# BODA BODA MOTORCYCLE TRANSPORT INFLUENCE ON SOCIO-ECONOMIC EMPOWEREMENT OF YOUTHS AND THEIR HOUSEHOLDS IN TURKANA COUNTY, KENYA

By

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(DAS/60292/15)

# A RESEARCH PROPOSAL SUBMITTED FOR THE PARTIAL FULFILMENT OF DEGREE OF DOCTOR OF PHILOSOPHY IN DEVELOPMENT STUDIES KISII UNIVERSITY

# FACULTY OF ARTS AND SOCIAL SCIENCES DEPARTMENT OF SOCIOLOGY AND DEVELOPMENT STUDIES

10<sup>th</sup> MAY, 2019

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# DECLARATION BY THE CANDIDATE

This study is my original work and has not been presented for a degree in any other university or of any award.
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This research proposal has been submitted for examination with our approval as University supervisors.
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SignatureDate

# **DEDICATION**

The proposed work is dedicated to my family members, for the passionate support for my education.

#### ACKNOWLEDGEMENTS

To complete the work of this nature will not succeed without God's guidance who gives wisdom and knowledge and the assistance, therefore endless thanks to God. The understanding and cooperation of many individuals and institutions are significant. For this reason, I will have many acknowledgements to make to those who assist in any way to make this work complete.

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#### **Abstract**

Motorcycle business known as "Boda-boda" eased transportation problem of connecting urban and rural areas in Kenya. It is booming business as it is readily available in urban and rural areas and people always transport goods to and fro and uses paths instead of roads given that feeder roads in Kenya are impassible during rainy seasons. Globally, for example in Vietnam motorbikes use is extremely high due to lack of public transport and low income levels that put automobiles out of reach for many peoples use. In Africa especially in Nigeria by 1980s the transportation sector of economy was greatly affected by SAPs and led to the drop in the supply of transport services and mobility and as a consequence led to emergence of motorcycle (okada) and tricycle transport. In Kenya, studies have been done such as assessment of the impact of training boda boda operators and safety status in Kakamega County, revealed that majority of the boda boda riders received informal training through apprenticeship and a few attend training schools, a reason for frequent occurrence of accidents, as no extensive training is given to riders. In Turkana County, mostly there are a few training Centres to offer refresher courses to boda boda motorcycle riders on how to comply with rules of Highway Code of driving. As a result most of the boda boda motorcycle riders and their passengers quite often get involved in fatal accidents. Most of the boda boda motorcycle riders are youths aged between 18 to 35 years old and are the prime sources of family income. Their customers/ passengers are also those who have some source of income and therefore, have to go out to fend for families. When accidents occur, affect both boda boda motorcycle riders and passengers. It's on this background that this study intends to unearth how the boda boda motorcycle industry has affected the socio-economic development of youths and families engaged in the business as an extension to their families. The objective of the study are: to examine how government policy on the motor cycle transport industry has affected the development of youths in Turkana County; to evaluate how boda boda motorcycle have affected the socio-economic development of motor cycle riders and their families in Turkana County; to assess the measures the government can take to enhance sustained socio-economic empowerment of youths involved in boda boda motorcycle industry in Turkana County and to analyze the effects of boda boda motor cycle accidents on socioeconomic development of youths riders and their households in Turkana County. There are a number of theories which explain the phenomena understudy and the research will apply the following two theories including, empowerment theory and problem-solving theory. These theories will relate to conceptual framework where the independent variable is the boda boda transport business and dependent variable is youth livelihoods and their households and will be moderated by government policy on boda boda transport industry in Kenya. Descriptive survey research design will be used and will be collected by three main research instruments structured questionnaires, direct observation and interview schedules. The research will target a population of 1006 from the five target groups including motorcycle riders, Heads of households, Police officials, Court officials and Loan organizations. Therefore, random sampling technique will be employed to select motorcycle riders, the households' heads of the motorcycle accidents victims selected by snowballing in the stages and police officials and Loan organizations will be purposively sampled. Data will be analyzed using statistical package for social sciences (SPSS) version 21.Data will be presented inform of tables, percentages and graphs. Expected findings of the study will provide needed information for socio-economic empowerment of youths and their households in Turkana County and applied in other counties with similar problem in Kenya.

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#### LIST OF ABBREVIATIONS/ACRONYMNS

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HDI-Human Development Index

HRM-Human Resource Management

ICT-Information communication and Technology

INTP-Integrated National Transport Policy

ITDP-Institute for Transport and Development policy

KIPPRA-Kenya Institute for Public Policy Research Analysis

KNBS-Kenya National Bureau of Statistics

MAAK-Motorcycle Assemblies Association of Kenya

NACOSTI-National Commission for Science, Technology and Innovation

NGOs-Non Governmental Organizations

NHTSA-National Highway Transport Safety Administration

NTPC-National Transport Policy Committee

NTSA-National Transport and Safety Authority

SACCO-Savings and Credit Cooperative societies

SAPs-Structural adjustment programmes

SPSS-Statistical Package for Social Sciences

WHO-World Health Organization

#### **CHAPTER ONE**

#### 1.0 INTRODUCTION

This chapter introduces the research problem. It examines the background. It also presents a statement of research problem, its purpose and objectives as well as research questions and hypotheses that will direct course of the study. It will also cover the assumptions of the study and Theoretical and conceptual frameworks. In addition it will describe the significance of the study and outlines its scope and delimitation as well as operational definition of key terms.

#### 1.1 Introduction and Background of the study

The study seeks to address the role of government policy in the relationship between bodaboda transport industry practices on youth livelihood in Turkana County. The boda boda motorcycle transport is becoming popular in both rural and urban areas because of its nature of operation of using paths where there are no roads or where roads are impassable. According to Nyaga (2017), the role of transport sector in Kenya is significantly demanding while at the same time being complex to ensure transport sector effectively and efficiently achieve its intended functions, the former minister for Transport, late John Njoroge Michuki, launched the National Transport Policy Committee (NTPC) on 2<sup>nd</sup> April 2003 with the view of developing Integrated National Policy (INTP), to regulate transport industry in Kenya. This INPT document was developed under the theme "Moving a working Kenya" (KIPPRA, 2009). It played a very significant role of establishing the challenges that prevailed within the transport sector and which adversely affected wellbeing of both rural and urban dwellers to access important services. Poor roads network isolated hinterlands from the rest of the world and as a result there has been increase in mortality rate due to patients who are not able to access health service at the right time (Starkey, 2006). The emergence of the boda boda motor cycles business in transport industry offered a solution to some of the problems and challenges people faced in linking the rural and urban areas for required services faster and more convenient.

