

**POVERTY IN DEEP SEA INFORMAL SETTLEMENTS; A GENDER INEQUALITY
PERSPECTIVE**

WAWERU MERCY WAITHIRA

REG NO: X51/35124/2019

**A research thesis Submitted to the Department of Economics and Development Studies,
University of Nairobi, in partial fulfillment of the Requirements for the Award of Master of
Arts Degree in Economic Policy Management.**

July 2023

DECLARATION

I declare that this thesis has been originally composed by me and has not been presented in part or in whole for academic examination and credit to another institution.

Signature



Date; 10/07/2023

WAWERU MERCY

X51/35124/2019

This research has been submitted for examination with my approval as the University Supervisor.

Signature



Date 10-07-2023

PROF. TABITHA WAGITHI KIRITI NGANGA

DEDICATION

This thesis is dedicated to the girls and women living in informal settlements in Kenya.

ACKNOWLEDGEMENT

I am honored and privileged to express my earnest gratitude to everyone who has played a part in the writing and conclusion of my thesis.

I would like to convey my heartfelt appreciation to my supervisor, Professor Tabitha Wagithi Kiriti Ng'ang'a for all the guidance, support, and patience in this study. Her comments and constructive feedback have been influential in shaping and improving the quality of my thesis.

My sincere appreciation goes to my father, Mr. Waweru Maina, my mother, Mrs. Metumi Waweru, my sisters Peris and Salome, and friends, who have been a major source of support during my studies.

TABLE OF CONTENTS

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF ACRONYMS	ix
ABSTRACT	x
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background to the Study	1
1.1.1 Global Poverty Trends.....	1
1.1.2 Poverty Levels in Sub-Sahara Africa	4
1.1.3 Poverty Levels in Kenya.....	6
1.1.4 An Overview of Gender Inequality and Poverty	7
1.2 Statement of the Problem	8
1.3 Objectives of Study.....	9
1.4 Justification of Study	10
1.5 Organization of Study	11
CHAPTER TWO: LITERATURE REVIEW	12
2.1 Introduction.....	12
2.2 Theoretical Literature.....	12
2.3 Empirical Literature	14
2.4 Literature Overview	17

CHAPTER THREE: METHODOLOGY	19
3.1 Introduction	19
3.2 Conceptual Framework	19
3.3 Economic Model	20
3.4 Research Site	21
3.5 Study Design	22
3.6 Study Population	22
3.7 Data Sources.....	23
3.8 Data Collection Tools.....	23
3.9 Sampling Procedure	23
3.10 Data Collection Methods.....	24
3.11 Data Analysis	24
3.12 Estimation Tests	25
3.12.1 Breusch-Pagan Test for Heteroscedasticity	25
3.13 Variable Definitions and Measurement.....	25
CHAPTER 4: DATA ANALYSIS AND PRESENTATION.....	27
4.1 Introduction	27
4.2 Questionnaire Response Rate.....	27
4.3 Descriptive Statistics.....	28
4.4 Regression Analysis	29
4.5 Results of the Estimation Tests	32
4.5.1 Breusch-Pagan Test for Heteroscedasticity	33

4.6 Social Impact of Poverty among Women in Deep Sea Informal Settlements	33
4.7 Mitigating Impact of Poverty	35
4.7.1 Welfare And Savings Groups	35
CHAPTER 5: SUMMARY, CONCLUSION & POLICY RECOMMENDATIONS	37
5.1 Introduction	37
5.2 Summary of the Study Findings.....	37
5.3 Conclusion.....	37
5.4 Policy Recommendations	38
5.5 Areas of Further Research.....	39
References.....	Error! Bookmark not defined.
Appendix A.....	47
Appendix B.....	56

LIST OF TABLES

Table 1; Multi-dimensional poverty measures 2021	5
Table 2: Variable Definitions and Measurements	25
Table 3: Questionnaire response rate	27
Table 4: Descriptive statistics	28
Table 5: Determinants of Poverty among Women in Deep Sea Informal Settlements	29

LIST OF FIGURES

Figure 1: Distribution of the World's Poor in 2021	2
Figure 2: Trends and Projections of Global Poverty	3
Figure 3: Poverty levels by counties 2015/2016.....	6
Figure 4: Conceptual Framework	19
Figure 5; Map showing the location of Deep Sea.....	22

LIST OF ACRONYMS

EAP	East Asia Pacific
FAO	Food and Agricultural Organization
KIHBS	Kenya Integrated Household Budget Survey
KNBS	Kenya National Bureau of Statistics
KRA	Kenya Revenue Authority
LAC	Latin America & Caribbean
MENA	Middle East & North Africa
MCA	Member of County Assembly
PRSPs	Poverty Reduction Strategy Papers
SSA	Sub-Sahara Africa
STEM	Science Technology Engineering & Medicine
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific & Cultural Organization

ABSTRACT

The feminization of poverty has sparked a widespread debate in analyzing poverty trends globally. The key aim of this study was to study poverty in Deep Sea Informal Settlements with a gender inequality perspective. A cross-sectional descriptive study was applied to examine the gender inequality factors contributing to a higher poverty incidence among women living in Deep Sea Informal Settlements. Through questionnaires and face-to-face interviews, the study concluded that the larger group of the women were either unemployed or working in the informal sector as casuals or owned businesses. Poor housing and sanitation, malnutrition among children, and increased drug abuse were found to be some of the impacts of poverty among women. To mitigate themselves against the social impact of poverty, the women engaged in Savings Groups, borrowed loans through mobile money, credit purchases of goods, and in-kind barter trade of goods and services. Policies focused on improving the Informal Sector should be prioritized if poverty reduction is to be actualized.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Poverty is a highly researched social issue by different institutions trying to understand the role it plays in human development. The definition of poverty as per the Merriam-Webster dictionary is “the state of one who lacks a usual or acceptable amount of money or material possessions.” World Bank in 2011, living on less than US \$1.90 a day defines extreme poverty, while moderate poverty is \$3.10 a day. To account for inflation and different costs of living, the amounts often change (Salai-Martin, 2006). Poverty manifests itself in hunger and malnourishment, minimal access to basic needs and education, and a lack of involvement in making decisions (Olaewaju & Olaewaju, 2020). However, is poverty then more likely to be transient for men but chronic for women? According to the Merriam-Webster dictionary, chronic refers to persisting for a long time or constantly recurring. Transient refers to an impermanent situation or happening for a short time. The United Nations (UN, 2000) concluded that there is a gender dimension to poverty and that women are the world’s poor.

1.1.1 Global Poverty Trends

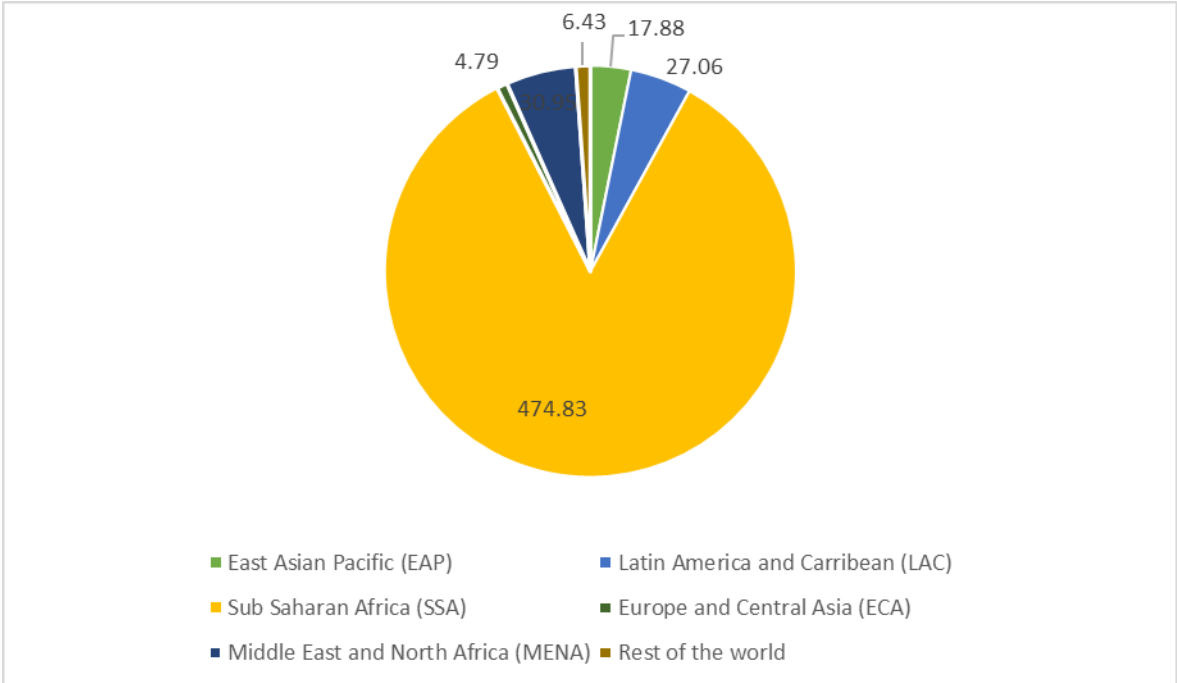
Poverty has often been discussed and inferred towards income and yet living in poverty has shown that it is about the quality of life. This may be seen from the ease at which people access basic needs (Tang, 2007). The multidimensional measures of poverty have since allowed policymakers and researchers to have a complete analysis of the socio-economic issue (Sabina & Sarwar, 2009). It is at this point that the gender perspective plays a role.

