehand and are put in the same order to each interviewee. Questionnaires and focus group discussion guides were also used to collect data.

According to Bell (1991) interviews put flesh to the bone of questionnaire responses. They also provide reliable, valid and theoretically satisfactory results than questionnaires in societies where interactions are highly personalised. He adds that through an interview, one gets better co-operation and more informative answers than a questionnaire.

The interview schedules that were utilised in this study consisted of structured questions. The interview schedules were used on adult males and adult females who use motorcycle transport and this was administered by the researcher while focus group discussion guides were targeted at the motorcycle drivers who were accessed at their collection venues after arranging a short meeting with them because of their busy schedule. The motorcycle drivers were grouped into two groups of 8 members each. The discussion was facilitated by the researcher.

### **3.6 Pilot Study**

The pilot study was conducted in Gucha sub-county. This assisted the researcher to understand the respondents and familiarise himself/herself with them. It also assisted the researcher gauge the type of responses he/she was likely to get.

### **3.7 Pre-test of Research for Validity and Reliability**

Kombo & Tromp (2006) and Borg and Gall (1989) noted that validity of a test is a measure of how well a test measures what it is supposed to measure.

Mugenda and Mugenda (1999) noted that validity is the accuracy and meaningfulness of inferences which are based on research results. Validity is therefore the degree to which results obtained from the analysis of data actually represents the phenomenon under the study.

The research instruments were subjected to pre-testing with regard to interview schedules for adult male and female customers of motorcycle transport and focus group discussion for motorcycle drivers.

The pre-test was done on two motorcycle drivers, two male and two female customers of motorcycles in Kisii North sub-county, the research instruments were then revised accordingly to enhance validity of the questions in terms of clarity, suitability and simplicity of the language and the researcher then proceeded to the field.

Reliability of the research instruments were determined by their consistence in testing what they were expected to measure. To measure reliability, test-retest method was used. According to Mugenda and Mugenda (1999) test-retest method is the administering of the same instrument twice to the same group of subjects; this helped to check whether the instruments would yield the same results when administered at different times to the same group.

The reliability test ensured that the research instruments were well understood by the respondents and that they provided the expected output.

### **3.8 Data Collection Procedures**

The study used both primary and secondary data. The data collection took 21 working days where in the first and second week, interview schedules were orally administered to adult male and female customers of motorcycle transport where the researcher asked the respondents questions and noted down their responses.

The focus group discussion guides were administered to two groups of motorcycle drivers where each group comprised of eight members on the third week.

These motorcycle drivers were accessed at their collection centres and grouped into groups of eight members each and the discussion was facilitated by the researcher.

The research permit was sought from the Ministry of Education, Science and Technology prior to the data collection exercise. This permit was presented to relevant gate keepers and the respondents in order to gain their confidence and informed participation in the study.

### **3.9 Data Analysis**

The study had two types of data; qualitative and quantitative data. The quantitative data collected was analysed using the Statistical Package for Social Sciences (SPSS). Bell (1993) notes that when making results known to a variety of readers, simple descriptive statistics such as percentage have a considerable advantage over more complex statistics since they are easily understood. Qualitative data obtained in this study was analysed using content analysis while quantitative data, was presented by use of frequency tables and figures.

### **3.10 Data Management and Ethical Considerations**

Informed consent was sought from respondents prior to them being interviewed or subjected to focus group discussions. Those not willing to participate were withdrawn from participation. The respondents were assured that the responses they gave were only to be used for the purpose of the study. In addition, confidentiality was guaranteed as the respondents used pseudo names, hence the surnames used the study did not refer to the actual names of the people who participated in the data collection exercise.

### **3.11 Summary**

The study was conducted in Keumbu sub-county which is in Kisii county. It employed descriptive research design as the motorcycle transport had various gender perspectives. The study targeted 160 motorcycle drivers and 600 motorcycle customers who were available within Keumbu sub-county. Purposive sampling was used to sample 10% of the target population which translated to 30 adult male motorcycle transport customers, 30 adult female customers and 16 motorcycle drivers.

Though only 74 respondents responded the numbers were adequate to provide a gender perspective of the motorcycle transport. The pilot study was conducted in Gucha sub-county and the pre-test of research for validity and reliability was done accordingly. Data collection techniques that were used in the study comprised of interview schedules for adult male and female customers of motorcycle transport and focus group discussion guide for motorcycle drivers. Confidentiality was guaranteed in the data collection exercise as respondents used pseudo names.

## **CHAPTER FOUR**

### **FINDINGS, ANALYSIS, PRESENTATION AND DISCUSSION**

#### **4.0 Introduction**

This chapter presents the research findings in relation to the objectives of the study. It provides an analysis of the findings in relation to each of the research objectives in the following sub topics; The demographic characteristics of customers of the motorcycle mode of transport in terms of gender in Keumbu sub-county, the socio-economic effects of motorcycle mode of transport on men, women, in Keumbu sub-county, Kisii County, the safety and health challenges that afflict men and women who use motorcycle transport in Keumbu Sub-County, Kisii County and the gender sensitive strategies that can be used to improve the motorcycle mode of transport in Keumbu Sub-County, Kisii County.

#### **4.1 Response Rate**

The researcher intended to interview 30 female customers of motorcycle transport and 30 male customers of motorcycle transport. The 30 female customers participated in the interviews while only 28 male customers of motorcycle transport participated in the interviews with 2 of the male customers declining to participate citing busy schedules. In addition, 16 male motorcycle drivers participated in focus group discussions. Therefore, the study had a total of 74 respondents consisting of 30 females and 44 males. This translated into a response rate of 97% and so the researcher received adequate response from the sample size representing the target population of

the study. This inspired the researcher to establish the frequent customers of motorcycle transport in terms of gender in Keumbu sub-county.

#### **4.2 The Demographic characteristics of users of Motorcycle mode of Transport**

The study sought to establish the demographic characteristics of users motorcycle mode of transport in Keumbu sub-county from a gender perspective. This was analysed from the perspective of their age groups, level of education, marital status and economic activities.

The age groups of the female motorcycle customers was analysed as shown in the following table.

##### **4.2.1 Age of motorcycle customers**

The analysis of the age groups of the female motorcycle customers was as indicated in table 4.1:

**Table 4.1: Age bracket of female customers of motorcyle transport**

<b>Age Bracket</b>	<b>Number</b>	<b>Percentage (%)</b>
15 – 24	8	27
25 – 34	10	33
35 – 44	6	20
45 – 54	3	10
Over 55	3	10
<b>Total</b>	<b>30</b>	<b>100</b>

The age bracket of female customers of motorcycles ranged between 15 years to over 55 years. 27% of the female customers of motorcycles were in the age group of 15 -24 years, 33% were in the age group of 25-34 years, 20% were in the age group of 35 -44 years, 10% were in the age group of 45-54 years and another 10% were in the age group of over 55 years.

These findings indicated that the female customers of motorcycle transport in Keumbu sub-county were of diverse age groups but the majority, 33%, were in the age group of 25-34 years.

These findings imply wide usage of motorcycle transport among the females in Keumbu in running their errands and this is likely to be facilitated by their availability and ability to venture in areas that are not easily accessed by four-wheeled motor vehicles, especially public service vehicles.

The researcher further examined the age groups of the male customers of motorcycle transport.

The analysis was made as shown on table 4.2

**Table 4.2: Age bracket of male customers of motorcycle transport**

<b>Age Bracket</b>	<b>Number</b>	<b>Percentage (%)</b>
15 – 24	7	25
25 – 34	7	25
35 – 44	10	36
45 – 54	2	7
Over 55	2	7
<b>Total</b>	<b>28</b>	<b>100</b>

The age bracket of male customers of motorcycle transport ranged between 15 years to over 55 years. Twenty five percent of the male customers were in the age group of 15 -24 years, another 25% were in the age group of 24-34 years, 36% were in the age group of 35 -44 years, 7% were in the age group of 45-54 years and another 7% were in the age group of over 55 years.

The findings pointed out that the male customers of motorcycles in Keumbu sub-county were of diverse age groups but the majority, 36%, were in the age group of 35-44 years. This is an

indication that male customers of the age brackets 35-44 years were the most frequent users of the motorcycle transport.

This scenario portrays minimal participation of women in the motorcycle transport due to the societal assignment of gender roles to individuals, where women were expected to get married and stay at home to raise a family and the men were expected to go out and support their families. This implies that, these male customers of motorcycle mode of transport were actively involved in paid labour compared to their female counterparts who may have been busy at home attending to the house chores.

The study also sought to analyse the age bracket of the motorcycle drivers in Keumbu sub-county, the analysis was done as indicated in the table 4.3.

**Table 4.3: Age Bracket of Male Drivers Of Motorcycles**

<b>Age Bracket</b>	<b>Number</b>	<b>Percentage (%)</b>
20 – 29	10	63
30 – 39	5	31
40 – 49	1	6
50 – 59	0	0
Over 60	0	0
<b>Total</b>	<b>16</b>	<b>100</b>

The age bracket of male motorcycles drivers ranged between 20 years to 49 years. 63% of the male drivers of motorcycles were in the age group of 20 -29 years, 31% were in the age group of 30-39 years and 6% were in the age group of 40 -49 years. These findings indicated that the male drivers of motorcycles in Keumbu Sub-County were of a youthful age with the majority, 63%, being in the age group of 20-29 years.