The boda boda transport has become booming business because of the monetary gains for the unemployed youths in Kenya. With the immediate monetary returns and affordability especially

where people can be advanced loans or even sell property, majority of the rural people have embraced this mode of transport as easier and affordable solution to their livelihoods (Kumar, 2011). Also youths have been attracted into boda boda taxi businesses even without the necessary basic training which has also turned to recipe to many accidents as well as violation of traffic rules (Nyachieo, 2012). According to Rugut (2015), motorcycles provide faster means of transport services in the face of poor road condition and persistent traffic congestion. It has also played significant role of high level of unemployed and underemployed university graduate youths to earn a living and a steady income (Rugut 2015). In this sense therefore, most motorcycle operators get involved in motorcycle service just to secure a temporary employment.

While boda boda offering certain transport advantages in the form of easy maneuverability, ability to travel on poor roads and demand responsiveness, commercial boda boda service growth has also led to an increase in road accidents and traffic management problems (Rugut, 2015). However, statistics point out to boda bodas as a major cause of traffic accidents in Kenya accounting for 13.50 percent of the total number of deaths (NTSA, 2014).

Boda boda serve passengers in areas where other modes of transport may not be available (Ministry of Transport, 2009). The boda boda serve as taxis and provide convenience of travelling irrespective of time, type of road, distance or destination and in addition they are readily available. The boda boda are increasing transportation access and employment chances for the youths and households and addressed issues of unemployment and poverty and leading to socio-economic empowerment of the youths and their households in Turkana County. However boda boda transport industry has all the advantages notwithstanding, the safety of the boda boda motorcycle rider and pillion has become a major concern to stakeholders including the government and non-governmental organizations (NGOs) concerned with transport safety. This is due to increase in road accidents daily involving the boda boda riders and pillions/passengers. For example Naivasha highway, there were reported deaths of up to 40 people per month. This death toll from motorcycle boda boda riders crashed has been so high that some hospital wards are set aside specifically for boda boda victims (Bogan, 2010).

This has social and economic implications, because the consequences of boda boda accidents include, a drain on the economy through loss of income for riders who are maimed, loss of

labour for the country, loss of labour in the county, loss of support for households especially if the breadwinner dies or is incapacitated and loss of time for other activities because of caring for the injured. Similarly, for those injured in accidents, the treatment is long and expensive because most of them sustain head and injuries, not to mention the emotional pain for relatives in the case death(Khayesi,1999). It against this challenges of boda boda transport industry and yet the benefits are more to many youths in the contemporary society, the study will be undertaken to determine the policies to be used to regulate the boda boda transport industry and lead to socioeconomic empowerment of youths and their households for sustainable development and economic growth in Turkana County, Kenya.

#### 1.2 Statement of the problem

The increase in the number of boda boda motorcycle accidents has been reported in many parts of the country according to police reports(KNBS,2016). These accidents have adverse effects on the riders and pillion passengers as well as other road users(Nyaga, 2017). Sometimes, most of the victims are poor people with no medical cover, accident cover insurances(Mbugua,2011). As a result of this ends up in depletion of already scarce resources at disposal for support of the household and leading to intolerable suffering for both the boda boda riders and dependent family members in their households. Kenya is reported to have over 200,000 boda boda motorcycle operators in the western region alone, and this number is increasing every month. In June 12<sup>th</sup> 2018, Motorcycle Association of Kenya (MAAK) figures show there were at 6000,000 commercial motorcycles in Kenya by the end of 2017, out of 48 million bikes in the country. Also official Data by the Kenya National Bureau of Statistics (KNBS) shows new motorcycle registries for the 10 month period rose to 159,260 units compared to 85,073 units registered during the same period in 2016. Data collected by the National Transport and Safety Authority (NTSA) between January 1st and December 28th 2017, shows motorcycle crash victims were 1,177 people, 10.6 percent of all road accident victims. Motorcycle accidents results in both human and economic loss, as some 490 deaths and 539 serious injuries were reported while 148 suffered minor injurious (Ilako, 2018). The boda boda motorcycle riders do not see the need for wearing a helmet although most would have at least one for themselves. Also many riders will have an extra, but there is often more than one passenger on the same motorcycle. Henceforth, most passengers do not like to wear helmets especially women because of the styles of hair they

have on their heads. Similarly some passengers do not necessarily want to wear a helmet worn several times by other people as some passengers see it unhygienic.

In Turkana County, mostly there are a few safety training Centres to offer refresher courses to boda boda motorcycle riders on how to comply with rules of Highway Code of driving as a result most of the boda boda motorcycle riders and their pillions/passengers quite often get involved in fatal accidents. Most of the boda boda motorcycle riders are youths aged between 18 to 35 years old and are the prime sources of family income. Their customers/passengers are also those who have some source of income and therefore, have to go out to fend for families. Non observance of traffic rules such as overloading, overspeeding, on the turkana sandy terrain is almost certain that an accident must occur which results to death of the boda boda motorcycle rider, with their passengers, incapacitation of both and which means the source of family livelihood has been cut off suddenly. The implication is whatever little family income that becomes available will be channeled towards medical bills, incurred after the accident. Accidents victims usually suffer from various injuries of different magnitudes that need a huge sum of money to settle medical bills. The initial purpose for youth's engagement in the boda boda motorcycle transport industry is enable them to have sufficient self-financial support and that of their families to help afford basic amenities and do other developments. These accidents affect both boda boda motorcycle riders and passengers in that there would tough for both boda boda motorcycle riders and passengers who would be supporting their families. It's on this background that this study intends to unearth how the boda boda motorcycle industry has affected the socio-economic development of youths engaged in the business with their families.

#### 1.3 Purpose

The purpose is to study boda boda motorcycle industry on youth's influence socio-economic empowerment and their households in Turkana county Kenya.

#### 1.4 The of objectives of the study

#### 1.4.1 The general objective

The general objective is to assess the extent boda boda motorcycle industry has affected the socio-economic development of youths and families in Turkana County Kenya.

#### 1.4.2 Specific objectives

- 1. To examine how government policy on the motor cycle transport industry has affected the development of youths in Turkana County.
- 2. To evaluate how boda boda motorcycle have affected the socio-economic development of motor cycle riders and their families in Turkana County.
- 3. To assess the measures the government can take to enhance sustained socio-economic empowerment of youths involved in boda boda motorcycle industry in Turkana County.
- 4. To analyze the effects of boda boda motor cycle accidents on socio-economic development of youths riders and their families in Turkana County.

#### 1.5 Research questions

- 1. How has the government policy on the motor cycle transport industry affected the development of youths in Turkana County?
- 2. Does the boda boda motorcycle affect the socio-economic development of motor cycle riders and their families in Turkana County?
- 3. What measures can the government take to enhance sustained socio-economic empowerment of youths involved in boda boda motorcycle industry in Turkana County?
- 4. What effects do boda boda motor cycle accidents cause on socio-economic development of youth's riders and their families in Turkana County?