Until the global COVID-19 pandemic, poverty levels were significantly declining (Yonzan et al., 2020).

Unfortunately, some regions were still recording increasing poverty levels. Sub-Saharan Africa (SSA) was expected to record the highest number of impoverished people at 439.8 million in 2019 (Wadhwa, 2018).

As seen in Figure 1, the larger group of poor people in the globe is in SSA followed by Middle East and North Africa (MENA), Latin America and the Caribbean (LAC) and East Asia Pacific (EAP). SSA also has the highest growth in global poor between 2019 and 2021 (Yonzan et al., 2020).

FIGURE 1: DISTRIBUTION OF THE WORLD'S POOR IN 2021



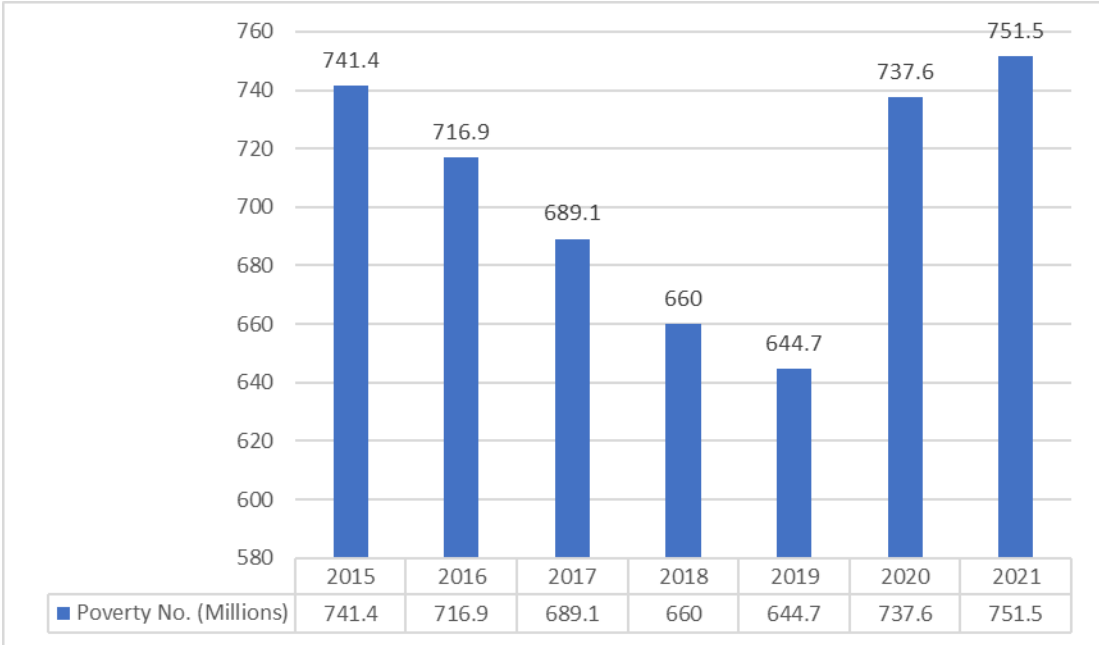
Source: Author’s construction based on World Bank 2021 projected global poor numbers.

According to World Bank (2020), SSA recorded 466.23 million people living in poverty, compared to 689 Million in 2017, globally. While most regions are expected to go back to declining poverty rates, MENA, SSA, and LAC are projected to see a growth in poverty rates in 2021, with 474.83 million people expected to be living in poverty in SSA (Yonzan et al., 2020).

However, given the 2020 Covid-19 pandemic, people living in extreme poverty were expected to increase by 150 million (Howton & Felsenthal, 2020). While in 2021, initial projections indicated 581 million people living in poverty globally, the current projection stands at 751.5 million people (Lakner et al., 2020). The majority of these would be expected to be women.

Figure 2 indicates that 2021 global poverty levels were expected to be higher than the poverty levels from 2015.

FIGURE 2: TRENDS AND PROJECTIONS OF GLOBAL POVERTY



Source: World Bank- 2020

Globally, women constitute up to 637 Million, an average of 70% of poor people (ILO, 2020). Data analyzed by World Bank through households’ data proved that age, marital status, and household composition (WorldBank, 2019) greatly influence poverty incidence.

1.1.2 Poverty Levels in Sub-Sahara Africa

The sum of global poor has continued to rise in SSA over the last five years (Yonzan et al., 2020). Half of the globe's poor live in five countries (Katayama & Wadhwa, 2015) three of which are in Sub Sahara Africa; Nigeria (12%), Congo (7%) and Ethiopia (4%). The poverty gap is used by the World Bank and measures the variation between the poverty line and the mean earnings of the population living under the poverty line globally multiplied by the poverty headcount ratio. It reflects the intensity of poverty in SSA, with countries such as South Sudan, Madagascar, Guinea Bissau, and Equatorial Guinea averaging a poverty gap of 73.3 (WorldBank, 2019).

Development in SSA has been slow-paced compared to the growth in population. Stagnated economic improvement has led to a shrinkage in goods and services production that would otherwise employ more people, thus improving their income and ultimately their quality of life (Kniivila, 2007). In countries facing resource, social and political inequality, wars are more likely to occur, and stagnating economic growth leading to increased poverty levels (Peterson , 2017). The quality of life in a country is also vastly reliant on the governance and leadership of a country. Many SSA countries have multiple corruption scandals at a time. This generally affects economic growth, leading to further poverty levels in the country (Rocha & Taxell, 2015).

There however have been some successful efforts to reduce extreme poverty in SSA countries. Some of these successes are attributed to countries reducing population growth by empowering women through education, family planning and improving access to fundamental amenities such as education and WASH(safe drinking water, sanitation, and proper hygiene). Dependence on agricultural occupations in Tanzania has also reduced, with more people being employed in industrial services (WorldBank, 2019).

Table 1 shows a sample of 10 countries in SSA from the World Bank poverty and equity survey brief which used the multidimensional poverty measures of access to basic infrastructure, monetary poverty, education. Monetary poverty of a daily consumption below US \$1.90, access to education and basic infrastructure was compared across countries and across years. Close to

half of the populace in these countries were living on under \$1.90 a day, with some countries recording as high as 55.8% of adults not having completed primary school. Access to standard sanitation was seen to affect the majority of the SSA population even in countries recording low monetary poverty levels such as Namibia.

TABLE 1; MULTI-DIMENSIONAL POVERTY MEASURES 2021

Country	Monetary Poverty (Consumption)	Education		Access to basic infrastructure		
		At least one school-aged child is not enrolled in school	No adult has completed primary education	No access to limited-standard drinking water	No access to limited-standard sanitation	No access to electricity
Kenya	36.8	6.1	22.5	32.2	69.0	56.9
Nigeria	49.5	25.5	61.6	26.9	70.7	69.0
Chad	38.4	5.9	67.9	56.0	92.7	97.3
Togo	49.9	2.3	26.7	40.6	51.8	N/A
Namibia	13.4	6.1	11.3	9.2	68.3	53.8
South	26.9	4.8	18.1	N/A	N/A	N/A
Tanzania	49.1	19.5	13.2	29.2	71.5	44.3
Botswana	15.7	4.2	8.2	3.7	52.0	35.5
Uganda	41.7	14.0	34.8	22.9	77.6	61.2
Mali	49.6	12.7	55.8	N/A	N/A	78.2

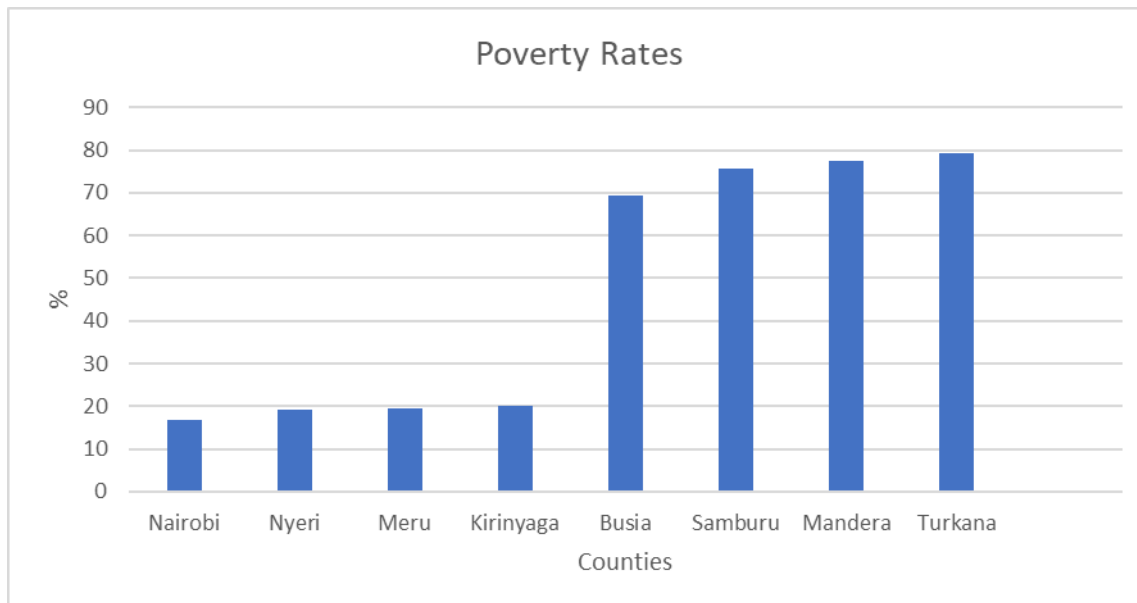
Source; Author’s construction of the World Bank Poverty and Equity Brief (Sub-Saharan Africa)

1.1.3 Poverty Levels in Kenya

The Kenya National Bureau of Statistics (KNBS) in 2016 recorded a drop in absolute poverty by 10.5 points from 46.6 points recorded in the 2005/2006 KIHBS Survey (KNBS, 2006). KNBS reported that there was a 0.2 million decline in the population of the poor between 2005 and 2015. However, there are geographical locations that continue to record high cases of poverty levels, and the disparities recorded between the least poor counties and the poorest counties are still very high. About 3.9 million people were recorded to live in abject poverty, unable to afford the basic basket of goods.