This points out to the fact that the motorcycle transport sector has created employment opportunities for many male youths who could have otherwise been unemployed, the findings also imply that the youthful males are more daring and can involve themselves in risky activities in order to earn a living compared to the older male counterparts, this is because operating a motorcycle may cause accidents and expose drivers to health challenges that are associated with driving motorcycles.

These findings are in agreement with Hisam's (2006) assertion that commercial bike riding is an attractive job opportunity for the male youth who are so daring and determined to improve their socio-economic status.

The study found it critical to establish the education background of the customers of motorcycle transport in Keumbu sub-county.

#### **4.2.2 Education level of customers of motorcycle transport**

The level of education of the female customers of motorcycle transport in Keumbu Sub-County was analysed and the findings were presented as shown in the table below:

**Table 4.4: Level of education of female customers of motorcycle transport**

<b>Level of Education</b>	<b>Number</b>	<b>Percentage</b>
Degree	2	7
Diploma	2	7
KCSE Graduate	12	40
Secondary School Drop out	8	26
KCPE Graduate	3	10
Primary School Drop out	3	10
<b>Total</b>	<b>30</b>	<b>100</b>

The study findings on the education level of the female customers of motorcycles indicated that their level of education ranged from degree, diploma, KCSE graduate, secondary school drop out, KCPE graduate and primary school drop out. 7% had a university Degree, 7% had a Diploma, 40% were KCSE graduates, 26% were Secondary School Drop outs, 10% were KCPE graduates and another 10% were Primary School Drop outs.

The study findings showed that the motorcycle transport is a common mode of transport and served both adult males and females in Keumbu Sub-County. The findings further, indicated that the majority, 40%, of female users of motorcycles in Keumbu Sub-County were KCSE Graduates. This implied that the female KCSE graduates used motorcycle mode of transport to meet their mobility needs since motorcycle transport offered speed and convenience. Indeed many KCSE female graduates confirmed that they used motorcycle transport to run business errands and others used them to go to their places of work as they were readily available and convenient.

The female customers with the degree and diploma level of education were less since most of them had moved away from Keumbu to work elsewhere, some of those ones available in the sub-county had their own vehicles hence sparingly used the motorcycle mode of transport.

The KCPE graduates and KCSE drop-outs also made use of the motorcycle transport to run their errands but their number was lower compared to KCSE graduates as some of them were residing in technical schools.

These findings were in line with Howe (2001) who observed that *bodaboda* transport has resulted in significant changes in lifestyles and increased the range and number of activities in which the users engage in.

The study further examined the education background of the male customers of motorcycle transport. The analysis was made and presented as shown in table 4.5.

**Table 4.5: Level of education of male customers of motorcycle transport**

<b>Level of Education</b>	<b>Number</b>	<b>Percentage</b>
Degree	2	7
Diploma	4	14
KCSE Graduate	10	37
Secondary School Drop out	4	14
KCPE Graduate	4	14
Primary School Drop out	4	14
<b>Total</b>	<b>28</b>	<b>100</b>

The study findings on the education level of the male customers of motorcycles indicated that their level of education ranged from degree, diploma, KCSE graduate, secondary school drop out, KCPE graduate and primary school drop out. 7% had a university degree, 14% had a diploma, 37% were KCSE graduates, 14% were secondary school drop outs, 14% were KCPE graduates and another 14% were primary school drop outs.

Therefore, the findings indicated that the majority, 37%, of male users of motorcycles in Keumbu Sub-County were KCSE Graduates implying that, motorcycle mode of transport solved the mobility need of male customers of varying educational backgrounds. The KCSE graduates being the majority since they were actively involved in income generating activities hence their frequent usage of motorcycle transport compared to the other male counterparts.

This is therefore an indication that both males and females who used motorcycles were literate, this implies that the youthful literate male and females of Keumbu Sub-County are the major contributors of economic development in the region since they engage in many economic

activities in the region, this is evidenced by their wide usage of motorcycle transport to enhance their mobility.

The study findings further indicated that, the drop-out rate of the female customers of motorcycle transport was higher at 26% compared to their male counterparts at 14%. This findings were in agreement with Ochieng and Egessa's (2003) assertion that *bodaboda* transport has led to increase in number of primary school drop-out . The study further sought to establish the education background of the male drivers of motorcycles, this was analysed as indicated in the following table:

**Table 4.6: Level of education of male drivers of motorcycles**

<b>Level of Education</b>	<b>Number</b>	<b>Percentage</b>
Degree	0	0
Diploma	2	13
KCSE Graduate	6	35
Secondary School Drop out	2	13
KCPE Graduate	2	13
Primary School Drop out	4	26
<b>Total</b>	<b>16</b>	<b>100</b>

The study findings on the education level of the male drivers of motorcycles pointed out that their level of education ranged from Diploma, KCSE graduate, secondary school drop out, KCPE graduate and primary school drop out. Thirteen percent were diploma holders, 35% were KCSE Graduates, 13% were secondary school drop outs, 13% were KCPE graduates and 26% were primary school drop outs. Therefore, the findings indicated that the majority, 35%, of the male motorcycle drivers in Keumbu Sub-County had KCSE certificates as the highest level of

education. The findings were in line with Nyachio (2015) who observed that, most *bodaboda* riders were literate, with the majority having secondary education.

The study findings implied that the male drivers of motorcycles who were degree holders did not use their motorcycles to transport customers but instead used them as private means of transport. The KCSE graduates who were the majority observed that, lack of other employment opportunities contributed immensely to their participation in the motorcycle transport business. The secondary school drop-outs reported that they were involved in the business because of lack of school fees and poverty, this stand was also maintained by KCSE graduates and primary school drop-outs.

The study findings implied that skill of operating motorcycles was easy to acquire hence many male youths graduating from secondary schools joined the motorcycle transport sector as it proved to be an easy way of earning a living in a region where employment opportunities are limited.

The study then found it necessary to establish the marital status of the customers of motorcycle transport as well as motorcycle drivers in Keumbu sub-county, Kisii county. The marital status of the female customers was done first followed by their male counterparts and lastly the motorcycle drivers.

#### **4.2.3 Marital status of female customers of motorcycle transport**

The study analysed the marital status of the most frequent customers of motorcycle transport in Keumbu Sub-County. The analysis on the female motorcycle customers was done as shown in table 4.7:

**Table 4.7: Marital status of female customers of motorcycles**

<b>Marital Status</b>	<b>Number</b>	<b>Percentage</b>
Married	20	67
Widow	2	6
Separated	6	21
Single	2	6
<b>Total</b>	<b>30</b>	<b>100</b>

The marital status of the female customers of motorcycles indicated that 67% were married, 6% were widows, 21% were separated while 6% were single. Therefore, the findings portrayed that a majority, 67%, of the female users of motorcycles in Keumbu Sub-County were married.

The married women used motorcycle transport to take their farm produce to the market, for instance one respondent named Kerubo, who was a married woman explains:

*I use motorcycle transport to take my bananas to Keumbu market. I prefer the motorcycle because it takes them right to my selling point, I find it cheap to transport bananas using a motorcycle than when I use other means of transport.*

Moraa who was also a married woman said that:

*The motorcycle transport has contributed greatly to the growth of my business, whenever I need to use a motorcycle I just call; the motorcycle transports my maize and beans to the market on Wednesdays. The motorcycle boys are so good even when I don't have money they just carry my goods and wait until I have made some profit.*

Though only a small number of widows responded; (6%) there is quite a number of them in the Sub-County. This may have been contributed by the fact that some of them thought that the information given might be used against them.

Those who were willing to respond pointed out that they used motorcycles to run errands for their families, Nyansiaboka, a respondent who was a widow said that:

*I use motorcycle transport to take my mitumba clothes to the market since they are readily available, I used to wait for a matatu for almost one hour, but with a motorcycle no minute is wasted. I call a motorcycle when am a ready you and it comes right to my door step! Business is more enjoyable with the motorcycles.*

Nyakerario another respondent who is a separated woman, also argues that:

*The motorcycles are very useful in my business I use them to transport my bananas to the market since they are readily availble, however, the bodaboda boys can be abother if you are not careful with them, they start wooing you. Though I use the motorcycle transport quite often Idont allow my daughters to use them, unless I completely trust the one operating.*

Kemuma who is a single woman also observed that:

*Since motorcycles are readily available , I use them to my place of work everyday. I used to have challenges when It was raining but my customer put an umbrella on his motorcycle, I thefore use it comfortably come rain, come sunshine; I also use it when I go for shopping since it brings me right to my house, I no longer have to walk all the way from the junction to bring my luggage home.*

These study findings implied that the motorcycle transport was widely used by women to run their business as well as go to their places of work, the majority of the users were married women.

This is an indication that the motorcycle transport has been widely accepted as a means of transport since the men are not opposed to their wives using this form of transport, this explains why 67% of female customers of motorcycles are married women. These findings confirmed the findings of Ahamed (2000) who observed out that motorcycle taxis enable women entrepreneurs to travel rapidly to and from markets since they are more available and more timely.

The marital status of the male customers of motorcycle transport in Keumbu sub-county was investigated and analysis was made.