#### 1.6 Assumptions of the study

The study will assume that respondents will be honest, cooperative and objective in response to research questions in the research instruments and will be available in the time of data collection. Further it will be assumed the research findings from the research conducted in Turkana county will be applicable in solving the similar problems of boda boda in other counties in Kenya and other parts of the world. Futher still, it will be assumed the findings from the study will make the boda boda motorcycle riders become compliant with the traffic rules, and reduce the number of accidents caused in boda boda transport industry.

#### 1.7 Scope / Delimitations

The study will focus on the boda boda motorcycle industry on youth socio-economic empowerment and their households in Turkana county Kenya and the study will be conducted in major towns in the sub counties of Turkana County. This will include: Lokitang in Turkana North sub county, Lodwar in Turkana Central sub-county, Lokichar in Turkana south Sub-county, Lorugum in Loima sub-county, Kukama in Turkana west Sub County and Lokor in Turkana East Sub County, as shown in the map of Turkana County in appendix 1. This will constitute both rural and urban communities because of it nature and links.

#### 1.8 Limitations of the study

This study will anticipate encountering limitation that will hinder to receive the required information of the study. The target respondents will be reluctant in giving proper information in the study fearing that information being sought will be used to intimidate and used to arrest them in case of traffic mistakes. The researcher will instill confidence to the respondents through the letter of introduction from the postgraduate in the university and assure them the information given will be kept confidential and for study purposes only. Also some of the respondents are illiterate and will not be able to fill the questionnaire and researcher and research assistants will spend more time in interviewing them and filling the questionnaires. The other limitation is that the study will be based in Turkana county and being ASALs region, will be limited by unfavorable weather to both the researcher and respondents. And the study will be limited to the study of socio-economic empowerment of youth riders and their households and will not include

the passengers. The study will be further limited by accessing accident records at the traffic police office and pose a challenge; given the nature of police work of keeping information is confidential. The other challenge will include inaccurate statistics of the actual number of accidents as there are reported and unreported cases of boda boda accidents in rural areas were the traffic police cannot trace.

#### 1.9 Significance of the study

Cox (2010) applauded the socio-economic benefit of the boda boda industry as it was a considerable direct and indirect income generation. However, basing on the problem stated, the rate of motorcycle accidents in Kenyan highways is becoming rampant although motorcycle business has attracted and influenced many unemployed university graduates youths countrywide as a business activity for sustainable livelihoods and steady income, for the households thus directly and indirectly leading to economic growth Kenya and particularly in Turkana county not been adequately studied to establish. However the dynamics of this business has not been adequately studied to establish the prerequisites for its success as a business venture for the youths, since most of them love lives in the course of operation. This study therefore, will explore the requirements to be put in place for successful operation and implementation so that to minimize the rate of deaths caused by boda boda riders. The findings will be from turkana central sub county as a sample study but will be applicable in regions nationally and internationally. The findings will therefore, assist the unemployed youths, riders and investors who will need to venture into the boda boda business and the government to regulate the business dynamics of motorcycle for enhancing its success for sustainable development and economic growth in Kenya.

#### 1.10 Theoretical framework

The study will apply a wide range of theoretical approaches which relates and focus on the study. A theory provides the researcher the lens to view the world (Royle and Hal, 2013). There are numerous theories which explain the phenomena understudy, as such will borrow a wide range of theories including: The empowerment approach and the problem-solving theory.

#### 1.10.1 The empowerment theory to boda boda riders practice

Empowerment approach makes connections between social and economic justice and individual pain and suffering (Lee, 1996:219). In this sense the study will be utilizing empowerment theory as unifying framework because it presents an integrative, holistic approach to meeting the members of the boda boda riders and passengers in transport industry. According to Lee (1996:224) Empowerment "deals with a particular kind of block to problem-solving: that imposed by the external society by virtue of stigmatized collective identity". The empowerment process resides in person (boda boda) rider, not the helper (passenger). According to Lee(1996:224), there are three interlocking dimensions of empowerment including(1) the development of a more positive and potent of self, in this study which will lead to boda boda riders compliant to traffic rules;(2)the construction of knowledge and capacity for more critical comprehension of social and political realities on one's environment, if an accident occurs; and(3)the cultivation of resources and strategies, or more functional competence for attainment of personal and collective social goals or liberation(Lee,1996:224).as the study will partialize and operationalize the concept of empowerment of youths involved in boda boda transport industry, it can be the keystone of social work(Beck, 1983), and sustainable households in Turkana county. This will lead political empowerment as the purpose but personal satisfaction, growth, community or ethnic pride and heightened self-esteem may be by products of these experiences in boda boda transport industry. The empowerment approach influenced the problem-solving theory in boda boda transport industry, in Turkana County.

#### 1.10.2 The problem-solving theory

The boda boda motorcycle transport industry emerged as an alternative means of transport sector to solve problems of transporting goods and people from areas where taxis cannot reach. Therefore, problem-solving theory is applied in this as a problem solving can be defined as a "cognitive activity aimed at changing a problem from the given to the goal state(Mayer,1994:600) or, more definitively, as "systematic, step-by-step thinking and acting process that involves moving from undesired to desired state" (Gelfand,1988:1). It express

people's natural capacity to use their cognitive power of reason and logic to attain goals they value, an ability that develops in increasing complex ways from infancy to adulthood(Turner &Jaco,1996:503). This capacity enables people to obtain information from their environment and use that information to design ways of meeting their biological, psychological, cultural and social needs(Flavell et at.1993). This means that it appears that the very fact of being alive challenges people to continually apply problem-solving powers in order to resolve the large and small dilemmas that living presents to them. According to Perlman(1957:53)saw living as a problem-solving process, and described life as "a continuous change and movement in which the human beings works on so adapting himself to external objects, or them to himself as to achieve maximum satisfactions in boda boda motorcycle transport industry. The problem-solving theory influenced advances in the life model of social work practice.

#### 1.11 Conceptual frameworks

Many scientific and academic researches employ a conceptual framework at the outset because it helps the researcher to clarify his/her research objectives and questions through a simplified manner. In this sense Orodho (2009), argues that a conceptual framework describes the relationship between the research variables. Thus, according to Everitt (2002), a dependent is a variable is a dependent on another variable like the independent variable. A dependent variable is a variable which is measured in research. In this study therefore, the dependent variable will be youth livelihoods and support of households while independent variable will be boda boda motorcycle transport industry and intervening variables will be the government policies to regulate the emerging boda boda motorcycle business in the transport industry for sustainable development and economic growth in Kenya. Figure 1 illustrates the conceptual frame as linked with the theories adopted for the study.