Figure 3 shows the disparities in poverty levels in the poorest and richest counties in Kenya. The poorest county has over 70% of its entire population living in abject poverty, while the richest county has less than 15% of the population in abject poverty.

FIGURE 3: POVERTY LEVELS BY COUNTIES 2015/2016



Source: Author’s construction of the highest and lowest poverty levels recorded by KIHBS 2015/2016.

It can be noted that, the poorest counties in Kenya have poor access to infrastructure and government services. Kenya's commitment to eradication of poverty is no new agenda, as it was also outlined in the Sessional Paper No. 10 of 1965 (Mboya & Kibaki, 1965). Other planning papers have been drafted since then including the Poverty Reduction Strategy Papers (PRSPs) in 2001. Unfortunately, due to weak leadership and bad governance, the implementation of these papers proved to be weak, and needed reform (Ochola, 2016).

The 2015/2016 KIHBS revealed that households that were women-headed had a greater likelihood of being poor in comparison to those led by men. 30.2 % of the 32.4 % female-led households were gotten to be poor contrasted to the 26.0 % of the male-headed households..

1.1.4 An Overview of Gender Inequality and Poverty

Gender inequality on the other hand, refers to a societal characteristic that on average places men higher than women economically and politically (UNDP, 2014). Morrison et al., (2007) found that there have been extensive micro and macroeconomic factors e.g., increased prevalence of female-led households, discrimination, lack of education, and access to credit, which have led to the widening gap of women caught in a poverty cycle as opposed to men. This aspect has come to be widely referred to as poverty feminization. The feminization of poverty (Pierce, 1981) has become widely used among economists, researchers, and policymakers over the last few decades (Chant, 2004). It refers to the aspect that women and children are inordinately constituted among the world's poor compared to men.

Gender norms play a huge part in women's societal role, especially in developing countries. They are expected to take care of the home and the families health and well-being, while men are expected to provide financially. Due to development and social changes ,the number of households led by women has significantly risen in the preceding few decades (Yoosefi et al., 2020). In general women are perceived to be more susceptible to falling into poverty as compared to men. With countries such as Ukraine having 49.4% households led by women, Kenya (32.4%),and Namibia (43.9%), there is then an emphasis on studying poverty from a

gender perspective (WorldBank., 2019). This study investigates gender inequality as a contributing factor to poverty, among others.

1.2 Statement of the problem

All factors held constant, women are more potentially to be chronically affected by poverty than their male counterparts (Klasen et al., 2010). Culturally, women are at a greater disadvantage with societal rules, norms, and cultures dictating what a woman can, cannot, should or should not do. Most African countries tend to rely on some of these norms while formulating and dictating parts of the constitution and policies (Deacon, 2018). The case of poverty and gender inequality is highly intertwined. Gender inequality then can be viewed as the impartiality in the determining of these outcomes- that is, equal chances, resources, liberties, and voice and not as the outcome equality for women and men (UNDP, 2014).

The number of households led by women have been increasing over the last four decades, with a great majority being impoverished (FAO, 2000). Results from the 2019 Kenya Population and Housing Census (KNBS, 2019) indicate that slightly over half of Kenya's populace is women. The increase in female-led households is then expected, given the trend in the last few decades from 31.7% in January 2003 to 36.1% in December 2015 (CEIC, 2017). With a current 30% poverty rate among women-led households, the majority are found in rural Kenya (KNBS,2019). While female-led households are expected to be on the rise (CEIC, 2017), the cultures and norms of society will still dictate them to take unpaid leave of absence to care for their children leading to further gaps in wages, and ultimately higher cases of poverty among women. It is vital to note that these same norms and tradition continue to determine the kind of jobs women may take up in competition with men.

Multiple Poverty reduction and strategy papers (PRSPs) have been drafted since independence and yet Kenya continues to see a rise in poverty and especially among rural women. Several studies have been done on poverty causes such as (Kiriti, et al., 2000) and (Geda et al., 2005) whose results and recommendations are still a foundation for scholars to analyze gender as a

household characteristic and how it may solely have an impact on poverty in Kenya. Since then, studies have been carried out with a focus on gender inequality factors. Mutua (2017), focused on how education policies have focused on the number of girls and women enrolled in school, rather than the root cause of the gender inequality; cultural norms, stereotypes, and school re-admission policies. Tisdell & Kiriti (2003), also reiterated that education and training played a huge role in reducing the probability of one falling back into poverty. Unfortunately, there has been some slack on implementation of the given recommendations and hence, the current policies put in place have not achieved their objective of reducing poverty among women in Kenya indicating that more is required. The global implementation of the 2030 Sustainable Development Goals, KIHBS 2015/2016 household survey and the 2019 Kenya census reports have also warranted further recent inquiry to the role of gender inequality and poverty in Kenya. This study seeks to assess education, income, access to finance for women living in the informal settlements as factors in gender inequality, and to what extent each plays a role in poverty levels among them.

The study seeks to answer the following research questions.

- a) What role does gender inequality play in poverty levels among women in Deep Sea Informal settlements?
- b) What strategies do women living in Deep Sea use to cope against poverty?
- c) What are the key policy recommendations that may incentivize gender equality for women and reduce poverty levels among women in Deep Sea Informal settlements?

1.3 Objectives of the Study

The primary aim of this study is to conduct a case study to identify the role gender inequality plays in furthering poverty levels among women living in the Deep-Sea Informal settlements in Nairobi.

The specific objectives of this study are;

- i) To identify the role played by gender inequality in the poverty levels of women living in Deep Sea Informal settlements.
- ii) To investigate coping strategies used by women living in Deep Sea Informal settlements.
- iii) To draw key policy recommendations that may incentivize gender equality for women and reduce poverty levels among women in Deep Sea Informal settlements.

1.4 Justification of the Study

The conclusions of this study will be pertinent to the government, financial institutions, and other development stakeholders by linking factors that lead to gender inequalities and the further feminization of poverty.

Given the steadily rising number of female-led households in Kenya, the study aims at understanding the areas in which gender inequality leads to the chronic nature of poverty and higher poverty levels among women and women-led households. With this, inclusive policies may be formulated that are adopted within private and public institutions. Reduction in poverty is key for any country's growth, as poverty affects other facets of life such as health and education. Addressing why women are susceptible to be chronically poverty will raise national awareness and encourage ideas from women groups around Kenya, on the role government can play in alleviating poverty, eventually achieving sustainable development goal one of No Poverty. The study's findings on identifying how women in Deep Sea Informal settlements mitigate against the impact of poverty may act as a guideline in formulating policies and poverty reduction strategies in informal settlements.

The study aims at showing the relationship between education, income, asset ownership and access to finance and poverty among women in Deep Sea Informal settlements, Kenya. The findings in this study will play a role as a reference point for future scholars, who seek to further understand the direct or indirect relationship of these factors and poverty. It will help identify key areas of research that do not have much research or are yet to be studied. This study aims to fill in gaps in knowledge about the Deep-Sea Informal settlements, to create demographic and

economic profiles and identify key problem areas in Nairobi informal settlements that may prevent the achievement of poverty and gender equality development goals by 2030 in Kenya.

1.5 Organization of Study

This study is organized into five chapters.

Chapter one contains the introduction to the study, which covers general and background information on global poverty, poverty in the Sub-Saharan region and in Kenya and an overview of gender inequality and poverty. It also contains the statement of the problem, the study's objectives, research questions and justification of the study.

Chapter two of the study contains a literature review. It reviews various studies done on poverty and gender inequality from both a theoretical and empirical approach. Chapter three explains the research design, research area and methodology used in the study,

Additionally, the fourth chapter presents the study results that show the effect of gender inequality on poverty in Kenya. Finally, chapter five outlines the summary, conclusion and key policy recommendations based on the study. It also identifies additional research areas that scholars may investigate.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section reviews existing research and theory on poverty, feminization of poverty and the role played by gender inequality in poverty among women. This section also analyses literature on women and poverty, and links this to female-led household's characteristics with poverty.

2.2 Theoretical Literature

The definition of poverty is one that has been in contention, and Laderchi & Saith (2003), concluded that there have been several questions to be answered on how to define and measure poverty. These range from the context of the definition and measurement of poverty or deprivation, the universality in the definition, if the methods were “objective” or subjective” and finally, how to distinguish the poor from the non-poor by using one or multiple poverty lines. The United Nations Development Program (UNDP) describes poverty as lacking the resources to provide the needs in life such as food, clean water, shelter, and clothing. Poverty is then viewed to manifest in terms of hunger and malnutrition, limited access to healthcare, sanitation, and education (UN, 2022). Poverty can be classified into absolute poverty, where households live below a certain minimum income, and relative poverty, where households receive less than 50% of the average household income (Habitat4Humanity, 2018). The World Bank further defines extreme poverty as living on less than \$1.90, which in principle has become the dominant instrument to measure absolute poverty (WorldBank, 2019). According to the Kenya National Bureau of Statistics, poor in Kenya is defined as an adult earning less than Ksh. 3,252 in rural areas and Ksh. 5,995 in urban areas (KNBS, 2020).