#### 4.2.4 Marital status of male customers of motorcycles

The analysis of the marital status of the male customers of motorcycle transport was as indicated in table 4.8:

**Table 4.8: Marital status of male customers of motorcycle transport**

<b>Marital Status</b>	<b>Number</b>	<b>Percentage</b>
Married	22	79
Widower	2	7
Separated	2	7
Single	2	7
<b>Total</b>	<b>28</b>	<b>100</b>

The the marital status of the male customers of motorcycle transport indicated that 79% were married, 7% were widowers, 7% were seperated while 7% were single.

These findings showed that a majority, 79%, of the male customers of motorcycle transport in Keumbu sub-county were married.

These study findings implied that the married men were actively involved in many economic activities in the sub-county so as to support their families hence their rampant usage. For instance one of the respondents called Onyonka who is a married man observed that:

*The motorcycle transport is very important to me, I use it to take my milk at 5:am to the buying centre then I come back and transport my children to their various schools using the motorcycle, I also use the same motorcycle to transport my charcoal to my selling point at the market . Actually the bodaboba boys are so good as longer as you give them your time-table they will be right there when you need them, without the motorcycle transport I will not be able to achieve my targets.*

Ogoti, another respondent who is a married man also pointed out that:

*My home is about 5km from the main road where vehicles pass, I therefore use a motorcycle to my place of work everyday, the motorcycles are fast, indeed have never been late to work ever since I started using them, my children reach their schools in time ever since I contracted one operator to be taking them there. Motorcycle operators can however, be very careless. I once broke my leg due to an accident that was caused by reckless driving but it has now healed. Nevertheless, I still like using motorcycles to run my errands.*

Though the motorcycle transport was widely used in Keumbu sub-county, it was notable that men who were not living with their wives sparingly used it, this was contributed by the fact that they were not willing to put their lives at risk. Onyancha for instance, a male respondent who was single argues that:

*Ever since I lost my brother to a motorcycle accident, I swore that I will never use a motorcycle. I clearly remember how he was run over by an oncoming lorry because of reckless driving. That scene is always in my mind.*

These findings imply that motorcycle mode of transport has led to loss of lives on the roads due to accidents. The findings were in line with Wesonga (2013) who noted that, bodaboda transport has caused many injuries and deaths on our roads.

Another respondent, Kemwamu who is a widower asserted that:

*I don't use motorcycle transport quite often since these motorcycles cause accidents anyhowly on our roads. I once suffered pneumonia because I used to take my children to school very early in the morning using a motorcycle. Though these motorcycles are readily available they can be dangerous to our health. Nowadays when I use a motorcycle I wear a very heavy jacket.*

These findings were consistent with Elliot et al (2010) who asserted that motorcycle ridding is associated with respiratory diseases like pneumonia and chest pains.

It was also critical to analyse the marital status of the male drivers of motorcycles since they were also key stakeholders in the motorcycle transport industry.

#### 4.2.5 Marital status of drivers of motorcycles

The analysis of the marital status of the motorcycle drivers was as indicated in table 4.9:

**Table 4.9: Marital status of male drivers of motorcycles**

<b>Marital Status</b>	<b>Number</b>	<b>Percentage</b>
Married	10	63
Widower	1	6
Separated	1	6
Single	4	25
<b>Total</b>	<b>16</b>	<b>100</b>

The study findings on the marital status of the male drivers of motorcycles portrayed that 63% were married, 6% were widowers, 6% were separated while 25% were single. These findings pointed out that a majority, 63%, of the male drivers of motorcycles in Keumbu sub-county were married. Ombati a respondent who is a married man explained that:

*Driving a motorcycle has assisted me to meet my financial obligations, the business has enabled me to pay school fees for my children and put food on the table for my family.*

These findings revealed that the majority motorcycle drivers were married, this was likely to be influenced by the need to provide for their families hence these men sought to support their families by driving motorcycles. The findings were consistent with (Nyachio 2015) who observed that the motorcycle riders were young males and the majority of them were married.

The study findings further showed that, a further 37% of the motorcycle drivers were not living with their wives; where 25% were single, 6% were widowers and another 6% were separated. In addition some motorcycle drivers confessed that they had lost their wives because they were suspicious that they were having affairs with their female customers. Ontomwa a respondent who is a separated man sadly reflected that:

*Driving a motorcycle can be very challenging, my wife left me because she thought that I was having an affair with one of my female customers, actually the truth was ; After making about ten trips I was exhausted and could not meet her sexual demands, she therefore left me with the children.*

Omenge a respondent who is widower, said that:

*Motorcycle transport business has helped me to raise my children, when the business is good I go home with one thousand shillings, and when business is down am assured of four hundred shillings. In spite of the good returns, the motorcycle that I use for the business has given me very many injuries; I lost my two front teeth and I have an ugly scar on my face, I got this scar when I started driving since I had not gained a lot of experience but nowadays am very careful.*

Ouko, a single man pointed out that:

*I do motorcycle transport business in order to make some money so that I build myself a good house and educate my siblings.”*

However, Magati, a respondent who was also a single man argued that:

*I drive a motorcycle for fun, I do enjoy driving so much and I prefer carrying beautiful ladies since I enjoy talking to them, sometimes I carry them for free.*

These study findings implied that the motorcycle transport has created many job opportunities for youthful males who could have otherwise been unemployed. However, this transport industry has also posed challenges in terms of accidents and this explains why some men are shying off from the business because of the risks involved.

The study findings from Focus Group Discussions (FGDs) on the usage of motorcycles indicated that 63% of the motorcycle drivers suggested that the most frequent customers of motorcycle transport were females, while 27% of the motorcycle drivers reported that the most frequent customers of motorcycles were males. One respondent in the group said that:

*Most women have so many house chores to do in a day as well as going an extra mile to provide for their families. As such they need to move up and down to accomplish all these. Therefore they tend to prefer motorcycles which are fast and reliable on the other hand some of the males have their own vehicles thus were not frequent users of motorcycles.*

”.

This finding discounts the Human Rights Watch Report (2004) which contends that motorcycle transport is not convenient for female customers due to the unlady like nature of climbing and disembarking from the motorcycles. This shows that despite the inconvenience posed by motorcycles most women use it, being the most common mode of transportation.

In relation to the number of passengers carried on the motorcycles, 75% of the motor cycle drivers indicated that they carry one passenger while 19% of the motorcycle drivers indicated that they carry two passengers while 6% of the motorcycle drivers indicated that they carry three passengers. For instance, Ombwori, one of the motorcycle drivers explained that:

*I carry one customer when passengers are not available. In situations where the demand is high for the bodaboda I carry three to four depending on their size. This enables me to make a lot of money.*

Omosa another motorcycle driver said that:

*I carry one passenger on my motorcycle because it is quite risky to carry more. I usually find it hard to balance when driving since some passengers don't balance well especially on the rough road which can easily make the machine lose control and cause an accident.*

A photograph of a motorcycle rider carrying one passenger.



*Taken at Keumbu trading center on 8/08/2016.*

However, Nyachoti, argued that;

*I carry two passengers since am able to make more profit in only one trip,  
who doesnt like to make an extra shilling when a chance presents itself?*

A photograph of a motorcycle driver carrying two passenger

*Taken at Keumbu market on 10/08/2016.*



Onyonka another motorcycle driver said that:

*I carry three passengers when passengers are many, this enables me to make more profit as I save on my fuel. Am always very careful not to cause accidents.*

These findings concurred with Everet et al.(2001) Who asserted that, many young people place themselves at unnecessary risks from motorcycle related crash and fatalities because of improper use of the motorcycles. This is a clear indication that motorcycle overload poses safety challenges in terms of accidents to both male and female users of this mode of transport in Keumbu sub-county.

Photographs of motorcycle drivers carrying more than two passengers



*Taken at nyabisabo trading centre*



*Taken at Rigena trading center on 20/08/2016*

In relation to the number of trips made in a day, 88% of the motorcycle drivers reported that they make over 10 trips per day while 12% said that they make less than 10 trips in a day. The Focus Group Discussion also revealed that, motorcycle drivers made an average of Ksh1,000 per day. This translated into at least Ksh100 per trip. This showed that motorcycle transport are a quick and reliable source of income.

The discussion also revealed that the main destinations for motorcycle drivers were trading centres, churches, schools, construction sites and hospitals. Lastly, the FGDs reported that 75% of the motorcycle drivers associated the frequent use of motorcycle transport to its ability to access remote places. 19% of the motorcycle drivers were of the opinion that motorcycles were preferred due to their affordability, while 6% suggested that motorcycles were preferred due to their speed. These findings are an indication that many customers prefer motorcycles to other means of transport.

The study then sought to find out the economic activities engaged by the male and female customers of motorcycle transport.

#### **4.2.6 Economic activities**

It was established that both male and female customers of motorcycle transport engaged in various income generating activities, this indeed was in line with Jacobs 1989 who pointed out that, gender roles have been changing in the recent decades and have become more flexible. This explains the participation of both male and females in income generating activities.

The analysis of economic activities of the female customers of motorcycle transport was as indicated in table 4.10

**Table: 4.10 Economic activities of female customers of motorcycle transport**

<b>Economic activities</b>	<b>Number</b>	<b>Percentage</b>
Trading activities	15	50
Professionals	12	40
School going girls	3	10
<b>Total</b>	<b>30</b>	<b>100</b>

The study findings on the economic activities of the female customers of motorcycles indicated that 50% of the female customers of motorcycles engaged in trading activities which included sale of farm produce like milk and cereals; clothing and other merchandise like animal feeds and kitchenware. Another 40% of the female customers of motorcycles were professionals including nurses, teachers and civil servants. The professional women used the motorcycles as a means of transport to and from their workplaces.