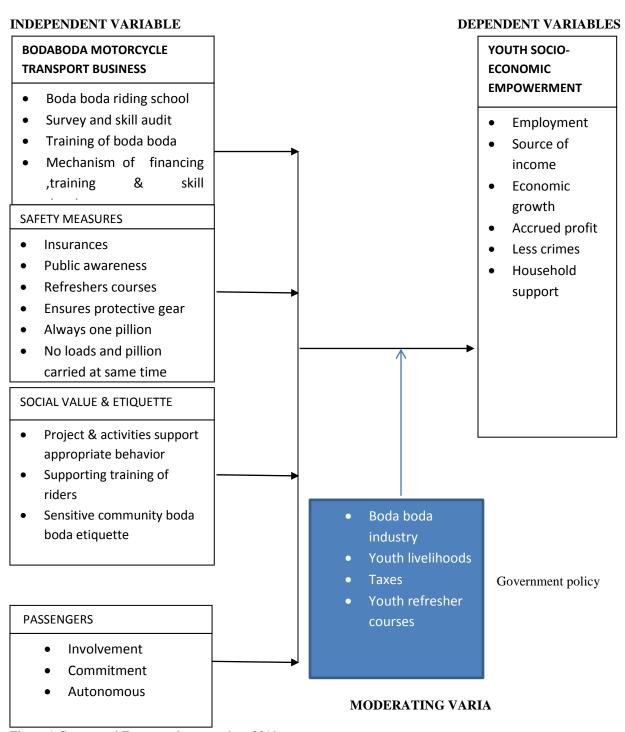


Figure 1. Conceptual Framework, researcher, 2019

Figure 1 illustrate the conceptual framework which simplifies the variables and gives a clear statement of the problem. The independent variable are classified into four according to objectives of the study such that the first, To examine how government policy on the motor cycle transport industry has affected the development of youths will include, aspects of insurances public awareness, refreshers courses, ensures protective gear, always one pillion and no loads and pillion. In the second objective To evaluate how boda boda motorcycle have affected the socio-economic development of motor cycle riders and their families including boda boda riding school, survey and skill audit, training of boda boda riders, mechanism of financing training & skill development. In the third objective To assess the measures the government can take to enhance sustained socio-economic empowerment of youths involved in boda boda motorcycle industry comprise of issues pertaining to project & activities support appropriate behavior, supporting training of riders, sensitize community boda boda etiquette. The fourth objective is to analyze the effects of boda boda motor cycle accidents on socio-economic development of youths riders and their families comprises aspects of involvement, commitment, autonomous in boda boda industry. This various variables leading to dependent variable of Socio-economic youth empowerment and their households will include aspects of employment, source of income, economic growth, accrued profit, less crimes and Household support.

#### 1.12 Definition of Operational terms

**Boda boda-** a two or three wheeled motorcycles used for transporting goods and passengers at a fee from one destination in urban and rural areas.

**Boda boda safety**-all aspects that applied to reduce the vulnerability to accidents when riding the boda boda, involving motorcycle design, rider training, skills and knowledge and riders behavior and attitudes leading to increase or decrease of boda boda accidents.

**Boda boda rider**- is the operator of the boda boda motorcycle

Good condition of boda boda-imply a boda boda in good working order for transporting passengers and goods which have reflectors, side mirrors, passenger seats, effective brakes, good tires and well serviced.

Households-this are all members of the riders family and dependents for the extended families

Livelihoods-this refers to the means or source of income for daily survival in the household

**Pillion**-refers to boda boda passengers

**Policies** are overall directives which will outline guides or sets a context for proposed actions a county government will take

**Road safety**-includes all activities or methods and measures that are issued to reduce risks of injury, death and ham to road users thereby reducing the rates and consequences of road crashes in transport industry.

#### CHAPTER TWO

#### 2.0 REVIEW OF RELATED LITERATURE

The previous chapter introduced the problem of the study by outlining the contexts of the study and problem statement, the study objectives, theoretical frameworks and justification of the study. The second chapter introduces the discussion on relevant literature applicable to the study objectives. Literature review involves systematic identification of documents containing any relevant information concerning the subject of interest understudy in a research problem (Mugenda and Mugenda, 1999). For simplicity purposes, literature will be organized into three different categories dealing with, historical perspective to development of boda boda, theoretical review of the relevant theories and empirical review on the studies conducted. It will also highlight the gaps in literature and in reference to conceptual framework constructed to illustrate the relationship between variables on reference to research problem.

#### 2.1.0 Historical perspective development of boda boda

The transport industry is recognized as one of the industries that has a significant effect on the economic growth and development of a nation. This is simply because people engage public transport services when they want to get access to areas of employment, education, retail, health and recreational facilities, as well as community facilities (Republic of Kenya, 2009). The significant role of transport, lead to the growth of boda boda business as an alternative means of transport to link rural and urban areas. Okebiro (2016) argues that motorcycle business known as "Boda boda" eased transportation problem of connecting urban and rural areas in Kenya. The significant growth in the use of boda boda as an alternative means of commercial public transport play an important role in sub-Saharan Africa, Latin America and Asia (ITDP,2009).In Kenya, the industry flourished significantly in 2008 after the zero rating of motorcycles below 150 cc by the government as a means of enhancing both rural and urban transport and job creation for the youth(KNBS,2010).According to Nyakundi (2017),poverty can be eradicated through strong leadership implementing policies and programmes geared to assist the poor to transform from poverty, such as boda boda business emerged as sustainability of youth's self-employment in Kenya.

#### 2.1.1 The historical origin of boda boda transport industry globally

Globally, the historical origin of two wheeler bicycles can be traced way back in 1860s by Pierre Michaux, a blacksmith in Paris who established the first company to construct bicycles with pedals. The first steam motorcycle is associated with Pierre's son Earnest Michaux, who fitted the first steam engine on the bicycle. The design was later taken to America by one of the employee of the company who developed the prototype in 1863 and filed a patent in America in 1866 (Georgano, 2002). Later this technology spread in other countries in Europe and the first commercial motorcycle emerged in Germany and England in 1880s and later spread to America and other parts of the world.in 1970s the Japanese manufacturers took over the market on Honda, Kawasaki, Susuki and Yamaha bicycles and dominated. Currently there are an estimated 300 million motorized two to thrillers on the road world (Rugut, 2015), where a majority of them are found in Asian and African countries. In global perspective, motorbikes are the primary means for motorized transport. For example in Taiwan the number of automobiles per ten thousand people is around 2500, and the number of motorbikes is about 5000. In Vietnam, motorbikes use is extremely high due to lack of public transport and low income levels that put automobiles out of reach for many(Rugut, 2015).