The monetary approach of poverty definition infers a decline in income or consumption from a particular poverty line (Rowntree, 1902). This approach was rejected by Sen in 1974, who defined poverty from the capabilities approach. According to (Sen & Nussbaum, 1993) poverty may then be viewed as the inability to attain certain minimal or basic capabilities that allow individuals to enjoy a long, healthy life, thus not being able to improve their well-being. Sen's approach emphasizes more on non-monetary indicators of measuring poverty such as proper

nutrition and education rather than monetary indicators such as income. In the capabilities approach of poverty Sen & Nussbaum (1993) suggested that education contributed to development by influencing social change, influencing economic production and because of its relevance in bettering an individual's well-being. They further argued that human capital, that is, investing in education, and human capabilities are closely knit ideas, with lack of education denying one of reaching their full potential. Further literature on the capabilities approach of poverty such as Harasta (1996) and Qizilbash (1998) came to a consensus that human well-being constituted health, nourishment, and education. The capabilities approach seemed to draw attention to a broader scale of the determining factors of poverty.

The major factors of poverty can be narrowed down to three; individual, cultural and neighborhood, and structural factors (Samit et al. 2012). The theory of individual factors puts emphasis on one being accountable for their own poverty status. In neo-classical economics, individuals and consumers seek to maximize personal satisfaction. On reviewing various literature Bradshaw (2007), concluded that welfare programs were viewed to provide a negative incentive cushioning individuals against bad decisions and consequences. The individualistic factor is further cemented by American systems and values where individuals believe they can succeed if they work hard and have motivation (Rank, 2004). This theory has however been criticized by Bradshaw (2007) who argued that eugenics believers went as far as sterilizing those in society deemed to have less intelligence and rationalizing poverty.

The second theory of the root of poverty is the culture of poverty, a theory concluding that the poor and the rich have a difference in patterns, beliefs and values (Lewis, 1966). The author argued that generational poverty resulted from children being accustomed to the values and goals linked to poverty. Samit et al., (2012) agreed with Bradshaw (2007) that one's neighbourhood and environment tended to shape poverty or success of individuals. The authors however criticized this theory as it placed blame on the poor rather than the societal failures they found themselves in.

Structural factors such as political, fiscal and social distortions accounted for the third theory on poverty causes. Capitalism was seen to create conditions in which the poor remain poor, both Samit et al., (2012) and Bradshaw (2007) agreed. The alleviation of poverty through income by poor people was viewed as a wage issue, seeing that various structural barriers only allowed

them access to low paying jobs (Bradshaw, 2007). They argued that the systemic barriers preventing development of schools in terms of manpower and books needed to be addressed first. The authors further concludes that barriers in the political system contribute to further poverty levels among the poor, as the rich are involved in politics to protect their interests.

Inequality has been defined as uneven or unequal allocation of resources among the members of a given group (Koh, 2020). They agreed with McKay (2002) that inequality is multidimensional, cutting across economic, social and spatial aspects, and in that more often than not are interrelated. According to McKay (2002), income, consumption and assets are the most common measures of inequality. They argued that it is imperative that policy makers consider the phenomenon of horizontal inequality, which is inequality among groups in terms of gender, race and ethnicity.

The social exclusion approach of poverty then analyses the attributes of a particular society and how it excludes a certain group of people from fully participating in society. Social exclusion was defined by Hills et al., (2002) as when one is a resident of a country/ region, but for reasons beyond their control are unable to participate in regular actions of that country/ society but would like to do so. This approach has since brought out gender inequality, and how it plays a role in poverty among women. Gender inequality refers to a societal characteristic that on average places men higher than women economically and politically (UNDP, 2014). Lastly, Laderchi & Saith (2003) defined the participatory approach to poverty as how poor people analyze their reality, and what they perceive to be important.

2.3 Empirical Literature

The education level of an individual plays a part in breaking poverty cycles or alleviating one from falling into poverty. According to Mihai & Titan (2015) poverty reduced significantly as the level of education increased. They attempted to view poverty as both cause and effect of lack of education. Using the education index, they used different tests carried out over time to analyse the results of the children from poor families and well-to-do families. They found that those from poor families did worse in tests as they lacked access to the necessary material and resources. With poor result tests, they were unlikely to enroll to higher education leading to a poverty cycle.

A study done in India by Kapur (2019) also reiterated that education is key in the reduction of poverty. They argued that education played a part in increasing one's employment opportunities through newly acquired skills and improved the individual's financial management abilities. A direct relationship exists between the education levels and employment, and individuals were able to earn higher income, which through financial management, one developed information on savings and investments. The author also concluded that education improved communication skills and gave one a sense of awareness to make appropriate and effective decisions. The study, however, noted that financing education was a huge barrier to education as even though the learning tuition was free, other requirements such as uniform and stationery cost money which at times was unavailable to low-income households. The author recommended an analysis of financial resource availability and how it impacts education enrollment. The study overlooked the quality of education and resources, and other factors that may inhibit school enrollment.

Through education, basic competencies in reading and writing help individuals carry out tasks at their workplaces satisfactorily. Tilak (2001) emphasized the need to view education not only as a basic need but also a means of achieving other basic needs. Tilak argued that education influenced women's attitude and behavior towards fertility and family welfare, and individual's utilization of health facilities. The author also stressed that there existed a robust correlation between education and earnings, with income earnings increasing as the education attainment increased. The study concluded that the education policy assumptions in developing nations needed to be reviewed as not all yielded positive results. The author also reiterated on reviewing education as a means of development or as an end in itself.

Access to education equality for girls in developing countries has been hindered by a lot of factors including cultural norms. As per the United Nations Educational, Scientific and Cultural Organization (UNESCO), the secondary school gender parity index in Kenya in 2009 was 0.896 meaning that more male students enrolled in secondary schools. Traditional factors such as child marriages, female genital mutilation, and taboos negatively affected girl education (Andiema, 2021). These studies however do not factor in education inequality in terms of access to proper books, teachers, and technology. Despite being able to access secondary school, girls in well-equipped schools tend to have a better chance to do better in school in comparison to their counterparts.

The amount of income is a critical determinant of poverty alleviation. However, there is yet a huge income gap between genders. A study done in the U.S by Hegenswich & Williams-Baron (2017) concluded that women make 79 cents for every dollar made by a man. For every Kes 100 a man is paid in Kenya, their female counterparts are paid Kes 62, 38 shillings less, according to World Economic Forum (2017). This may be due to a series of factors over the woman's lifetime such as career choice. Even in modern society, there exists a sexual division of labour that not only causes disparity in opportunities for women in terms of jobs and productive capital, but also hinders them from participating in political and economic decision making (Godoy, 2004).

The narrow access to certain Science, Technology, Engineering and Mathematics (STEM) subjects causes limited opportunities through the gender division of labour brought about by the Mathematics and Science stereotype. According to Makarova & Herzog (2015) there exists a gender stereotype towards Mathematics, Physics and Chemistry, with both Maths and Physics have negative relations to the female gender. The authors did a cross-sectional study across students and teachers. The stereotype that Mathematics and Physics are considered manly, discourages female enrollment into such careers, furthering the stereotype as a male dominated field. Further to this, Ramsey (2017) conducted a study in Michigan that concluded that science-based subjects needed agentic traits, more common in men, to succeed as opposed to communal traits, as commonly seen in women.

Factors like education and age are key in determining wage and income levels. According to Earle (2010), income for those in well-paying jobs was highly influenced by experience, which is measured by age, in a study done in New Zealand. The author concluded that median wage increased with age, up to a certain point prior to retirement. Klasen & Lammana (2008) concluded that girls have a higher marginal rate of return on education. This means that girls would most likely have a higher percentage change in earnings for every additional year of schooling. According to Hegenswich & Williams-Baron (2017) choices made by women such as having children contribute to the low incomes among women. Since they are viewed as the primary caregivers of their families, they are unable to work more hours to earn more income. They also found that women occupy most low paying and part time jobs. As incomes rise, households have a higher marginal propensity to save. Low incomes among women thus tend to result into lower savings.

In accessing financial services, poor people can take part in the economic activities in a society. Omar & Inaba (2020) established that there exists a negative link between poverty and inclusion to financial services. From their analysis on panel data from over 116 developing countries, they found that economies with better financial inclusion exhibited smaller poverty levels. There existed a strong correlation between poverty and financial inclusivity according to Park & Mercado (2015) who recommended that poverty reduction strategies include financial inclusion in way of microfinance and provision of loans to lower income groups. Essential financial services such as savings, access to loans, credit and money transfer can play a huge role in improving one's life (Dupas & Robinson, 2013) . Using data collected from a control trial in Bumala in Kenya, they concluded that having bank and savings accounts made one eligible for bank loans that were used to expand the businesses especially among market women. The authors recommended doing a large study to include income earners in different settings to examine whether the results are similar.