The other 10% of female customers of motorcycle transport included school going girls in primary and public secondary schools within Keumbu Sub-County.

These findings agreed with the Ahamed (2000) who pointed out that motorcycles enable women entrepreneurs to travel rapidly to and from markets since they are more available and timely. These findings imply that motorcycle mode of transport has improved the social and economic status of women in the area to a great extent. These findings inspired the researcher to examine the economic activities of the male customers of motorcycle transport.

#### 4.2.7 Economic activities of male customers of motorcycle transport

The analysis of the economic activities of the male customers of motorcycle transport was made and presented as portrayed in the next table :

**Table 4.11: Economic activities of male customers**

<b>Economic activities</b>	<b>Number</b>	<b>Percentage</b>
Trading activities	13	43
Professionals	15	50
School going boys	2	7
<b>Total</b>	<b>30</b>	<b>100</b>

The study findings on the economic activities of the male motorcycle customers indicated that 43% of the male customers of motorcycles engaged in trading activities which included transportation of merchandise for sale and transportation of animal feeds from shopping centres to their farms. The male customers of motorcycles also used them to transport working tools to construction sites and farm produce like milk and cereals to shopping centres.

Another 50% of the male customers of motorcycle transport were professionals including teachers, administrators, medical workers and civil servants. The professional men used the motorcycles as a means of transport to and from their workplaces. The other 7% of male customers of motorcycle transport included school going boys in primary and public schools within Keumbu Sub-County.

These findings implied that motorcycle transport contributed greatly to economic development in the region since men customers who engaged in diverse economic activities used it, indeed

this was an indication that motorcycle transport was the most commonly available and easily accessible mode of transport in the region.

The study then found it necessary to further examine the ownership of motorcycles in Keumbu sub-county.

#### 4.2.8 Ownership of motorcycles

The analysis on the ownership of motorcycles was as indicated in the table below

**Table 4.12: Ownership of motorcycles**

<b>People who own motorcycles</b>	<b>Percentage</b>	<b>Number</b>
Motorcycle drivers	38	6
Other males	52	8
Females	10	2
<b>Total</b>	100	<b>16</b>

The study findings on ownership of motorcycles showed that 52% of the male drivers rode motorcycles owned by other males, 38% of the male drivers owned the motorcycles they were driving while, only 10% of the male drivers used motorcycles owned by females. These findings are in agreement with Malmaberg - Calvo (1994) who asserted that motorcycle ownership and use was entirely the prerogative of males.

These findings imply that though motorcycle transport offers employment opportunities and contributes to generation of income, most women are shying off from the motorcycle transport

business, this could have been contributed by the fact that the motorcycle transport business is still perceived as a male's domain hence explaining the small number of women owning motorcycles used in the transport business. These findings are in contrary to the assertion of Elliot et al., (2010) that many women own and ride motorcycles.

The study also sought to examine the preference of motorcycle transport among male and female customers. The analysis on its preference among the female customers was made as indicated on the table 4.13.

**Table 4.13: Preference of motorcycle transport among female customers**

<b>Reasons for preference</b>	<b>Number</b>	<b>Percentage</b>
Access to remote areas	24	80
Speed	5	16
Affordability	1	4
<b>Total</b>	<b>30</b>	<b>100</b>

The study findings on preference of motorcycle transport among the female customers in the table above indicated that 80% of the female motorcycle customers preferred to use motorcycle transport because of its ability to access destinations like churches, schools and trading centres which are located far away from the main roads.

Another 16% of the female customers preferred to use motorcycle transport due to its speed while 4% of the female customers of motorcycle transport preferred to use it due to its affordability. It was also critical to examine the preference of motorcycle transport among the male customers. The analysis was done and presented as shown in table 4.14:

**Table 4.14 :Preference of motorcycle transport among male customers**

<b>Reasons for preference</b>	<b>Number</b>	<b>Percentage</b>
Access to remote areas	21	70
Availability	6	20
Affordability	3	10
<b>Total</b>	<b>30</b>	<b>100</b>

The study findings on preference of motorcycle transport among the male customers indicated that 70% of the males preferred to use motorcycles because of their ability to access destinations which are located far away from main roads like construction sites, farms and trading centres.

Another 20% of the male customers preferred to use motorcycles due to its availability compared to four wheeled motor vehicles while 10% of the male customers of motorcycles preferred to use motorcycles due to its affordability.

These study findings implied that motorcycle transport was the most common mode of transportation in Keumbu sub-county for both adult males and females who preferred it due to its availability and ability to venture to remote places. The findings agreed with (Willio & Starkey 2013) who contended that, the only motorised services that people can rely on are the motorcycle taxis.

The study further investigated the socio-economic effects of motorcycle transport in Keumbu sub-county.

### **4.3 The Socio-Economic Effects of Motorcycle Transport**

The data was gathered from 28 male customers of motorcycle transport, 30 female customers and 16 motorcycle drivers. The findings were presented from the perspective of adult male customers, adult female customers and male drivers of motorcycles in Keumbu Sub-County.

The study findings indicated that 70% of the adult male customers of motorcycle transport pointed out that the motorcycle drivers had a negative influence on the school going boys while 30% explained that motorcycle drivers helped the school going boys to reach their school early hence positively contributed to their education. In the words of one adult male user called Omweri who was engaged in trading activities:

*School going boys pick bad habits like smoking bang and other forms of drug abuse as well as criminal activities from motorcycle riders who have dropped out of school.*

Therefore, the findings indicated that motorcycle transport was one of the causes of school drop out among the school going boys in Keumbu Sub-County.

In addition, the findings indicated that moral decadency and drug abuse among the school going boys was associated with motorcycle transport business in Keumbu Sub-County. It was therefore necessary for the researcher to examine the effects of motorcycle transport on its driver's social life.

#### **4.3.1 Effects of motorcycle transport on male driver's social life**

The effects of motorcycle transport on the male driver's social life was examined and analysis made as shown on table 4.15:

**Table 4.15: Motorcycle transport cause moral degradation male drivers**

<b>Motorcycles Cause Moral degradation</b>	<b>Number</b>	<b>Percentage</b>
Strongly agree	18	65
Agree	6	20
Disagree	4	15
<b>Total</b>	<b>28</b>	<b>100</b>

Further analysis on the effects of motorcycles on the social life of adult males indicated that 65% of the male drivers associated motorcycle transport with degradation of morals among the adult males, while 20% claimed that motorcycle transport was partly involved in moral degradation. Another 15% totally disagreed that the motorcycle transport was associated with moral degradation. One adult motorcycle driver called Onyancha who was engaged in construction reported that:

*Young motorcycle drivers engage in premarital sex because they are negatively influenced by older motorcycle drivers who are adulterous.*

Therefore, the findings indicated that motorcycle transport was associated with sexual immorality among the adult male motorcycle drivers in Keumbu Sub-County, a view supported by Perco (2008) who established that use of motorcycles was associated with the risk of contracting HIV/AIDS

On the economic front, 97% of the adult male customers of motorcycle transport suggested that the motorcycles were associated with high income and employment levels among the young men. However, another 3% argued that motorcycle transport did not yield a lot of income due to high taxation and expensive motorcycle spares.

One of the adult male motorcycle driver called Ochogo pointed out that:

*Nowadays it is hard to get an idle young man because after graduating from Form Four, for they get busy riding motorcycles as they wait to join college.*

. In addition, one male driver of motorcycles called Ondieki, reported that:

*Motorcycle drivers usually make between 400 and 1000 in a day. Therefore, no motorcycle driver can sleep hungry even when the customers are few.*

The findings indicated that the motorcycle transport was associated with increased employment levels among the young men and was a steady source of income to the motorcycle drivers and the owners in Keumbu Sub-County, Kisii County.

These findings were consistent with Kempstop & Starkey (2013) who observed that motorcycle taxis provide rural employment for young men, since most drivers in the rural areas are men and Karimi (2016) who noted that *bodaboda* business is dominated by the males in terms of drivers and owners.

The study then sought to establish the effects of motorcycle transport on the social life of its female customers.

#### 4.3.2 Effects of motorcycle transport on female customers' social life

The effects of motorcycle transport on the social life of the female customers were examined and analysis was made as indicated on the following table:

**Table 4.16: Motorcycle cause moral degradation on female customers**

<b>Motorcycles cause Moral degradation</b>	<b>Number</b>	<b>Percentage</b>
Strongly agree	14	46
Agree	12	40
Disagree	4	14
<b>Total</b>	<b>30</b>	<b>100</b>

The majority of the female customers of motorcycle transport (46%), suggested that motorcycles were associated with high rate of teenage pregnancies and school drop out rates from learning institutions in Keumbu sub-county.

Another 40% argued that the motorcycle transport was partially responsible for teenage pregnancies and consequently school drop-out, however, 14% of the female customers argued that the motorcycle transport was not associated in any way with teenage pregnancies and school drop-out . One of the adult female motorcycle customer called Mong'ina reported that:

*Many school going girls have been impregnated by the motorcycle drivers. It is not uncommon sight to see school girls talking with the*

*motorcycle boys along the roads in the evenings after school, some of them have even dropped out of school to be married by them.*

In addition, one adult female customer of motorcycle transport called Gesare, who was a teacher by profession explained that:

*The young men who ride motorcycles are engaged in illicit sexual affairs with school girls and married women. Three of my students who got pregnant last year confessed that they were lured by the motorcycle drivers.*

These findings concurred with Tavis (1992) who argued that, some women will not use motorcycle transport for fear of sexual harassment and Amino (2001), who pointed out that *bodaboda* operators and customers are exposed to sexual harassment.

