BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT OF DISASTER RISK REDUCTION



Examining The Causes And Socio-Environmental Impacts Of Illegal Settlement, A Case Study Of Ward 5, Epworth, Harare Zimbabwe

BY

TALENT NATSAI KANDIRA

B202249B

DISSERTATION SUBMITTED TO BINDURA UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE BACHELOR OF SCIENCE HONOURS DEGREE IN DISASTER MANAGEMENT STUDIES

May 2024

APPROVAL FORM

The undersigned certify that they have read this project and have approved its submission for marking after confirming that it confines to the Faculty of Science and Engineering, Disaster Risk Reduction Department and HBSc DMSc requirements.

T.P.Cl into

25-09-24

.....

SUPERVISOR

Altas

DATE

28/09/24

••••••

.....

Prof E. Mavhura (Chairperson, DRR Dpt)

(Date)

DECLARATION FORM

I, KANDIRA TALENT NATSAI, registration number B202249B declare that this dissertation is the product of my own work and has not been previously submitted to any University other than Bindura University of Science Education. All the sources used or quoted have been indicated and acknowledged as complete references.

Andra

29/09/2024

••••••

Signature

Date

••••••

DEDICATION

I dedicate this dissertation to my parents, Tsitsi and Patrice Foti, as well as to my guardians, Robson and Beauty Manyere. I appreciate your unwavering love and support. In addition, I dedicate this work to Tarisai, Kudakwashe, and Alice, my three siblings. Without your love, care, and support, this would never have been possible. I appreciate everyone's belief in me. You have always been my pillars of support, and I am grateful for everything.

ACKNOWLEDGEMENT

First and foremost, I am humbled to acknowledge the Almighty's boundless grace and strength, which have been my sustenance throughout this academic endeavour. I thank God for his divine wisdom that steered me through my academic journey. Without his grace and mercy, I would not have made it up to this level.

I extend my sincerest gratitude and deepest respect to academic supervisor Mrs Chinyanganya for her encouragement, guidance patience, commitment, her unwavering support and always pushing me to work harder throughout the duration of this research project. Her expertise, wisdom and dedication have been a constant source of inspiration and motivation for me. Her mentorship has not only shaped the success of this research project but has also had an everlasting impact on my personal and professional growth. Her contribution towards this study will forever be treasured.

In addition, I would like to humbly thank my devoted parents for their unwavering financial, emotional, and spiritual support they were a big shoulder to fall back on. Their inspiration and assistance enabled me to weather every adversity in life. I owe them my success because without their help, I could not have made it to where I am now. There aren't enough words to appropriately convey how grateful I am.

My warmest regards are also extended to my aunts and uncles, Beauty Manyere, Idah Manyere, Chantelle Manyere, Learnmore Gwesere, Robson Manyere, Kudzanai Manyere, and Rodwell Manyere, for their inspiration, love, and support. Your assistance with this research will always be appreciated. I also thank the residents of Ward 5, the authorities of Epworth Local Board, and the representatives of the Ministry of Housing and Social Amenities for their assistance with this study. Thank you also to Mr Blessmore Zharare. I appreciate all of your inspiration, love, support, and encouragement. My pals Panashe Chinyuke, Tinerumbidzo Zharare, and Mitchell Nyakonda are also deserving of special gratitude for their assistance with the data collection process. I appreciate their unwavering support at every stage of the study. Your assistance will always be valued.

May your kindness and guidance be rewarded with abundant blessings.

ABSTRACT

The study examined the causes and impacts of illegal settlements in Ward 5 of Epworth district. The study used sample size of 101 people, where 96 were the community members and 5 were the key informants from the Epworth Local Board (2), the Ministry of National Housing and Social Amenities (2) as well as the Ward councillor. It identified the main causes and the social as well as the environmental impacts of these settlements. Questionnaires, key informant interviews and observations were used to collect data. Data were presented using graphs and pie charts. Research findings show the causes of informal settlements and these include poverty, migration, politics and ineffective housing policies. They also show the social and environmental impacts of illegal settlements which include lack of access to basic services, poor waste management, health problems, susceptibility to disasters, substandard housing, overcrowding as well as pollution and diseases outbreaks which are caused by poor waste management. On examining the causes and effects of illegal settlements, the study revealed that there ways to mitigate the spread as well as the effects of illegal settlements in Ward 5 and these include regularising these settlements, relocation and resettlement, provision of affordable housing and enhancing access to basic services. The study findings show that illegal settlement are posing challenges to the people as well as the environment hence the study recommends regularisation of these settlements, integration of disaster risk reduction measures into land use planning policies to minimise the impact of disasters on vulnerable communities living in or near illegal settlements as well as reviewing statutes which govern housing delivery to accommodate everyone's varying financial levels within communities.