In the majority of Organization for Economic Co-operation and Development (OECD) and developing economies, asset-based financing is widely used (OECD, 2015). Secured loans tend to have lower interest rates on borrowing compared to unsecured loans. Customary laws and practices continue to hinder women in Kenya from owning land and other forms of property (Bosuben, 2018). While most banks require some form of property as collateral, women with no such property are unable to access credit. Field & Torero (2004) found that ownership rights had a correlation with access to credit. Statistics from the Kenya Land Association confirms that only 10.3% of women in Kenya own and control land Mayer (2020).

2.4 Literature Overview

Most of the reviewed studies including Sen & Nussbaum (1993), Mutua (2017), Dupas & Robinson (2013), Makarova & Herzog (2015) and Andiema (2021) are on poverty determinants and the various factors of gender inequality leading to more women being in poverty as compared to men. This study seeks to validate or dispute the findings from these studies on how

levels of education, income and access to credit or finance contribute to reduction of poverty among women in Deep Sea and how they cushion themselves from the impact of poverty.

As Dupas & Robinson (2013) recommended, there is a necessity to have additional studies on the importance of financial inclusivity in the decrease of poverty. This study will be reviewing the role played by gender inequality factors in the poverty levels among women in Deep Sea. These factors may include their income, saving and microfinancing access, financing of education in Deep Sea influences the education quality, and the impact it has on education levels and the career subjects such as STEM in school as discussed by Makarova & Herzog (2015) and how this influenced the career choices taken by the women, and their guidance to their daughters. This study also aims to investigate the strategies undertaken by women living in Deep Sea to alleviate their poverty levels, and eventually draw key policy recommendations for anti-poverty programs.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This section illustrates the conceptual framework, research site, study design, sample size and procedure, study population and data collection methods and analysis.

3.2 Conceptual Framework

From the literature review the independent and dependent variables can be outlined as shown in Figure 4;

Independent Variables

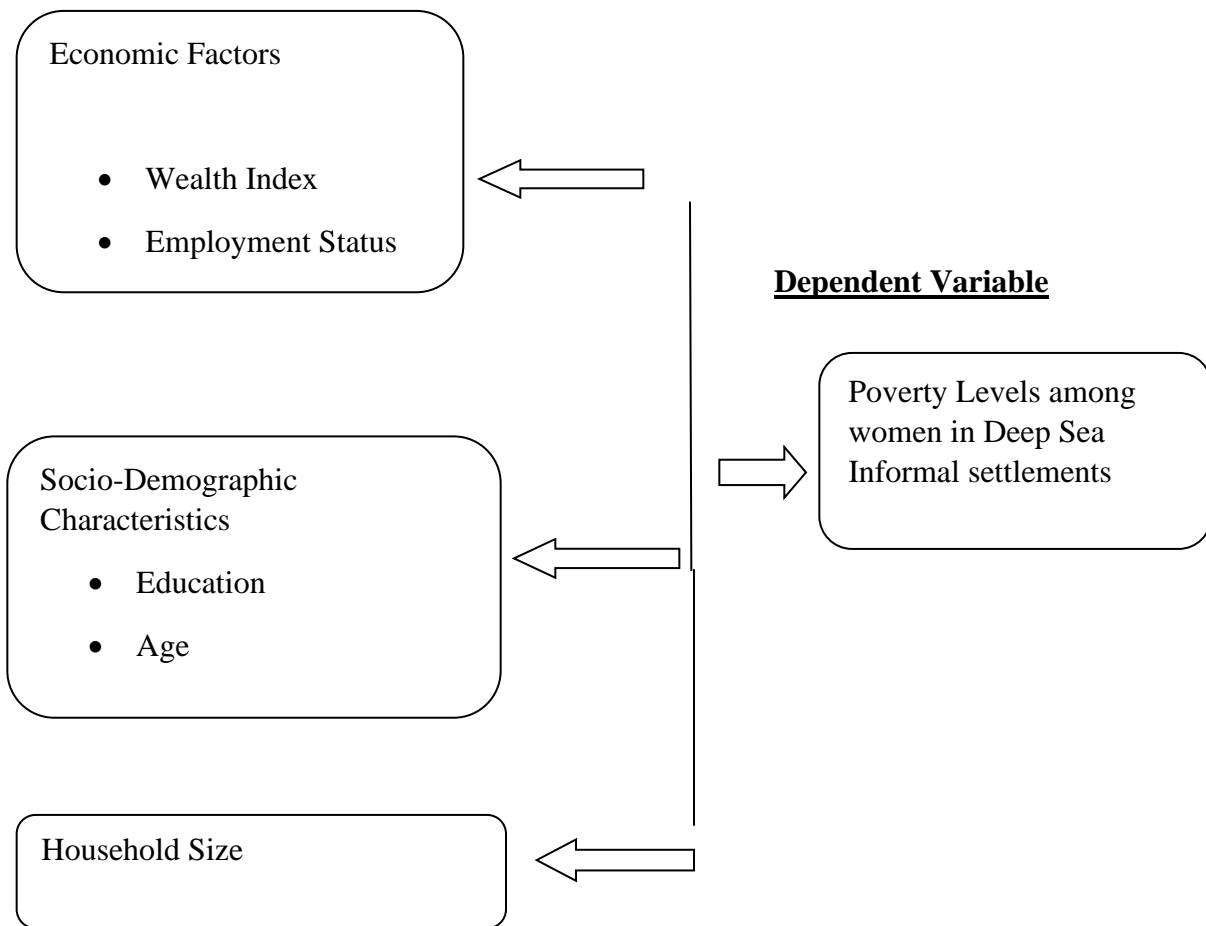


FIGURE 4: CONCEPTUAL FRAMEWORK

3.3 Economic Model

As shown in the figure 4, poverty levels among women in Deep Sea Informal settlements may be determined by their education levels, age, income, employment status and access to financial services.

A correlation analysis was used to establish the correlation between the variables. The link between the single dependent variable and the independent variables was assessed using the multiple regression analysis. The intention of this analysis was to use the established values of the independent variables to predict the value of the dependent variable.

The regression model identifies the relationship between Y, the dependent variable, as a function combination of X, input variables, and unspecified parameters, β .

$$Y = f(X, \beta) \dots\dots\dots(i)$$

The intention of the study was to give an explanation on the regressand as the likelihood of living in poverty given the explanatory variables. It is assumed that there exists a direct correlation between the hypothetical variable Y^* and regressors (X_i). The structural model is then defined as;

$$Y^* = X_i\beta + \varepsilon \dots\dots\dots(ii)$$

Where Y^* is the unobserved hidden variable

X_1 is the explanatory variable vector

β is a vector of parameters to be estimated

ε is the error term

The measurement equation below links the hypothetical construct variable Y^* and the observed binary variable Y;

$$y = \begin{cases} 1 & \text{if } Y^* > K \\ 0 & \text{if } Y^* \leq K \end{cases} \dots\dots\dots(iii)$$

Where Y is the likelihood of living in poverty (1 if living in poverty, 0 if otherwise), while the limit point in the income levels is K, in which beyond K, the individual is not living in poverty/poor. The X characteristics are averaged and regressed against Y to determine the impact of each variable on the probability of one living in poverty. The dependent variable, poverty, will be represented as a function of employment status, access to financial services/ loans, education, age, household size and wealth index.

The general regression equation can be stated by the equation;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k + \varepsilon \dots\dots\dots(iv)$$

Where;

β_0 is the intercept and B_1, B_2, B_3 represent the slope between Y and the related independent variable X. ε , represents the error in the measurement of Y and the effect on Y from other independent X variables missing from the equation.

Thus;

$$Y = \beta_0 + \beta_1 \text{Education} + \beta_2 \text{Wealth Index} + \beta_3 \text{Employment} + \beta_4 \text{Access to Financial Services} + \beta_5 \text{Household Size} + \beta_6 \text{Age} + \varepsilon \dots\dots\dots(v)$$

The output variable, Y, as a function combination of the explanatory variables, X, and unspecified parameters, β , therefore is;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 \dots\dots\dots(vi)$$

3.4 Research Site

This study was done in Deep Sea informal settlements, which is bordered by Parklands and Westlands. The settlement is estimated to house 12,000 residents (Gikandi, 2019) all of whom

live in informal houses made of mud or iron sheets. The figure below outlines the location of the Deep Sea Informal settlement.