In Africa motorcycles can be traced way back to 1960s however, its commercialization can be traced clearly after the structural Adjustment Programmes(SAPs) by world Bank in early 1980s.for example in Nigeria by 1980s the transportation sector of economy was greatly affected by SAPs and lead to the drop in the supply of the transport services and mobility. As a result of these inadequacies of government operated and controlled public transport companies, led to emergence of other modes of transportation among which are motorcycle and tricycle. The two wheeled motorcycles popularly known as "okada" have become an important means of passenger and good transportation in urban and semi-urban Centres of Nigeria and an estimated 70 percent of Nigerian cities with over 250,000 inhabitants rely on motorcycles (Okada) for transport services (Ogunsanya and Galtima, 1993).

#### 2.1.2 The historical origin of bodaboda transport industry in Kenya

According to Malmberg-Calvo (1994), within East Africa, the two wheeled transport service is a Ugandan innovation commonly known as "Boda boda" which developed from a small beginning in the 1960s, at the Busia border region with Kenya. Studies made by (Okebiro, 2016; Nyachieo, 2015; Rugut, 2015; Howe and Davis, 2002) shows that the boda boda motorcycle industry developed from the English word "border border" in line with manually operated bicycles before the innovation to motorized bicycles and latest concept of the use of motorcycles. Torres(2001) identified the major reasons for the emergence of motorcycles as means of urban mobility in Nigeria and other countries of the world as the inadequacy and ineffectiveness of the conventional modes of transportation such as the buses and taxis, and ferry and train in very few cities.Rugut(2015) argues that the increasing use of motorcycles in developing countries for transportation purposes has been ascribed to socio-economic reasons, convenience in negotiating traffic in congested cities and poor maintained roads, political reasons and ease of parking in narrow streets. As Torres (2001) pointed out, the sorry state of roads in developing countries played a key role; larger proportions of urban network were unpaved, while most roads paved were in poor condition. Further the overland modes have been unable to provide door to door services, more so that there were no defined bus stops and specific public transport routes. Therefore it is important look into government policy to boda boda transport industry practices and socio-economic empowerment of youths and their huseholds in Turkana County in Kenya.

#### 2.2 Empirical review of literature

#### 2.2.1 The strategies to ensure sustainability of boda boda programmes

In Kenya, a study conducted by Luchidio, Kahuthia, Gathu and Gatebe (2013) to assess the impact of training boda boda operators and safety status in Kakamega county in Kenya, revealed that majority of boda boda operators received informal training since a half of boda boda motorcycle operators were trained through apprenticeship, only one third of boda boda motorcycle operators attended driving schools while those who learned how to ride by their own initiative were 16 percent. Further, the study established a strong relationship between the place where the boda boda motorcycle operators trained their driving and causes of accidents. In this sense majority of

the accident resulting from careless driving were majorly caused by those who trained from other people while those from driving schools contributed less (Rugut, 2015). Therefore Luchidio et al.(2013), focused on training, the economic impact of accidents were overlooked despite the damages, injuries, losses, compensations, fines and penalties that follow as consequences of poor training. This current study will suggest for county government of Turkana to establish a boda boda County driving school. And also establish a mechanism of financing training and skills development of the boda boda youths from poor financial backgrounds.

#### 2.2.2 Motorcycles industry contribution to youth livelihood

A study conducted by Yakubu (2012) to assess the determinants of earnings among commercial motorcycles operators in Kwara state, Nigeria, compared the operators' education qualification and their earnings per a day. The study revealed that daily earnings from with incomplete Junior secondary education were higher than those who completed post-secondary education. This implied that the education qualification did not determine the daily earnings per day. Nyakundi (2017) studies on poverty eradication through motorcycle (boda boda) as emerging business for the poor in transport sector in Kenya, revealed that motorcycle business in transport industry is important because it generates income for both the rider and owner at the end of the day at approximately 500 shillings to 1500 per day. Further, the study revealed that the business not only assists the owner and the rider but also becomes a source of poverty eradication at the grassroots.

#### 2.2.3 The safety measures in boda boda motorcycle riders

Some scholars argue that the amount of government regulation of private sector business directly reflects the level of economic power within the private sector (Glaeser and Shleifer, 2003). Also a recent study by Pendell and Hinto (2004), suggests that the legal costs per dollar of revenue are substantially greater for small relative to large businesses. Boda boda transport business has been a subject to governments regulations governed by traffic laws in different countries.however,the level of compliance remains a change(Rugut,2015).Traffic accidents are so common due to non-compliance to rules by riders and pillions simultaneously. They have been known to be responsible for a large percentage of orthopedic patients in some urban(Gbadamosi,2006).The

new traffic rules in Kenya implemented by NTSA require boda boda riders and pillions to have the protective gear consisting of two helments, one for the rider and the other for the pillion and always the rider should wear a reflective jacket for easier visibility and identification by other road users the riders should have valid driving license while boda boda should be have insurance licenses so as to insure both the rider and pillion against any eventuality.

#### 2.2.4 Social values and etiquette for boda boda riders

Studies by Musalimu and Oluvole (2014) in southern western Nigeria, assessing the level of compliance of commercial motor cycle to traffic rules on urban roads revealed a rampant irrational behavior of commercial motorcyclists on urban roads attributable to inadequate training, illegal possession, of driving licenses as well as the inability of the police to enforce traffic rules and regulations among this category of transporters. The operators were mostly young men under 40 years of age therefore prone to deviance or crime including in observing traffic rules. As a result, the non-compliance led to traffic accidents in urban areas. In this current research on the government policy in the relationship to boda boda transport industry practices on youth livelihood in turkana will leads to boda boda riders to the see the need of values and etiquette to compliance of traffic rules and reduction of accidents.

#### 2.3 Theoretical review of literature

Theoretical review provides the researcher the binoculars to view the world. In this view, theoretical reviews are explanations about a phenomenon and according to Kothari(2004), a theory is an accepted fact that attempt to provide a plausible or rational explanation of cause- and –effect (causal)relationship among a group of observational phenomenon.in this sense, several theories have been put forward by scholars to explain and understand the field of variable understudy of public transport. Thus, the study will borrow from the a wide range of theories including: the government regulation theory and systems theory

#### 2.3.1 The government regulation theory

Boyer and Aglieta (1976) were among the founders of regulation school which stated that broad theory is the study of the transformation of social relations, which creates new forms-both economic and non-economic organized structures and producing a determinate structure, mode

of reproduction. This theory approaches capitalist economies as a function of social institutional systems and not just as government's role in the regulation of the economy, although it plays a major part of the approach. This approach seeks to put into perspective that an economy would be more efficient if there is presence of regulations of governing institutions such as transport industry. Basing on this theory, the Kenyan government will draw policies to regulate the transport sector and build capacity to enforce rules for the boda boda riders and pillions to follow and become compliant and leading reduction of accidents and sustenance of boda boda business for the benefit of youth livelihoods and support of their households.