The findings on the financial benefits of motorcycle transport indicated 70% of the female customers of motorcycle transport were beneficiaries of the income from motorcycles while the 30% of the married women of the motorcycle drivers reported that the money from motorcycles was not beneficial to their families. One adult female customer of motorcycle transport called Nyambeki, who was also a spouse to a motorcycle driver explained that:

*The money from motorcycles has spoilt my husband because he uses all of it on school going girls. He does not care about me and his children any more in fact when I ask him he says he is not to blame since the girls like him.*

Therefore, the findings indicated that motorcycle transport business was associated with teenage pregnancies, school drop out and fornication among the school going girls and adult women in Keumbu sub-county.

However, one adult female customer of motorcycles called Nyanchera, who was also a spouse to a motorcycle driver pointed out that:

*Money from motorcycles has helped my family to meet routine financial obligations and we are happier as a family. Indeed we never go hungry and we are able to pay our children's school fees in time.*

These findings were consistent with Karimi (2016), who observed that bodaboda has its socio-economic benefits which include financial independence, ability to provide for families and offers employment opportunities for the youths.

Further, the study findings also indicated that the motorcycle transport business was also a source of employment and income among the adult male drivers and owners of the motorcycles in Keumbu sub-county. These findings were in agreement with Hisam (2006) which observed that motorcycle business is a catalyst of development through provision of employment opportunities and enhancement of mobility among the entrepreneurs.

The study findings from Focus Group Discussions (FGDs) on the economic importance of motorcycle transport indicated that 88% of the motorcycle drivers pointed out that motorcycles were a source of financial income for households in Keumbu sub-county, While 12% claimed that the income from motorcycle transport did not reach the households.

One motorcycle driver called Omweri explains:

*Motorcycles have enabled many people to meet their basic needs. The adult women get money to buy sugar and tea leaves, the adult men get money to buy tobacco and chang'aa, the school girls get money and other gifts from their boyfriends who drive the motorcycles while the school boys get pocket money from their fathers, uncles, brothers and cousins who earn from driving the motorcycles.*

*All the employed motorcycle drivers are usually able to retain atleast shs 400 per day after paying the owners shs500 or more.*

In addition, the findings from the FGDs indicated that 95% of the motorcycle drivers associated motorcycles with provision of employment to the the male residents of Keumbu Sub-County while 5% argued that motorcycle transport did not offer employment since the motorcycles were only used by the owners. One motorcycle driver called Nyanusi explained that:

*I dropped out of school in Form Three but since then I have never been idle because I am busy riding a motorbike every day and of course I make alot of money out of it.*

In addition, 88% of the motorcycle drivers confirmed to have connected their siblings and relatives to get employed in the motorcycle transport sector, while another 12% of the rest did not since they did not want their relatives and friends to risk their lives as motorcycles could easily cause accidents. One motorcycle driver called Okari, pointed out:

*I have managed to assist five of my relatives to get employed as motorcycle drivers by my boss. Atleast no cousin of mine is at home without work.*

Further analysis of the findings from the FGDs indicated that 100% of the motorcycles drivers reported that the motorcycles provided employment benefits to the male adults in Keumbu Sub-County. One male driver called Ondimu, pointed out:

*My two uncles are motorcycle drivers and they connected three of their male friends to get the same job. I have also connected two of my brothers and now they are driving motorcycles in Keumbu region. I also connected three of my cousins who started as drivers and now one of them owns a motorcycle and he has employed his other brother. I also bought this motorcycle that I am driving after being employed by my uncle for three years.*

Therefore, the findings from the FGDs indicated that the male and female residents of Keumbu sub-county derived financial benefits from motorcycle transport while the male residents also derived employment benefits from the motorcycle transport sector.

These findings are in agreement with Elliot et al (2010) who established that the enhanced mobility from motorcycles is a catalyst of development and leads to increased employment opportunities especially among the male youths.

The study further sought to examine the health and safety challenges that afflict men and women who use motorcycle transport in Keumbu sub-county, Kisii county.

#### 4.4 Safety and Health Challenges in the Motorcycle Industry

The data was gathered from 28 male customers, 30 female customers and 16 drivers of motorcycle, making a total of 74 respondents. The findings were presented from the perspective of adult male customers, adult female customers and male drivers of motorcycles in Keumbu sub-county.

The security challenges that affected the male customers were examined and an analysis was made as shown in the table below:

**Table 4.17: Security challenges affecting male customers**

<b>Security challenges</b>	<b>Number</b>	<b>Percentage</b>
Deterioration of security	13	46
Theft & robbery	12	44
Rape	3	10
<b>Total</b>	<b>28</b>	<b>100</b>

The majority of the male customers of motorcycle transport (46%), suggested that the use of motorcycles was associated with deterioration of security, while 44% of the adult male customers of motorcycle reported that that motorcycle transport was associated with cases of robberies and theft in Keumbu Sub-County .

The findings also indicated that 10 % of the adult male customers of motorcycles reported that motorcycle transport was associated with cases of rape. One male customer called Ondieki, who was a civil servant said:

*A school girl was raped and infected with HIV by a motorcycle rider who was taking her to school in the early morning.*

These findings are in agreement with Ochieng and Egessa (2003) who pointed out that HIV/AIDS menace is closely associated with *bodaboda* business due to rampant sexual immorality associated with motorcycle mode of transport.

The study also examined the safety challenges affecting the female customers and the analysis was made as shown in the next table:

**Table: 4.18 Security challenges affecting female customers**

<b>Security challenges</b>	<b>Number</b>	<b>Percentage</b>
Theft and robberies	18	60
Bodily harm	8	24
Rape	4	14
<b>Total</b>	<b>30</b>	<b>100</b>

Majority of the respondents that is 60% of adult female customers, of motorcycles believed that the use of motorcycles was associated with robberies among the customers of the motorcycles especially those who travel during the night.

The findings also indicated that 14% of the adult female customers of motorcycles reported that motorcycle transport was associated with cases of rape while 24% of the adult female users of motorcycle suggested that motorcycle transport was associated with cases of bodily harm resulting from motorcycle accidents. One female user called Nyansiaboka, who was a teacher said:

*Many women who use motorcycles have suffered head injuries with others losing their limbs or suffering permanent disability some of these women can be seen either in wheel chairs or clutches.*

These findings concurred with the findings of Starkey (2002) who pointed out that, motorcycles present many problems on safety, regulation and enforcement due to lack of user protection and their instability. It was therefore critical for the researcher to examine the safety and health challenges associated with motorcycles. The analysis on this was done and presented as indicated on table 4.19

**Table 4.19: safety and health challenges associated with motorcycles**

<b>Challenge</b>	<b>Number</b>	<b>Percentage</b>
Chest pains	8	50
Bodily harm & permanent disability	7	44
Low libido	1	6
<b>Total</b>	<b>16</b>	<b>100</b>

The study findings from Focus Group Discussions (FGDs) on the safety and health problems that afflict men and women who use motorcycles in Keumbu sub-county indicated that 50% of the drivers of motorcycles pointed out that, the use of motorcycles was associated with chest pains among the drivers and customers of motorcycles. In addition, 44% explained that, motorcycles were associated with bodily harm and permanent disability and a further 6% of the motorcycle drivers suggested that motorcycle transport was associated with low libido among the young married men who used motorcycle transport in Keumbu Sub-County. Therefore, the findings from the FGDs indicated that the drivers of motorcycles in Keumbu Sub-County were of the opinion that use of motorcycles resulted in health problems including chest pains, bodily harm, permanent disability and low libido among the male drivers.

The findings concurred with Sabey and Taylor (1980), who pointed out that motorcycling causes a myriad of health problems which include low libido in males because of the many hours of driving a motorcycle in a sitting position, the findings also concurred with their assertion that motorcycle riding is associated with respiratory diseases like pneumonia and chest pains.

It was therefore critical to establish the gender sensitive strategies to improve motorcycle transport in Keumbu sub-county.

#### **4.5 Gender Sensitive Strategies to Improve the Motorcycle Transport**

The data was gathered from 28 male customers of motorcycles, 30 female customers of motorcycles and 16 motorcycle drivers. The findings were presented from the perspective of adult male customers, adult female customers and drivers of motorcycles in Keumbu sub-county, Kisii County.

The study examined the views of the male customers on the gender sensitive strategies, the analysis was made as shown in the table below:

**Table 4.20: Male customers view on gender sensitive strategies**

<b>Strategies</b>	<b>Number</b>	<b>Percentage</b>
Use of protective clothing	11	36
Profiling of motorcycle riders	8	24
Enhanced surveillance	4	16
Sensitization of school going boys & girls	3	14
Using motorcycles whose riders are well known	2	10
<b>Total</b>	<b>28</b>	<b>100</b>

According to the study findings, 36% of the male customers of motorcycles suggested that the strategies to improve motorcycle transport in Keumbu sub-county would include use of protective clothing, another 24% pointed out that profiling of motorcycle drivers would reduce motorcycle accidents in Keumbu sub-county. In addition, 16% of the adult male customers of motorcycle transport suggested that enhanced surveillance of motorcycle drivers would reduce the accidents of motorcycles in Keumbu Sub-County.