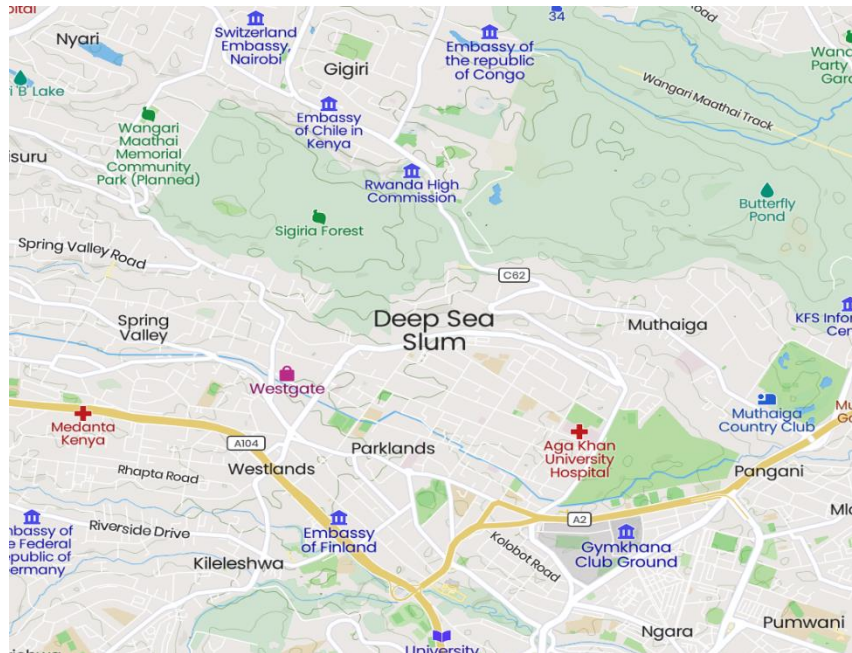


FIGURE 5; A GOOGLE MAP LOCATION OF DEEP SEA -
DEEP SEA SLUMS - [HTTPS://GOO.GL/MAPS/Q5pF1rAXGU45GID5A](https://goo.gl/maps/Q5pF1rAXGU45GID5A)

3.5 Study Design

A research design creates an idea of the type of study undertaken to answer the research questions (Cooper D & Schindler P, 2001). This study used the cross-sectional descriptive design, where data was gathered at that exact point in time. This study was carried out via face-to-face interviews and questionnaires.

3.6 Study Population

Mugenda & Mugenda (2003) define the study population as the group in which a researcher intends to draw their conclusion. The study population was drawn from women living in Deep Sea informal settlements aged 18 years old and above.

3.7 Data Sources

Primary data was used for this study through the administration of a questionnaire to the study population. The questionnaire sought to obtain information on employment status, income levels, access to financial services, their education levels and age.

3.8 Data Collection Tools

This study used a questionnaire as a means of data collection. The study applied cross-sectional observation study design. A cross-sectional study is quick and inexpensive to conduct, a huge advantage for the study. One of the limitations of cross-sectional study is the susceptibility of sampling bias (Wang & Cheng, 2020). They define bias as a systematic error that results in an incorrect estimate of the real impact on the dependent variables by the independent variable. Bias may then be categorized into two; the selection bias where the sample chosen no longer represents the population and the information bias where when crucial variables are gathered, measured, or interpreted wrongly (Wang & Cheng, 2020). To avoid selection bias, this study used randomization in selecting the sample population.

3.9 Sampling Procedure

As per Mugenda & Mugenda (2003), the process of selecting a few people for a study as a representation of the bigger group in which they were chosen is known as sampling. The authors observed that 30% of the target population is a good representation. Sampling was subjective, targeting women who reside in Deep Sea. Individuals were to meet the criteria of being at least 18 years old, live in Deep Sea informal settlements and be a woman. The researcher identified these women through the help of the locals and social workers who have worked with women in Deep Sea.

In computing the sample size in an unknown population Biswas (2013) suggests the use of the following method;

$$n = Z^2 * (p * q) / d^2 \dots\dots\dots(vii)$$

In the formula above, “n” represents the sample size to be computed, “P” is the estimated proportion of the study variable, q is (1-p), and d represents the margin of error. Based on the report by Munoz & Maria (2018) at least 12.8% of women live in poor households. Using a significance level of 7%, the Z- score is 1.96 and p is 0.128 the sample size may then be calculated as;

$$N= 3.8416 * ([0.128*{1-0.128}]/ 0.0049) \dots\dots\dots(viii)$$

The sample size proposed for this study was therefore 88 respondents.

3.10 Data Collection Methods

3.10.1 Questionnaires

A questionnaire was used as the main tool for collecting data. It contained both closed-ended and open-ended questions. Responses from the closed ended questions were analyzed through quantitative methods such as bar charts and pie charts and econometric methods to further explain the relationships between factors. Conversely, open ended questions allowed the researcher to gain more insight into the answers given, and further analyzed through qualitative methods.

The questionnaire had five sections. The initial section assessed the demographics of the respondent, while the second section assessed access to financial services. The third section assessed the wealth index of the respondents through a series of questions.

The fourth section sought to understand the economic needs and challenges faced by the respondents and how they mitigate the challenges. The final section analyzed the literacy levels to assess quality of education.

3.11 Data Analysis

The data was scrubbed before converting it into analyzable data. This was done by re-checking the questionnaires to ensure validity of the target audience, and completeness in ensuring respondents filled in all the questions. Cross tabulation of the quantitative results was done to obtain further insight to the responses. Exploratory-sequential design (Creswell et al., 2003) was used to explore and explain the relationship between qualitative and quantitative data. Statistical Package for Social Sciences (SPSS) Software was used to analyze the data.

3.12 Estimation Tests

3.12.1 Breusch-Pagan Test for Heteroscedasticity

Heteroscedasticity arises when the residuals in a regression model are not equally distributed and have unequal variance. Heteroscedasticity is tested in this study using the Breusch Pagan test hypothesized by;

H_0 (Null hypothesis) = Homoscedasticity present

H_1 (Alternative Hypothesis) = Heteroscedasticity present

The null hypothesis is rejected where the p-value is below the 0.05 significance level , and heteroscedasticity does exist.

3.13 Variable Definitions and Measurement

Table 2 presents the variable definitions, their descriptions, and the expected sign from the results.

TABLE 2: VARIABLE DEFINITIONS AND MEASUREMENTS

<u>Dependent Variable</u>	<u>Measurement Description</u>	<u>Expected Sign</u>
Poverty Levels	<p>1 if the individual earns less than Ksh 5,995 per month</p> <p>0 if otherwise</p>	

<u>Independent Variables</u>		
<u>Socio-Demographic Factors</u>		
Education	Education Quality Quintiles; 1 if lowest, 2 Second 3 Middle 4 Highest	Positive/ Negative
Age	Age in years	Positive/ Negative
<u>Economic Factors</u>		
Wealth Index	Wealth index quintiles; 1 lowest 2 Second 3 Middle 4 Fourth 5 Highest	Positive/ Negative
Employment Status	1 if neither formally employed/ engaged in economic activity 0 if otherwise	Positive/ Negative
Access to Financial Services	1 if individual has no access to loans/ savings group 0 if otherwise	Positive/ Negative
Household Size	Number of Household Members	Positive/ Negative

CHAPTER 4

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The main objective of the study was to assess poverty in Deep Sea Informal Settlements from a gender inequality perspective. This chapter shows the data analysis and results of the study. The section describes the questionnaire response rate, descriptive statistics, determinants of poverty among women in Deep Sea, the social impact of poverty and the mitigating measures against poverty.

4.2 Questionnaire Response Rate

TABLE 3 QUESTIONNAIRE RESPONSE RATE

Response Rate	Frequency	Percentage	Cumulative Percentage
Responded	80	90.9	90.9
Non-Response	8	9.1	100
Total	88	100	

According to Table 3, 88 questionnaires were issued, with 80 respondents returning them completed translating to 90.9 response rate. This is above the 70% acceptable rate (Mugenda & Mugenda, 2003).

4.3 Descriptive Statistics

Table 3 presents the descriptive statistics of variables used in the analysis. It summarizes the data collected on 80 observations.

TABLE 4: DESCRIPTIVE STATISTICS

Variable	Observation	Mean	Standard Deviation	Min	Max
Dependent Variable					
Poverty Level	80	0.65	0.4799	0	1
Independent Variables					
Age	80	32.3	8.66	18	53
Education	80	2.575	0.7424	1	4
Wealth Index	80	2.175	0.7919	1	5
Employment Status	80	0.719	0.4427	0	1
Access to Financial Services	80	0.719	0.4427	0	1
No. of dependents	80	5.056	2.5754	1	12

65% of the women living in Deep Sea Informal Settlements are living on less than Kes 5,995 per month. Thus, plenty of the women are living below the poverty line, which is currently defined as living on less than Kes 5,995 per month in urban Kenya and Kes 3,252 per month in rural Kenya. The mean age of the women living in Deep Sea Informal Settlements is 32.53 years. Majority of the women fall in the 2nd quartiles of education, only attaining primary school level education and have minimal to no literacy skills, which limited the number and level of

opportunities to work and earn wages. The average wealth index of the women is between the second and middle quintiles, living in poor housing and sanitary conditions and owning zero to little assets. 71.79% of the women are neither engaged in formal employment nor in consistent economic activities. Majority of the women 71.79% did not have access to loans or savings groups, thus have minimal to no financial access. The mean number of household sizes was 5 people, 1 person higher than the national mean household size of 4 (KNBS, 2020).

4.4 Regression Analysis

The strength and significance of the variables were determined by running a linear regression model. Table 5 shows the dependent variables with the coefficients, standard error, t, and p-values.

TABLE 5: DETERMINANTS OF POVERTY AMONG WOMEN IN DEEP SEA INFORMAL SETTLEMENTS

Poverty Level	Coefficient	Std. Error	t	P> t
Education	-0.081	0.082	-0.99	0.327
Age	0.031	0.043	0.73	0.470
Age. ²	-0.001	0.001	-0.79	0.431
Wealth Index	-0.056	0.046	-1.21	0.229
Employment Status	0.291	0.128	2.28	0.026
Access to Financial Services	-0.019	0.118	-0.16	0.871
No. of people living in the household	-0.031	0.021	-1.47	0.146
Cons.	0.481	0.849	0.61	0.573

Number of observations; 80

$F(7, 72) = 2.46$

Prob > F = 0.0256

R-Squared = 0.1928

Adj R-Squared = 0.1144

Age is positively correlated to the likelihood of having an income of less than Kes 5,995 in a month. This study found that all factors held constant, increasing age by one year, growing the likelihood of one being poor and earning less than Kes 5,995 per month by 0.3%. This study agrees with what Keddar & Henry (2010) who found that less experience and high unemployment among young people could be a cause for higher probabilities of poverty among them. Yamada (2018) and Datt & Dean (2005) also found similar results. However, as age progresses, it is negatively related to having an income of less than Kes 5,995 per month. An increase in age, lessened the chances of being poor by 0.1%. Earle (2010) also found similar results as age and experience contributed to higher median wages. The p-value of age is 0.470 which is > than the 0.05 significance level and is not statistically significant to conclude the existence of a non-zero correlation. This may be credited to the sample size being small, which increased the impact of the random error.