#### 2.3.2 The systems theory

The systems theory was propounded in 1956 by Ludwing Von Bertalantiffy. It emphases the way in which organized systems respond in an adaptive way to cope with significant changes in their external environments so as to maintain their basic structures intact. According to Abor and Quartey (2010), the systems theory models of decision making in human groups emphasize their interaction with "outside" actors and organizations and concentrate on identifying the particular elements in the environment of the group or organization that significantly affect the outcomes of its decision-making and this argument is supported with Shafeek (2009) who amplified the general systems theory in the context of the project performance. The systems theory does much to render the complex dynamics of human psychosocial change comprehensible hence making it more applicable to current development dynamics (Reynolds, 2009). Therefore this theory relates to this study in the sense that the dynamics of boda boda industry is open to outside influences which affect the livelihoods and support of the households.

#### 2.4 Identification of research gap on

Boda boda business has been considered an alternative means of transport which is faster and readily available as it is spread widely and adopted in rural and urban areas and leads to economic growth in Kenya. However the number of frequent injuries to passengers, accidents and losses caused through road traffic accidents and litigation thereof poses questions on its significance to the society. Various studies have been conducted by various research scholars in Kenya on the participation in youth in transport sector. However this studies illustrates that they

were conducted and focused on different variables and locations and not Turkana County. The studies include a study by Kagwira (2017), on determinants of youth participation in transport industry, a case of boda boda in Meru County, Kenya and focused on demographic characteristics, operational capital influence, socio-economic characteristics affecting and market dynamics influencing youth participation and never touched the livelihoods. Another study by Nyaga (2017) on the impact of motorcycle Taxi transport(boda boda) in accessing the rural areas, a case study of Meru South sub county, focused on the socio-economic benefits of boda boda to rural community, opening up of Kenyan rural areas, challenges faced the boda boda motorcycle operators in Meru south. It did not focus on the boda boda motorcycle influence on socio-economic empowerment of youths and their households in Turkana County. Another study was done by Rugut (2015) on determinants influencing performance of alternative public transport in Nakuru county. This also was focused not focused on livelihoods of youths but entire public transport sector. Another study by Nyachieo (2015) studied on socio-cultural and economic determinants of boda boda transport safety in Kisumu County, Kenya and focused demographic characteristics, level of formal rider training among boda boda, level of motor cycle safety knowledge, the rate of accidents involved, behaviours and attitudes of boda boda riders in Kisumu east sub County. Therefore, the studies illustrates the lack of study focusing on on socio-economic empowerment of youths and their households in Turkana County, being Arid and Semi-arid lands(ASALS). There is need for a research to explore the socio-economic empowerment of youths and their households for sustainable development in reference to Turkana County in Kenya. This study seeks to fill the literature gap identified.

#### CHAPTER THREE

#### 3.0 RESEARCH DESIGN AND METHODOLOGY

This chapter will present the methods and techniques of data collection, analysis and interpretation. It begins with the, geographical description of the study area, research design and population of the study. It will also examine measures used to ensure that the study and its results will be credible and finally it focuses on how the findings of the study will be analyzed and presented. It also looks the ethical issues in the research study.

#### 3.1 Geographical description of Study Area

The study will be carried out in Turkana County in Kenya. The major research sites for the study will be located towns in Turkana County, Lodwar in Turkana Central Sub County, Kerio in Turkana East Sub County, Lokitang in Turkana North Sub County, Lokichar in Turkana South Sub County, Kakuma in Turkana West sub county and Lorugum in Loima Sub County whereboda boda motorcycle riders are readily available for transporting goods, people and services to and from rural and urban areas. The map of Turkana County showing the research sites is shown in the appendix I.

#### 3.2 Research Design

Research design is a plan and the procedure for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Johnson & Onwuegbuzie, 2006). Also Cooper and Schindler, (2006) supported that research design is the procedure in which data is collected, measured and analyzed in the view of the broad assumptions. Therefore, adopted is descriptive survey research design and used to collected data from motorcycle riders. According to (Mugenda and Mugenda, 2003), descriptive research allows a researcher to describe certain phenomena without manipulating variables of the study. Descriptive research design will be used because this is a method of collecting information by informing or administering a questionnaire to a sample of individuals (Orodho, 2003). Also Kombo and Tromp (2006), noted, concerning descriptive design, that such studies are not only restricted to fact finding, but may often result in the formulation of important principles of knowledge and providing solutions to significant problems. A survey research allows the researcher to obtain

information that describes the existing phenomena by asking individuals about their perception, attitude and behavior values (Bryman and Bell, 2011; Mugenda and Mugenda, 2003). Survey designs are procedures in quantitative research in which the investigator administers a survey to a sample or the entire population, to describe attitudes, opinions, behaviors and characteristics of the population. According to Creswell (2011), survey researchers collect quantitative and numbered data using questionnaires and statistically analyze the data to describe trends about responses to questions and test the research questions. It usually uses questionnaires and interviews to determine the opinions, attitudes, preferences and perceptions of groups of people of interest. Questionnaires are used to collect basic descriptive information from a broad sample (Kathuri and Pals, 1993). This study will involve gathering opinions from motorcycle(boda boda) riders in Lodwar town who connect rural areas in Turkana county. The opinions will be used to generalize the results to be applicable to the other parts of the country with similar profile and transport industry. Therefore, the study considers the design appropriate as it will contribute towards minimizing biases hence maximizing reliability of data collected. As Gay(1981) defines descriptive research as a process of collecting data with the aim of testing hypothesis as well as with intent to answer the current questions about behavior which is under study.

#### .3.3 Target Population of the Study

According to Sekaran and Bougie (2010), a population is the total collection of elements about which we wish to make inferences. Therefore, this study will target the population of the boda boda motorcycle riders in six town headquarters of six sub counties in Turkana County. This towns will be chosen because have a large number of boda boda riders connecting the rural areas linking those towns. The towns links to other towns and rural setting and will give a picture on the boda boda motorcycle transport influence on socio-economic empowerment of youths and their households both in the urban and rural communities. The area of the study population will comprise of people from different ethnic groups and a metropolitan area in research sites. Therefore, the research study will target population groups of Bank officials, police officers, court officials and household heads of the riders.