In addition 14% of the adult male customers of motorcycles pointed out that sensitization of the school going boys and girls to avoid riding on motorcycles whose drivers are little known to them would also reduce incidents of injuries and death that may be caused by motorcycle accidents in Keumbu Sub-County.

Lastly, 10% of the adult male customers of motorcycles suggested that female customers of motorcycle mode of transport should not be ferried by drivers who are unknown to them in order to reduce instances of rape in Keumbu sub-county.

It was therefore necessary to establish the views of the female motorcycle customers on gender sensitive strategies that may be used to improve the motorcycle transport. These views were analysed accordingly and presented as indicated in the table below:

**Table 4.21 Female customer's view on gender sensitive strategies**

<b>Strategies</b>	<b>Number</b>	<b>Percentage</b>
Use of protective clothing	14	48
Sensitization	6	20
Training on security issues	6	20
Frequent medical check up	4	12
<b>Total</b>	<b>30</b>	<b>100</b>

The study also established that, 48% of the adult female customers of motorcycle transport in Keumbu Sub-County were of the opinion that training on the use of protective clothing among the motorcycle users would reduce motorcycle accidents.

In addition, 20% of the female adult customers of motorcycle transport suggested that sensitization on sexually transmitted diseases would reduce the levels of sexual immorality among the motorcycle customers in Keumbu Sub-County.

In addition, another 20% of the adult female customers of motorcycles pointed out that training on security measures would assist the female customers of motorcycle mode of transport to deal with incidences of rape, theft and robberies.

Lastly, 12% of the adult female customers of motorcycles suggested that the male drivers of motorcycles in Keumbu Division should undergo frequent medical checkups so as to curb injuries to reproductive organs and impotence.

The study findings from Focus Group Discussions (FGDs) on the gender sensitive strategies to improve motorcycle transport in Keumbu sub-county indicated that 63% of the male drivers of motorcycles suggested that sensitization on the appropriate security measures during criminal acts like rape and robberies would reduce the damage associated with such crimes in the motorcycle transport industry. The other, 37% of the male drivers of motorcycles pointed out that timely medical care in case of illnesses like chest pains and pneumonia would help to reduce the deaths associated with motorcycle transport in Keumbu Sub-County.

Therefore, the findings from the FGDs indicated that the male drivers of motorcycles in Keumbu sub-county were of the opinion that the gender sensitive strategies to improve the use of

motorcycle transport in Keumbu Sub-County include sensitization on the appropriate security measures during criminal acts like rape and robberies and timely medical care incase of illnesses like chest pains and pneumonia.

These findings concur with the Sauter et al. (2005) who recommended that the safety of motorcycles be integrated in the social, mental and physical training programmes targeting users and riders so as to reduce the risk of death or disability and optimise the socio-economic benefits of motorcycle business and sport.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

The chapter presents the summary of the main findings, the conclusion based on the findings and the recommendations on policy, practice and further study.

#### 5.1 Summary of Findings

The purpose of the study was to examine the gender perspectives of motorcycle transport in Keumbu Sub-County, Kisii County. The sample size was made of 76 respondents out of which 74 participated in the study translating into a response rate of 97%. The findings were presented in line with the research objectives.

The first objective was to establish the demographic characteristics of customers of motorcycle mode of transport in Keumbu Sub-County, Kisii County. The study revealed that male and female customers of motorcycle transport were of diverse age groups ranging from 15 years to over 60 years while all the drivers of motorcycles were youthful men. The study also revealed that male and female customers of motorcycles were of diverse levels of education, with 37% of the motorcycle drivers having KCSE certificates as the highest level of education. An analysis of the marital status of the customers of motorcycles revealed that 63% were married, 6% were widowers, 6% were separated while 25% were single.

Further analysis pointed out that the motorcycle business was the main economic activity for the motorcycle drivers with some of the customers and drivers of motorcycles being owners of the motorcycles.

Many respondents observed that none of the female customers of motorcycle mode of transport owned a motorcycle. They also pointed out that motorcycles were used to transport both male and females to learning institutions, work stations and trading centres. Lastly, many respondents asserted that the use of motorcycles was popular among the residents of Keumbu Sub-County due to its speed, accessibility of remote areas, convenience and affordability.

The second objective was to establish the socio-economic effects of motorcycle mode of transport on its customers in Keumbu Sub-County, Kisii County. The study found out that 50% of the adult male customers of motorcycle mode of transport were of the opinion that the motorcycle drivers had a negative influence on the school going boys while 30% of the male customers of motorcycle pointed out that motorcycles were associated with degradation of morals among the youthful males, the other 20% disagreed with rest on the fact that motorcycle transport had a negative influence on the youthful males and was associated with moral degradation. From the perspective of adult female customers of motorcycle mode of transport, 46% of the female customers of motorcycle mode transport reported that motorcycles were associated with high rate of teenage pregnancies and school drop out rates from learning institutions. Further findings showed that 40% of the female customers of motorcycle mode of were of the opinion that motorcycle transport caused moral degradation among the customers while 14% were of contrary opinion that motorcycle transport was not associated in any way with moral degradation among its customers. In addition, 88% of the motorcycle drivers reported that motorcycles were a source of financial income for households while 12% argued that income from the motorcycle transport was used by the drivers to woo young girls.

75% of the motorcycle drivers associated motorcycles with provision of employment to the male residents of Keumbu Sub-County, while 25% argued that motorcycle mode of transport did not provide employment opportunities. In addition to that, the study revealed that 88% of the motorcycle drivers had encouraged their siblings and relatives to get employed in the motorcycle transport sector while the other 12% did not encourage because of the risks that were associated with driving of the motorcycles. Lastly 100% of the motorcycles agreed that the motorcycles provided employment benefits to the male adults. Therefore, from these study findings many people agreed that motorcycle mode of transport was a source of employment and it offered many youthful males a quick and reliable source of income, however, many respondents observed that the motorcycle mode of transport was associated with sexual immorality and teenage pregnancies, they further pointed out that the motorcycle mode of transport was associated with degradation of morals among the youthful.

The third objective was to establish the safety and healthy challenges associated with the usage of motorcycle transport in Keumbu sub-county, Kisii County. The study revealed that 46% of adult male customers of motorcycle mode of transport reported that the use of motorcycles caused insecurity, 44% of the adult male customers of motorcycle mode of transport suggested that motorcycle mode of transport was caused theft and robberies while the other 10% of the adult male customers of motorcycles pointed out that motorcycle transport caused rape in Keumbu Sub-County. From the perspective of adult female customers, 60% of adult female customers of motorcycle mode of transport pointed out that the use of motorcycle mode of transport resulted in theft and robberies among its customers especially those who travel during the night.

26% of the adult female customers of motorcycle reported that motorcycle transport caused associated bodily harm while 14% of the adult female customers of motorcycle transport pointed out that motorcycle transport resulted rape among the customers of motorcycles in Keumbu sub-county. From the perspective of male drivers of motorcycles. The study findings showed that 50% of the male drivers of motorcycles suggested that the use of motorcycles caused chest pains among the drivers and customers of motorcycles while 44% explained that motorcycle transport was caused bodily harm and permanent disability and another 6% reported that motorcycle transport resulted in low libido among its drivers. 75% of the male customers of motorcycles pointed out that motorcycle accidents could cause bodily harm and permanent disability or even death. In addition, 25% of the adult male drivers of motorcycles reported that motorcycle driving transport could lead to reduced libido on male drivers. The motorcycle mode of transport caused alot of insecurity in Keumbu sub-county since many respondents in the study observed that many rape cases, bodily harm, theft and robberies were closely linked with the motorcycle transport. Further still, many other respondents pointed out that the use of motorcycle mode of transport caused chest pains, pneumonia and reduced libido among the motorcycle drivers.

The fourth objective was to establish gender sensitive strategies to improve the motorcycle transport in Keumbu sub-county, Kisii County. From the perspective of adult male customers of motorcycles, 36% of the male customers of motorcycles suggested that the strategies to improve motorcycle transport for in Keumbu Sub-County would include use of protective clothing among the motorcycle customers, 24% suggested the profiling of motorcycle drivers, 16% suggested that enhanced surveillance of motorcycle drivers would reduce instances of insecurity.

14% of the adult male customers of motorcycles pointed out that sensitization of the school going boys and girls to avoid riding on motorcycles whose drivers are little known to them would also reduce incidences of kidnapping while another 10% suggested that all motorcycle customers should use motorcycles whose drivers are well to them.

From the perspective of adult female customers of motorcycles; the findings revealed 48% of the adult female customers of motorcycles in Keumbu Sub-County were of the opinion that training and sensitization on protective clothing among the motorcycle customers would reduce motorcycle accidents. 20% of the female adult customers of motorcycles suggested that sensitization on sexually transmitted diseases would reduce the levels of sexual immorality among the motorcycle users, 20% of the adult female customers of motorcycles suggested that training on security measures would assist in dealing with incidences of rape, theft and robberies. In addition, while 12% of the adult female customers of motorcycles suggested that the male drivers of motorcycles in Keumbu Sub-County should undergo frequent medical checkups so as to reduce chances of damaging reproductive organs.