The wealth index in this study was assessed based on housing, sanitary conditions, and assets owned by the women, with those living in worse-off housing and sanitary conditions and not owning assets falling in the lowest quintile and those in relatively better conditions in the highest quintile. There exists a negative relationship between wealth index and making under Kes 5,995 per month among women living in Deep Sea. Where all factors are held constant, being wealthier i.e. those who owned more assets and had better living conditions increased the probability of one not being poor by 5.6%. This study is in agreement with Barrientos (2010) who found that improving social welfare played a role in low poverty levels. The p-value of the wealth index is 0.229 > 0.05 significance level. A non-zero correlation cannot therefore be

concluded as it is not statistically significant in this sample size, due to the sample relative to the variability of data.

This study found a p-value of $0.146 > 0.05$ for the sum of people residing in the household variable, thus there is insufficient evidence to conclude a non-zero correlation exists. An increase in family size staying within the household decreased the probability of earning under Kes 5,995 per month by 3.1%. It is contrary to the findings by Orbeta (2005) and Kinyanjui & Gachanja (2016) who found that poverty increased as members of a household increased. It however is in agreement with Rahman (2012) that the prevalence of poverty was greater with bigger households. The study additionally agreed with Kamuzora (2001), who found that less poverty with household size is pervasive in Africa, finding that there was less poverty among larger households in East & West Africa, compared to one or two-member households.

A positive relationship exists between employment and the probability of poverty and earning less than Kes 5,995 per month. The p-value of the employment variable was $0.026 < 0.05$ and thus statistically significant. This study concluded that being engaged in an informal business and activity increased the probability of poverty by 29.1%. The study found that 71.9% of the women were either unemployed or engaged in informal self-employed activities which had inconsistent income. It was in agreement with Hieu et al., (2014), who found that where households were engaged in informal business and self-employed earnings, poverty was heightened, in comparison to informally employed individuals. They used the description by the General Statistics Office, Vietnam, to describe informal business and self-employment as those who ran unregistered businesses, while informal employment as individuals who earned wages without any form of social security. In Kenya, informal employment may be categorized as casual employment categorized by cash payment at the end of every day, while informal businesses such as Jua Kali are not registered with the registrar, not covered via Social Security, or governed by employment regulations such as minimum wage, according to Kenya Revenue Authority. Vaalavuo & Sirniö (2022) also concluded that part-time employment and short-term employment were less effective in alleviating poverty. As the nature of labor and sector-specific employment played a factor in poverty alleviation, as in the findings from Oiro (2002) and Oyugi et al., (2000), this study found that the low skill set among the women was a direct cause for the low wages.

The financial access variable's p-value is $0.871 > 0.05$, implying that it is statistically insignificant, which may be attributed to the sample size thus increasing random variation. These findings contrast that of Park & Mercado (2015), who found that a strong relationship existed between poverty and financial inclusivity. This study mirrors the findings from studies done by Omar & Inaba (2020) and Haruna & Saifullahi (2012) who found that financial inclusion reduces poverty levels significantly. There is a negative correlation between accessing financial services and living under Kes 5,995 per month. Ceteris paribus, increasing the accessibility of financial services reduced the likelihood of one being poor by 1.9%.

This study substantiated that there exists a negative relationship between education and being poor, that is, living under Kes 5,995 per month. With each additional year at school, literacy skills improved. All factors constant, the probability of living below Kes 5,995 per month was reduced by 7.8%. The education variable had a p-value of $0.345 > 0.05$, statistically insignificant and a non-zero correlation cannot be concluded, as the sample size may have been small. Berg et al., (2011) and Bhatra (2017) found that education had minimal impact on reducing poverty levels where quality was low. This study found that the negative relationship between education & poverty increased with education and literacy levels. This agreed with Tilak (2007) who found that primary level education and mere literacy had a positive relationship with poverty, while secondary and higher education had a negative relationship with poverty. Geda, et al., (2005) also agreed that high school and university education played a bigger role in reducing poverty among women. This study was also in agreement with Mihai & Titan (2015) and Kapur (2019) that education decreased the probability of one living in poverty.

4.5 Results of the Estimation Tests

Heteroscedasticity arises when the residuals in a regression model are not equally distributed and have unequal variance. This section discusses the results of the heteroscedasticity Breusch-Pagan Test.

4.5.1 Breusch-Pagan Test for Heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: Age NoofpersonslivinginHousehold EmploymentStatus WealthQuintile AccesstoFin
EducQuintile

chi2(6) = 2.24

Prob > chi2 = 0.8959

Ho represents the null hypothesis of the test, which states that there is a constant variance among the residuals, while the Chi2 (6) is the chi-square test statistic of the test. The p-value of the test is 0.8959 which is greater than 0.05. The null hypothesis was accepted and homoscedasticity is present.

4.6 Social Impact of Poverty among Women in Deep Sea Informal Settlements

This study revealed that 65% of the study participants were living under the Kes 5,995 poverty line in urban Kenya. This made it difficult for the women to meet household demands. More than 80% of the respondents reported their inability to meet their basic needs. They reported that they occasionally have to survive on one meal a day due to the high costs of food and at times the unavailability of cheaper options in the market. Respondents reported that they had to send children to school without food. One respondent cited that while food may be available, it was expensive and unaffordable.

“Money is not enough to take care of the children’s school fees and buy food; We eat one meal a day.” (Respondent 43, 37 years)

“Food prices are high. ‘Unga’ is 200/ and Salad oil has become too expensive” (Respondent 33, 32 years)

Only 5 of the respondents owned their houses, with the rest renting mud and iron sheet houses. Nearly 50% of the respondents also reported that the conditions of the houses were poor as most of the houses were leaking, often letting in water and cold. An average of 5 people lived in one tiny house, which worsened the living conditions by sharing minimal resources. They also faced evictions multiple times as they were unable to make enough money in the month to cater for food and rent.

“Money from the side hustle is not enough to cater for basic needs and must be split between rent and food. On healthcare, at least public hospitals are free.” (Respondent 6, 18 years)

“We do not have enough money for food, and many people are living in the house” (Respondent 20, 45 years)

Lack of water and proper sanitation was also a key problem for the women living in Deep Sea Informal Settlements. Occasionally, they are forced to go for weeks without water, creating unsanitary conditions for the shared pit latrines. Healthcare and access to hospitals was also a big concern for the respondents with 10 noting that they did not have the funds to go to hospital. This poses a bigger threat as the children are often malnourished due to a lack of proper feeding and singular meals a day. One respondent cited the lack of a National Health Insurance Fund card to pay for medical bills. While some respondents commented that public hospitals were free, they are still burdened with the obligation to buy medicine, often which they are unable to, do due to lack of funds.

“I lack money to buy food, and sometimes food is not available. Paying rent is also a problem t. We have not had water for two weeks now. Money to go to hospital/ buy medicine is a problem.” (Respondent 39, 45 years)

“The rent money is not enough, and I don’t have NHIF for my sick children” (Respondent 8, 28 years)

Other social impacts of poverty among women living in the Deep-Sea Informal Settlements include teen pregnancies, crime, and drug use.

“My husband does not give me money, and yet he expects to find food when he comes back. So, I cannot die of stress. I will come to this place and have a jug of Keg to forget” (Female Resident Deep Sea, 38)

“I cannot afford my epilepsy medicine, but alcohol helps keep away my seizures, so I come to drink” (Female Resident Deep Sea, 41)

4.7 Mitigating Impact of Poverty

In response to the second aim of the study, this section investigates how women cushion themselves against the economic challenges they face in their households. The study found that the women engaged in numerous activities to decrease the impact of poverty in their households.

4.7.1 Welfare And Savings Groups

Dupas & Robinson’s (2013) and Omar & Inaba’s (2020) findings in their studies are reflected in this study. The financial inclusion of the respondents using loans and savings improved their lives. This study found that the women relied a lot on mobile loans and credit “Fuliza” to curb the economic challenges brought about by poverty. One respondent was able to expand their business by borrowing from her savings group.

“I was able to borrow Kes 100,000 from my chama to expand the business and pay school fees for my children. I always borrow money from chama and then pay it back” (Respondent 1, 36 years)

Another respondent used mobile loans as their safety net during an economic challenge. Field & Torero’s (2004), findings that ownership of property was directly correlated with getting credit was confirmed in this study. Less than 1% had bank accounts, primarily using mobile money as their means of money transfers and access to credit. The study discovered that 48% of the participants had been denied a loan at least once. The loans taken by respondents did not require

any sort of collateral and were accessible as long as they were paid on time. Due to inconsistent income, repayment was a challenge.