#### 3.4 Sample and Sampling technique

This could be a national study aimed at investigating the boda boda motorcycle transport influence on socio-economic empowerment of youths and their households. But since neither time nor resources are available will allow for a thorough and a countrywide study of this nature, Turkana County will be chosen as a sample. Respondents will be selected using purposive random strategy of non-probability. By this technique, selection of the respondents will be done when an opportunity will arise without the complexity of a probability sample (Kathuri and Pals, 1993). This technique is advantageous over probability sampling simply because not everybody in the targeted population is knowledgeable as far as this research is concerned. Therefore, respondents will be selected deliberately or purposively in each of the research sites.

#### 3.5 Sample size

The study will employ both qualitative and quantitative approach and correlates with descriptive survey design to establish the dynamics of motorcycle (boda boda) transport industry and youth livelihoods and sustainable households in turkana central sub county Kenya. From the whole population of the study area, 30% will be selected purposively as a representative sample size. Therefore, the research will use purposive sampling technique, which is non-probability in determining the sample for this study, the research will adopt the non-probability purposive sampling strategy in consistency with qualitative approach and survey study method. Non probability sampling suits this study because as Mugenda and Mugenda (2009) asserted, the focus is on in-depth information on a particular issue and not on making inferences or generalizations. Hence, the study will target boda boda riders who are known to have the information that will serve the purpose of this study, by virtue of their stations and duties (Kombo and Tromp, 2006).

The size of the population usually makes it impractical and uneconomical to involve all members of the population in research study (Welmen, 2001). And the sample size is a subset of the population that is taken to be representatives of the entire population (Kumar, 2011). A sample population of 376 will be arrived at by calculating the target population of 1006 with a 95% confidence level and an error of 0.005 using the following formula taken from Kothari (2009).

$$n = \frac{Z.^{2}N.O_{p}^{2}}{(N-1)e^{z} + Z^{zd}_{p}^{2}}$$

Where;

n =size of samples

N =Size of the population and given as 1006

e = Acceptable error and given as 0.05

dp = The standard deviation of the population and given as 0.5 where not known,

Z =standard variation at a confidence level given as 1.96 at 95% confidence level.

$$n$$
= (1.96)2 X 1006 X (0.5)2

$$(1006 - 1) X (0.05)2 + (1.962 X 0.52)$$

$$n = \frac{2009.62}{5.35} = 375.8$$

n Is approximately 376

Table 1 Sampling Frame for the study

N = 380

Target groups	Sampling	Sample	Sample size
respondents	Techniques	Population	
Boda Boda	Random Sampling	906	268
Riders	technique		
Households	Snow balling	100	100
heads of MC			
accident victims			
Police officials	Purposive	6	6
Court officials	Purposive	2	2
Loan officials	Purposive	4	4
Total		1012	380

#### 3.6 Description of Data Collection Technique and procedures

The research will use four data collection instruments including interview schedules, questionnaire, direct observation and document analysis as the research targets both primary and secondary data. A sample of three hundred and eighty respondents will be sampled through stratified purposive sampling technique. The rationale for applying multiple forms of data collection will be to establish credibility and validity in the findings of the study through triangulation. This is supported by the view by Hendricks(2006), who affirms that "looking at multiple forms of data when answering research questions helps the researcher fill in the gaps that would occur if one data source was used" (p.72). This study will use the primary data that will be obtained through use of questionnaires and interviews and observation.

In order to obtain official access to the study area and target population to conduct research, a research permit will be obtained from the office of the president (NACOSTI) with assistance from the school of post graduate studies, Kisii University, Kenya. Thereafter, the county commissioner of Turkana central sub County will be informed of the undertaking before the

commencement of the actual research. An appointment will be sought for administering the questionnaire. The researcher or research assistant will administer the questionnaires personally and conduct interviews. The respondents will be selected using purposive non probability sampling strategy. By these techniques selection of the respondents will be done when the opportunity arise without complexity of a probability sample (Kathuri and Pals, 1993). Therefore, respondents will be selected purposively in each of the research site. This will be necessary and significant to allay any suspicion, doubt, fear or even conflict between the government authorities and the person conducting research and the public.

### 3.6.1 Questionnaires

A structured questionnaire will be used as the main instrument of data collection from the motorcycle boda boda riders in Lodwar town. The question will be constructed to have both open ended and closed ended questions. Open ended questions will be used to encourage the respondents to give in-depth and felt response without feeling held back in illuminating of any information, while closed ended questions allows respondents to respond from a limited options that had been stated. Saunders (2011), noted, open ended or unstructured questions allow profound response from the respondents while the closed or structured questions are generally easier to evaluate. For this purpose or reason, the responses for few questions of the open ended questions will be recorded as given from the respondents without alteration and closed will be evaluated and interpreted for better analysis.

A total of 376 questionnaires will be distributed to the motorcycle youth riders. The data will be analyzed, summarized and interpreted using simple percentages and chi-square method to measure inconsistency between the observed and expected frequencies and to prove the significance in the stated hypothesis. The responses from the questionnaires will be measured using Likert Scale: A five point scale namely: strongly agree(5 points), Disagree(4 Points), Undecided(3 Points), Disagree(2 Points) and Strongly disagree(1 Point). this will be used to register and know to what extent of agreement or disagreement with particular statement of an attitude, belief or judgments as regards the youths livelihoods in line with the four objectives of the study.

#### 3.6.2 Interviews

Interview schedule/guide will be applied to Base commander Traffic police officers in the research sites of the five towns of sub-counties in Turkana County, for reliable data of the boda boda accidents and reliable recorded data. Interviews are one of the most important sources of data in qualitative research (Mugenda & Mugenda, 2009), and are advantageous in that they provide in-depth data which is not possible to obtain, so that to meet specific objectives of the study and also guard against confusing the questions since the interviewer can clarify the questions thereby helping the respondent give relevant responses. The technique entails an oral exchange between an interviewer (researcher or research assistant) and interviewee (respondent) who may be an individual or a group of individuals (Kathuri and Pals, 1993). However, Interviews can be time-consuming and as such, they are expensive to use with a large number of respondents. It will be worsened by the difficulty in coding, collating and analyzing very many qualitative data or responses. For these reasons, samples for a qualitative case study interviews should be small (Kathuri and Pals, 1993), in the research sites/towns.

#### 3.6.3 Document analysis

The use of document analysis as a data generation technique will be important in the study. Yin (2009), asserts that documentary information is likely to be very relevant every case study topic. One advantage of document analysis as a source of data in qualitative research is that they enhance the credibility of the study an important aspect of trustworthiness (Jwan and Ong'ondo, 2011). The document which will be obtained from the Public Health and Town planning departments in research sites will be used in the study.

#### 3.6.4 Direct observation

This study will use observation method. Observation is a data gathering device that entails visual perception and recording of what is occurring in a given situation (Kathuri and Pals, 1993). To ensure that the process of observation is objective and systematic, the researcher will use a camera to capture poor solid wastes dumped in various parts causing environmental pollution in research site (Town). Direct observation technique will be sufficient to be used along with interviewing of individual respondents and focus groups. Therefore, most of the environmental

conditions and activities will be captured and recorded by the camera and recorded in the observation Record Book kept by the researcher.