From the perspective of male drivers of motorcycles, 63% of the male drivers of motorcycles pointed out that sensitization on the appropriate security measures on criminal acts like rape and robberies would reduce the damage associated with such crimes while the other 37% of the male drivers of motorcycles pointed out that timely medical care incase of illnesses like chest pains and pneumonia would help to reduce the deaths associated with motorcycle transport.

It can therefore be noted that, many respondents suggested that the gender sensitive strategies to improve motorcycle transport could include: Training and sensitization on both adult male and

female customers of motorcycle mode of transport on wearing of protective gears to reduce the extent of bodily harm in cases motorcycle accidents among both male and female customers, motorcycle customers to ensure that they are not ferried by drivers who are not known to them in order to reduce criminal acts, sensitization on the appropriate security measures will reduce the damage and also timely medical care should be sought on illnesses like pneumonia to reduce untimely deaths.

## **5.2 Conclusion**

The study findings indicated that both male and female customers of motorcycle transport service were of diverse age groups but the majority were of the age group 20-29 years for the females & 30-39 years for male.

The study also established that motorcycle transport was key to economic development since it enabled both men and women entrepreneurs to carry out economic activities, it also pointed out motorcycle transport business also offered a quick and reliable source of income to many male adults. The study however, indicated that motorcycle transport was associated with deterioration of security where many rape cases, theft and robberies were linked with the motorcycle transport. The study findings further pointed out that the motorcycle transport was associated with sexual immorality and teenage pregnancy.

The study findings suggested that both male and female motorcycle customers should wear protective gears to reduce incidences of accidents, and also customers of motorcycle mode of transport should not be ferried by drivers who are not known to them to reduce criminal acts.

### 5.3 Recommendations

The following recommendations were made in relation to the study findings:

- i. Regarding the demographic characteristics of motorcycle mode of transport users, the ministry of trade should encourage importation of motorcycles with low engine capacities in order to attract more female drivers
- ii. As for the socio- economic effects, The ministry of Transport and Infrastructure and The Kisii County Government should invest more resources in improving rural infrastructure so as to increase the convenience of using transport to enhance rapid economic development since time wasted during travel will be reduced.
- iii. Regarding the health and safety challenges, there should be massive sensitization programmes targeting both male and female customers of motorcycle mode of transport so as to curb incidences of insecurity like theft and rage and also effects of respiratory diseases.
- iv. In an effort to enhance safety of motorcycle mode of transport, The National Transport and Safety Authority should come up with rules and guidelines to ensure that motorcycle drivers and users wear protective clothing at all times to reduce incidences of diseases which come as a result of exposing themselves to dust or wind and minimise the extent of bodily harm in case of motorcycle accidents.
- v. In regard to safety there should be enforcement of the already existing policies on road safety to reduce occurrence of motorcycle accidents

#### **5.4 Areas of Further Research**

The following recommendations were made in relation to areas for further study:

There is need for a similar study encompassing the effects of motorcycle transport in other parts of the country. The findings from such studies will increase the generalizability of the findings across Kenya and also inform appropriate policy to enhance the utilization of motorcycle transport.

There is also a need to conduct a study with a view to improve the operations of the motorcycles so as to increase gender equity in the motorcycle transport industry. This will ensure the motorcycle transport attracts more women operators, consequently, this will ensure that benefits of such ventures are not diluted.

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## APPENDICES

### APPENDIX I: INTERVIEW GUIDE FOR ADULT FEMALE CUSTOMERS OF THE MOTORCYCLES

Dear respondent,

My name is Edna Omari, I am a Master of Arts student at the school of Humanities and Social Sciences in Kenyatta University. I am currently undertaking my research entitled: ‘The gender perspectives of motorcycle transport in Keumbu sub-county, Kisii County’. You are kindly requested to answer all questions in this interview guide. The information that you will provide shall be treated with high level of confidentiality and strictly used for the purpose of this research study. This study aims at examining the gender perspectives of motorcycle transport in Keumbu sub-county, Kisii county so that the benefits of the motorcycle transport service are maximised and the negative effects minimised through the enhancement of gender sensitive strategies.

**NB:** Please do not disclose your name anywhere in this interview guide.

Thank you

Edna

#### **SECTION A: RESPONDENTS PROFILE**

1. When were you born?

.....

2. State your highest level of education

.....

3. Are you married?

A. Yes      ( )

B. No ( )

i. If yes, what does your husband do?

.....

ii. If married to a motorcycle driver:

a. When did your husband enter the business?

.....

b. Does he own the motorcycle?

.....

c. What challenges do you experience as a wife of a motorcycle driver?

.....

**SECTION B: USAGE OF MOTORCYCLE TRANSPORT**

1. List the factors that have motivated the use of motorcycle transport among the following customers:

i. Young married women

.....  
.....

ii. Aged women

.....  
.....

2. What positive experiences have you had on the use of motorcycle transport?

.....  
.....

**SECTION C: SOCIO-ECONOMIC EFFECTS OF MOTORCYCLE TRANSPORT BUSINESS**

1. List the financial benefits derived by women from the operation of motorcycle transport business

.....  
.....

2. List the employment benefits derived by women from the operation of motorcycle transport business

.....  
.....

**SECTION D: HEALTH AND SAFETY CHALLENGES OF MOTORCYCLE TRANSPORT BUSINESS**

1. List the health challenges faced by the following female customers of motorcycle transport business in Keumbu sub-county:

- i. Young married women

.....  
.....

- ii. Aged women

.....  
.....

2. List the security challenges associated with the following female customers of motorcycle transport business in Keumbu sub-county:

- i. Young married women

.....  
.....

- ii. Aged women

.....  
.....

**SECTION E: GENDER SENSITIVE STRATEGIES TO IMPROVE MOTORCYCLE  
TRANSPORT BUSINESS**

1. Suggest measures that should be taken in order to overcome the challenges facing the following customers of motorcycle transport business:

i. Young married women

.....  
.....

ii. Aged women

.....  
.....  
.....

**END.**

**THANKS FOR YOUR RESPONSE**

## **APPENDIX II: INTERVIEW GUIDE FOR ADULT MALE CUSTOMERS OF THE MOTORCYCLES**

Dear respondent,

My name is Edna Omari, I am a Master of Arts student at the school of Humanities and Social Sciences in Kenyatta University. I am currently undertaking my research entitled ‘The gender perspectives of motorcycle transport in keumbu sub-county, Kisii county’. You are kindly requested to answer all questions in this interview guide. The information that you will provide shall be treated with high level of confidentiality and strictly used for the purpose of this research study. This study aims at examining the gender perspectives of motorcycle transport in Keumbu sub-county, Kisii county, so that the benefits of motorcycle transport service are maximised and the negative effects reduced through the enhancement of gender sensitive strategies.

**NB:** Please do not disclose your name anywhere in this interview guide.

Thank you

Edna

### **SECTION A: RESPONDENTS PROFILE**

1. When were you born?

.....

2. State your highest level of education

.....

3. Are you married?

- a. Yes ( )
- b. No ( )

iii. If yes, what does your wife do?

.....  
iv. If married to a motorcycle driver

i. When did your wife enter the business?

.....

ii. Does she own the motorcycle?

.....

iii. What challenges do you experience as a husband of a motorcycle driver?

.....

**SECTION B: USAGE OF MOTORCYCLE TRANSPORT**

1. List the factors that have motivated the use of motorcycle transport among the following male customers:

iii. Young married men

.....  
.....

iv. Aged men

.....  
.....

2. What positive experiences have you had on the use of motorcycle transport?

.....  
.....

**SECTION C: SOCIO-ECONOMIC EFFECTS OF MOTORCYCLE TRANSPORT BUSINESS**

1. List the financial benefits derived by men from the operation of motorcycle transport business

.....  
.....

2 List the employment benefits derived by men from the operation of motorcycle transport business

.....  
.....

**SECTION D: HEALTH AND SAFETY CHALLENGES OF MOTORCYCLE TRANSPORT BUSINESS**

1. List the health challenges faced by the following male customers of motorcycle transport business in Keumbu sub-county:

i. Young married men

.....  
.....

ii. Aged men

.....  
.....

2. List the security challenges associated with the following male customers of motorcycle transport business in Keumbu sub-county:

i Young married men

.....  
.....

ii Aged men

.....  
.....

**SECTION E: GENDER SENSITIVE STRATEGIES TO IMPROVE MOTORCYCLE TRANSPORT BUSINESS**

1. Suggest measures that should be taken in order to overcome the challenges facing the following male customers of motorcycle transport business:

i Young married men

.....

.....  
ii Aged men  
.....  
.....  
.....

**END.**

**THANKS FOR YOUR RESPONSE**

## **APPENDIX III: FOCUSED GROUP DISCUSSION GUIDE FOR MOTORCYCLE**

### **DRIVERS**

#### **Instructions**

Dear respondent,

My name is Edna Omari, I am a Master of Arts student at the School of Humanities and Social Sciences in Kenyatta University. I am currently undertaking my research entitled ‘The gender perspectives of motorcycle transport in Keumbu sub-county, Kisii county’. You are kindly requested to answer all questions in this research focused group discussion guide. The information that you provide shall be treated with a high level of confidentiality and strictly used for the purpose of this research study. This study aims at examining the gender perspectives of motorcycle transport in Keumbu sub-county in Kisii county, so that the benefits of motorcycle transport service are maximised and the negative effects minimised through the enhancement of gender sensitive strategies.