“I use Fuliza, M-shwari or Tala and take loans that I will pay later” (Respondent 6, 18 years)

Less than 30% of the respondents, however, were involved in a savings group, with other respondents citing a lack of funds to make the daily or weekly commitment to contribute money. More than 50% of the respondents relied heavily on their small savings, well-wishers, and government support.

External and social networks support from well-wishers, religious organizations, public & government officials such as Members of County Assembly (MCAs), and chiefs played a huge role in mitigating challenges. Through these, they were able to receive packets of “unga,” vegetables, and monetary assistance.

“The MCA and Senator or Governor sometimes bring food to give to us. If I am too hungry, I ask the chief to give me something to eat” (Respondent 30, 53 years)

As part of social networks, the women also depend on each other, giving small loans to be repaid later, and occasionally getting goods at the retail shops on credit.

“I get a loan with shops and chama for food, shopping, and business” (Respondent 60, 35 years)

We also found that the women were involved in multiple casual jobs at a time, to increase their monthly income. The income earned helped them pay for some basic needs such as food. Multiple jobs increased their income, and in some cases, work was paid in kind.

“I get some donations, and when I work, they give me food to carry home” (Respondent 58, 24 years)

CHAPTER 5

SUMMARY, CONCLUSION & POLICY RECOMMENDATIONS

5.1 Introduction

The main objective of the study was to identify the role that gender inequality plays in the poverty levels among women living in Deep Sea Informal Settlements. Other specific objectives were to determine the coping strategies these women use to mitigate the impact of poverty on the household. The study also aimed to draw key policy recommendations to incentivize gender equality and reduce poverty levels among these women. The dependent variable was the poverty level.

The independent variables were employment status, education, wealth index, age and no of household dependents, and access to financial services. A regression model was estimated.

5.2 Summary of the Study Findings

This study found that a higher wealth index, access to financial services, higher quality education, and number of people living in households are negatively related to earning less than Kes 5,995 per month. Better access to financial services, higher education, improved wealth index reduced the probability of one living in poverty, and under Kes 5,995 per month in urban areas. However, age and employment status were positively related to one earning less than Kes 5,995 per month. Increasing age up to a certain age, and the informal business and activities that women and households were involved in, increased the probability of one living in poverty and earning less than Kes 5,995 per month.

5.3 Conclusion

This study investigates how gender inequality factors play a role in poverty levels among women living in Deep Sea Informal Settlements. The statistical analysis concludes that gender inequality factors such as education, access to financial services, wealth index, age, and employment play a key role in poverty levels among women living in Deep Sea informal settlements.

As a result of poverty, the women faced poor housing and sanitation with leaky houses and latrine toilets which often lacked water. With low incomes, meals were scarce, and malnutrition was a high likelihood among children eating one meal a day. Teen pregnancies, early marriages, and drug abuse were some of the other impacts arising from poverty in Deep Sea Informal Settlements.

To mitigate the impact of poverty, loans and savings, donations from well-wishers and government officials were key. A barter trade of services for goods was also instrumental among these women in alleviating poverty's impact. Informal saving groups "chamas" was found to be a major coping mechanism used by these women to cope with the effects of poverty, as it was an avenue to save and borrow funds, as well as save for rainy days.

5.4 Policy Recommendations

Literacy levels are still quite low with the majority of respondents having low to zero reading and writing skills, even while having some form of primary education. It is thus imperative for the government to investigate the current education system at the primary level and encourage further enrollment of girls and women into high school and higher education.

The informal economy is inevitable and thus, poverty reduction policies should be highly put in place in this sector. There is a need to put in measures to support informal businesses in informal settlements. With income inconsistency due to market conditions, policies to cushion them during times of hardship should be put in place. The government should also incentivize established artisan and informal workplaces to employ individuals as households in informal employment do better than their informal business and self-employed counterparts.¹ Vocational training may also be of benefit to the informal economy, as it would improve the skill sets of the employees and the overall quality of products in the market.

¹ Informal businesses i.e., the kiosks, Jua Kali et al would be subject to turn over tax, while one who is informally employed would be subject to regular individual taxes. In this context, they would thus be treated differently. Further, said businesses have overheads that are meant to be covered by the income, prior to them paying themselves. An informally employed individual would only need to cater for their own needs on the income paid at the end of the day.

Access to financial services is also seen as a key contributor to the decrease in poverty levels. Cash-based transfer programs and tax breaks on low-income businesses may also allow for the expansion of businesses and the creation of a bigger job market. Where small loans are issued by the Government of Kenya such as in the “Hustler Fund,” Women Enterprise Fund, UWEZO Fund, and the Youth Enterprise Fund, there is a need for better management of funds and allocation to guarantee that the right people receive the amounts.

The minimum requirements required to open a bank such as KRA pins & minimum monthly incomes, the high charges to open and maintain a bank account, and the high-interest rates associated with bank loans and mobile money loans discouraged the women from taking loans. On the KRA pin, there is a lot of weariness as it comes with the implication of filing annual taxes where failure to do so attracts penalties. Sensitization is thus prudent for the tax man to encourage taking up of the pins, to reduce the barriers of entry in a bank account acquisition. Smartphones are often needed for many loans and mobile banking products and services. As these are not easily accessible, more non-application-based product availability would improve access to financial services. The government should thus work with various stakeholders to review these for lower-income groups. As informal savings groups are used to mitigate poverty in informal settlements, policies that safeguard their interests, and incentivize increased savings such as access to bigger loans without collateral should be put in place.

5.5 Areas of Further Research

A larger sample size may be used for further research in analyzing gender inequality factors and the role they play among women in Deep Sea Informal Settlements. Further areas of research can be to examine similarities in leading causes of poverty among women in urban informal settlements and rural areas. In this regard, government policies may be applied across the board.

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Appendix A

QUESTIONNAIRE

Introduction

My name is Mercy Waweru from the University of Nairobi, School of Economics, and I am conducting this study as part of my examination. This questionnaire is aimed at conducting the impact gender inequality levels have on poverty levels among women living in Deep Sea informal settlements, in Nairobi. You have been selected, as you are a Deep-Sea resident and a woman above the age of 18. Any information provided will be treated confidentially and it will only be used for this study.

Section A; Demographic Information

1. Name:
2. Mobile number :
3. Date of birth (Year) -

What is your Age? _____

4. Highest Level of Education

- a) Never went to school
- b) Primary School
- c) Secondary School
- d) College/ University

5. Marital Status

- a) Single
 - b) Married
 - c) Widowed
 - d) Divorced/separated
6. Number of children sired

7. No of persons living in the residence including relatives

8. Employment Status

- a) Formally employed- By government or company
- b) Informally employed (Gig/ side hustles)
- c) Self-employed (Business)
- d) Unemployed

9. What is your main economic activity?

- a) Agriculture (foreman, gardener, farmer, tractor operator)
- b) General labourer (driver, cleaner, sweeper, messenger, house manager/help)
- c) Retail (Food Vendor, charcoal sale, gas sale, kiosk, tailor)
- d) Other Hustle (Washing clothes, cleaning houses)

10. How much do you make in a month?

- a) Salary if employed _____
- b) Business _____
- c) Gig/ Side Hustles _____
- d) Government Cash Transfer _____
- e) Cash transfer from other (Children, Parents, Relatives) _____

SECTION B; ACCESS TO FINANCIAL SERVICES; I am using some of the user-side financial access indicators from the World Bank (rephrased)

1. Do you have access to a bank account?
 - A) Yes
 - B) No
2. Do you have access to mobile money- M-pesa, M-shwari, or Fuliza?
 - A) Yes
 - B) No
3. Are you a member of a Savings Group/ Chama?
 - A) Yes
 - B) No
4. How often do you deposit/ withdraw funds from M-pesa/ Bank/Savings?
 - A) 3 or more times in a month
 - B) Less than 3 times a month
5. Have you ever been denied a loan by the bank, Mshwari, Fuliza, or Chama?

A) Yes

B) No

6. What is the highest amount approved for your loan?

A) 0-1000

B) 1001- 5,000

C) 5,001-50,000

D) Above 50,000

SECTION C; Wealth Asset

• **Ownership of Household Assets**

1. Does your household have;

a) A television Yes / No

b) A radio Yes/ No

c) A smartphone Yes/ No

d) Bicycle/Car/ Motorcycle Yes/ No

e) Livestock (cows, goats, chicken) Yes/ No

• **Housing Conditions & Amenities**

2. Wall Structure Mud/ Iron Sheet/ Timber/ Stone

3. Main source of drinking water Bottled water/ Piped to house/ Public Tap

4. Main mode of human waste disposal Pit latrine/ Bucket/ Open

5. Is the waste disposal facility shared with others Yes/ No

Appendix B

QUALITY OF EDUCATION

LITERACY SECTION;

1. Speaking; Respondent to read this aloud

1. Mwai Kibaki was the third president of Kenya.
2. There are 365 days in a year.
3. June is the sixth month of the year.
4. Kenya is a country in East Africa.
5. Maasai Mara is a national park in Kenya.

2. Writing; Respondents are to give answers on reading the paragraph.

Once upon a time, there was a lion named Mara. Mara lived in Kenya, a country in East Africa, and was called the king of the jungle. Like all lions, Mara had a long tail and long mane. Mara had one brother called Simba. He had a roar that scared many animals in the kingdom. The other animals like zebras and antelopes were afraid of Simba.

Questions

1. What was the name of the lion? _____
2. Where did the lion live? _____
3. Which other animals lived with the lion? _____