### 3.7 Measures of credibility of the study

#### 3.7.1 Validity of the Research Instruments

Validity refers to the ability a test to measure what it is supposed to measure (Kombo and Tromp, 2006; Kothari, 2004). According to Golafshani (2012), validity is the accuracy and meaningfulness of inferences based on the research results. Hence, the developed instruments will be assessed for both content and construct validity. Content validity will be to ensure the instruments cover exhaustively the study objectives. Construct validity will be measured to ensure that the instruments are measuring what they are supposed to be measuring. A content validity test will be used to measure instrument validity. According to Mugenda and Mugenda(2009) this type of validity measured the degree to which data collected using a particular instrument represented a specific domain of indicators or content of a particular concept.in this sense, validity is a degree to which the sample of the test item represent the content that is designed to measure, that is, the instrument measures the characteristic or trait that is intended to measure(Mugenda and Mugenda,2003).it important that data need not only to be reliable but also true and accurate and if a measurement is valid, it is also reliable(Joppe,2000).

To ensure validity of research instruments, the researcher will use simple language that will be easy to be understood by the boda boda riders. The researcher will also engage the supervisor and other experts to ensure that questions asked in questionnaires will test and measure what they are supposed to measure as per the objectives of the study.in this study will adopt content validity which refers to the extent to which a measuring instrument provides adequate coverage of the topic under study. Amin (2005), validity formula, will be used in line with other previous studies(Lefort and Urzua, 2008), that is, the formula is :content validity Index=(No.of judges declaring item valid)/ (Total No.of items). this study will use CVI of about 0.78 or more experts could be considered evidence of good content validity as recommended by Amin(2005).

#### 3.7.2 Reliability of the Research Instruments

Reliability is concerned with the consistency with which a characteristic is measured. If a research yields consistent results or data after repeated trials, then it is reliable. The aim of reliability is to ensure that later investigations will arrive at the same findings and conclusions if following exactly the same procedure described by an earlier investigator, and conducting the same case study all over again. The purpose with reliability is to reduce the errors and biases in a study (Yin, 2009). In this study, the instruments will be tested through the measurement of reliability provides consistency in the measurement of variables(2000). Therefore, internal consistency reliability is the most commonly used psychometric measure assessing survey instruments and scales(Zhang,2000). Cronbach alpha is the basic formula for determining the reliability based on internal consistency. For testing the reliability of instruments, internal consistency techniques will be applied using Cronbach's alpha. The alpha value ranges between 0 to 1 with reliability with the increase in value. Thus, the coefficient of 0.6-07 is a commonly recommended that indicates acceptable reliability and 0.8 or higher indicate good reliability (Mugenda and Mugenda, 2008).

### 3.8 Description of data analysis methods

Data analysis will entail editing, coding and tabulation of data collected into manageable summaries (Kumar, 2000). According to Kothari (2004), data analysis is a mechanism for reducing and organizing data to produce findings that require interpretation by the researcher. Therefore, Data will be analyzed thematically in five main states as transcription, familiarization with data, open coding, axial and selective (Creswell, 2007). The research will ensure trustworthiness in analysis, which is the degree or extent of certainty that the research process is truthful, careful, and rigorous enough to qualify to make claims that it does (Creswell, 2007). And also by giving a detailed account of the research process, excerpts from the field notes, quotes from interviews and ensuring flexibility (Jwan,2010), and by acknowledging the role in research process and admitting any possible influences.

Data to be collected will be coded and entered in the computer for analysis using the statistical package for social sciences (SPSS) version 21. Data will then be analyzed using descriptive statistics by frequency counts and percentages. According to Orodho (2003), this technique will

give simple summaries about the sample data and present quantitative descriptions in a manageable manner.

The findings will be presented using tables, charts and graphs for further analysis and facilitation of comparisons. This will be generated to quantitative reports through tabulations, percentages and measures of central tendency. Descriptive statistics such as measures of central tendency and dispersion along with percentages will be used to organize and summarize numerical data whose results will be presented in tables, pie charts, column and bar graphs for easy interpretation of the findings (Zhang, 2000).

#### 3.9 Ethical considerations

The Postgraduate School will write a letter of approval for the researcher and used to apply for a permit from the National Commission for Science, Technology and Innovation (NACOSTI). In terms of ethics, the researcher will sought permission from the relevant organizational authorities to gain access to the geographical site (town) and participants before data collection. As Creswell (2009) noted, the researcher will develop an informed consent form for participants to sign before engaging them in the research, and acknowledging that their rights would be protected during data collection, element of which will include: identification of the researcher; the benefits for participating in the research, the level and type of participant involvement; guarantee of confidentiality, provision of names and persons to contact if questions arise. The researcher will keep or ensure anonymity of the participant and keep their names secret so that any other person will be unable to identify who gave the information. This will help the researcher to keep the information for intended purpose and thus within the boundaries of the shared consent.

This study will observe the law and professional ethics as required by social science research processes. Informed consent will be sought before collecting data from the respondent and respondents will not be coerced to give information, always freedom will be encouraged to ensure willingness aspect from the respondents. At the end of the research process, feedback will be made to all persons involved in the research process. Also there will be duly efforts in respect to have the literature used in the process of the study cited.

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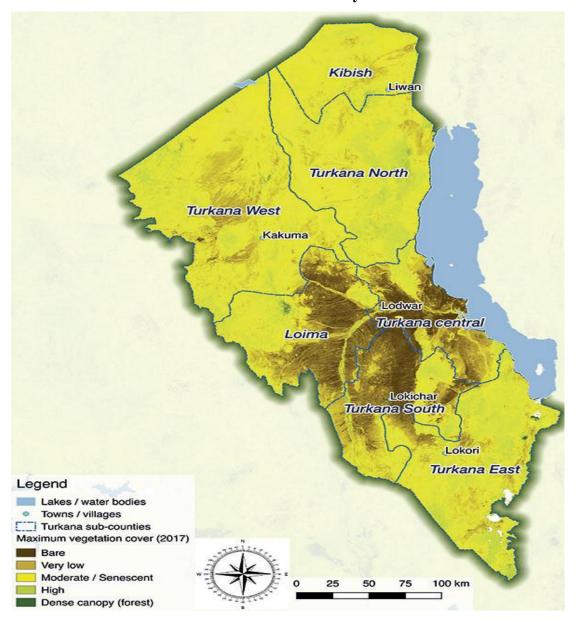
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## **APPENDIX 1**

# Research sites in Kenya



# Appendix ii Map of kenya