**NB:**Please do not disclose your name anywhere in this interview guide.

Thank you

Edna

### **PART A: RESPONDENTS’ DETAILS**

Please tick appropriately where applicable in the spaces provided

1) What is your age bracket?

- |                  |     |
|------------------|-----|
| a. 15– 24 Years  | ( ) |
| b. 25 – 34 Years | ( ) |
| c. 45– 54 Years  | ( ) |
| d. Over 55 Years | ( ) |

2) What is your highest level of education?

- a. Primary ( )
- b. Secondary ( )
- c. Tertiary ( )

**PART B: USAGE OF MOTORCYCLE TRANSPORT**

- 1. Who are the most frequent customers of motorcycle transport?  
.....
- 2. How many customers do you carry at ago?  
.....
- 3. How many trips do you do in a day?  
.....
- 4. How much do you get from every trip?  
.....
- 5. To what destinations do you carry your customers?  
.....
- 6. In your view, what are the reasons for the popularity of motorcycle transport?  
.....

**PART C: SOCIO-ECONOMIC EFFECTS OF MOTORCYCLE TRANSPORT**

- 1. What benefits do the following groups of people get from the operation of motorcycle transport business ?
  - i. Adult women  
.....
  - ii. Adult men  
.....

iii. School girls

.....

iv. School boys

.....

v. Motorcycle drivers

.....

2. What are the employment benefits that accrue to the following classes of people from the operation of motorcycle transport business :

i. Adult women

.....

ii. Adult men

.....

iii. School girls

.....

iv. School boys

.....

v. Motorcycle drivers

.....

**PART D: HEALTH AND SAFETY CHALLENGES OF MOTORCYCLE TRANSPORT**

1. What health challenges are associated with the use of motorcycle transport business on?

i. Adult women

.....

ii. Adult men

.....

iii. School girls

.....

iv. School boys

.....

v. Motorcycle drivers

.....

2. What security challenges are associated with the use of motorcycle transport business on:

i. Adult women

.....

ii. Adult men

.....

iii. School girls

.....

iv. School boys

- .....
- v. Motorcycle drivers
- .....

**PART E: GENDER SENSITIVE STRATEGIES TO IMPROVE MOTORCYCLE  
TRANSPORT**

1. Suggest the solutions to the challenges experienced by the following persons in the operation of motorcycle transport.

- i. Adult women
- .....
- .....

- ii. Adult men
- .....
- .....

- iii. School girls
- .....
- .....

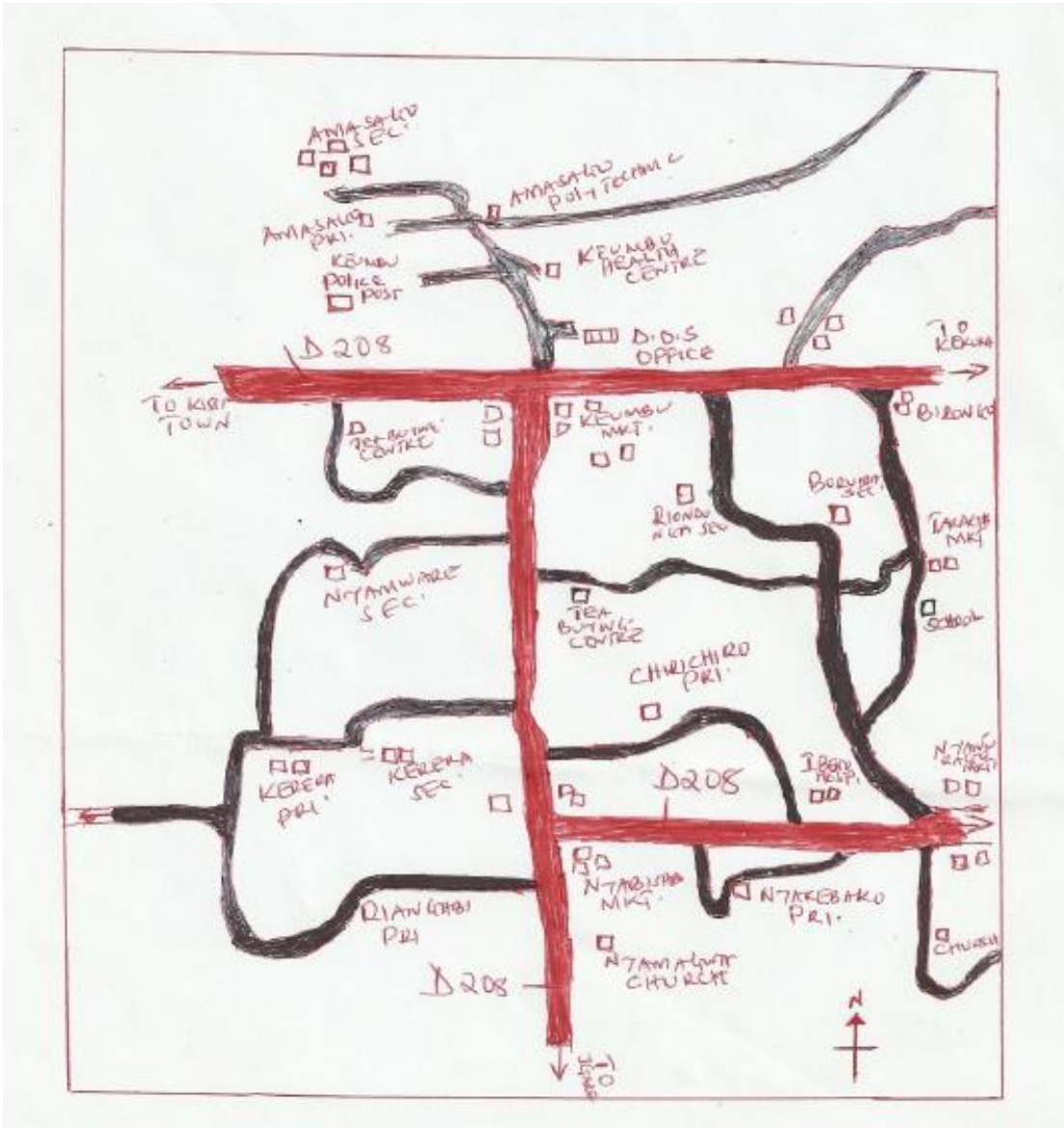
- iv. School boys
- .....
- .....
- .....

- v. Male motorcycle drivers
- .....
- .....
- .....

**END.**

**THANK YOU**

**APPENDIX IV: SKETCH MAP OF THE STUDY SITE.**



**KEY:**

- i) Road in red (D) –represents main tarmac roads in Keumbu sub-county; passable in all seasons
- ii) Road in black –represents feeder roads connecting the interior parts of Keumbu sub-county passable during dry seasons only .

## APPENDIX V: INTRODUCTORY PERMIT

KENYATTA UNIVERSITY  
GRADUATE SCHOOL

E-mail: [kubps@yahoo.com](mailto:kubps@yahoo.com)  
[dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)  
Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 8710901 Ext. 57530

---

Our Ref: C50/CE/22714/2010

Date: 15<sup>th</sup> March, 2015

The Principal Secretary,  
Higher Education, Science & Technology,  
P.O. Box 30040,  
**NAIROBI**

Dear Sir/Madam,

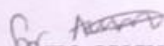
RE: RESEARCH AUTHORIZATION FOR MS. EDNA K. OMARI-REG. NO. C50/CE/22714/2010

I write to introduce Ms. Omari who is a Postgraduate Student of this University. She is registered for a M.A. degree programme in the **Department of English & Linguistics**.

Ms. Omari intends to conduct research for a thesis Proposal entitled, "**The Gender Perspectives of Motorcycle Transport in Keumbu Division, Kisii County**".

Any assistance given will be highly appreciated.

Yours faithfully,

  
**MRS. LUCY N. MBAABU**  
**FOR: DEAN, GRADUATE SCHOOL**

AM/nn

**APPENDIXVI: RESEARCH PERMIT**

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

Telephone: +254-20-2213471,  
2241349, 3310571, 2219420  
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Website: www.nacosti.go.ke  
when replying please quote

9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref: No.

NACOSTI/P/17/84116/15103

Date:

13<sup>th</sup> February, 2017

Edina Kemunto Omari  
Kenyatta University  
P.O. Box 43844-00100  
NAIROBI.

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*The gender perspectives of motorcycle transport in Keumbu Sub-County, Kisii County,*" I am pleased to inform you that you have been authorized to undertake research in **Kisii County** for the period ending **10<sup>th</sup> February, 2018**.

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

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

  
BONIFACE WANYAMA  
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner  
Kisii County.

The County Director of Education  
Kisii County.



**APPENDIX VII: CONSENT FORM FOR TAKING MOTORCYCLE PHOTOGRAPHS**

CONSENT FORM FOR TAKING MOTORCYCLE PHOTOGRAPHS

I, DNYAMBU SOLOMON TINEGA....., have agreed to have my photograph taken for the purpose of this research.

Name SOLOMON TINEGA Date 13/03/2016 Signature [Signature]

(RESPONDENT)

Name DMAE? & EAMA Date 13/3/2016 Signature [Signature]

(RESEARCHER)