TABLE OF CONTENTS

APPROVAL FORMi
DECLARATION FORMii
DEDICATION iii
ACKNOWLEDGEMENTiv
ABSTRACTv
LIST OF FIGURESix
LIST OF APPENDICESx
ACRONYMSxi
CHAPTER ONE: INTRODUCTION
1.1 Introduction
1.2 Background of the Study1
1.3 Statement of the problem
1.4 Aim of the study
1.5 Objectives of the study
1.6 Research Questions
1.7 Significance of the study4
1.8 Delimitation of the study5
1.9 Definition of key terms
1.9.1 Illegal settlement5
1.9.2 Social impacts
1.9.3 Environmental Impacts6
1.10 Organisation of the study
1.11 Conclusion
CHAPTER TWO: LITERATURE REVIEW
2.1 Introduction
2.2 Theoretical framework
2.3 Empirical Literature
2.3.1 Causes of illegal settlement
2.3.2 The socio-environmental impacts of informal settlement
2.3.3 Solutions to negative impacts of illegal settlements from the perspective of the research subjects in the study area

2.4 Research gap analysis	18
2.5 Chapter summary	19
CHAPTER THREE: RESEARCH METHODOLGY	20
3.1 Introduction	20
3.2 Study area	20
3.3 Research design	21
3.4 Target population	22
3.4.1 Sample size	22
3.5 Sampling procedure	23
3.6 Research methods	24
3.6.1 Key informant interviews	24
3.6.2 Questionnaire	25
3.6.3 Observations	25
3.7 Data analysis methods/ techniques	26
3.8 Ethical considerations	26
3.9 Chapter summary	26
CHAPTER FOUR: RESULTS, PRESENTATION AND DISCUSSION	27
4.1 Introduction	27
4.2 Demographic profile study respondents	27
4.2.1 Level of education	28
4.2.2 Levels and form of employment in the informal settlements	29
4.3 Causes of the growth of informal settlement	30
4.3.1 Poverty	30
4.3.2 Migration	31
4.3.3 Politics	32
4.3.4 Ineffective housing policies	32
4.4 Social and environmental impacts of illegal settlement	32
4.4.1 Social impacts of illegal settlements	32
4.4.2 Impacts of illegal settlement on accessibility to basic services	36
4.4.3 Environmental impacts	37
4.5 Perceptions on the efforts being done by the Epworth Local Board to reduce the	
impacts of illegal settlement	40
4.6 Residents' opinions on alternative housing for illegal settlement	41

4.7 Residents' perceptions regarding the efforts to address challenges of illegal settlement
4.7.1 Regularising informal settlements
4.7.2 Providing affordable housing43
4.7.3 Relocation and resettlement
4.8 Conclusion
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS45
5.1 Introduction
5.2 Summary of the research findings45
5.3 Conclusion
5.4 Recommendation
References
APPENDIX 1 QUESTIONNAIRE
APPENDIX 2: INTERVIEW GUIDE
APPENDIX 3: OBRSERVATION GUIDE

LIST OF FIGURES

Figure 2.1 The pressure and release model	8
Figure 2.2 The possible causes of illegal settlement	9
Figure 3.1 Epworth District Map, Ward 5	21
Figure 4.1 level of education	
Figure 4.2 Level of employment	29
Figure 4.3 Causes of illegal settlements	
Figure 4.4 Social impacts of illegal settlement	
Figure 4.5 Substandard houses that were destroyed by heavy rains during 2022-202	3 rainy
season	
Figure 4.6 Impacts of illegal settlement on accessibility to basic services	
Figure 4.7 Methods of waste disposal	37
Figure 4.8 Waste being dumped in water sources, drains and along roadsides	
Figure 4.9 Perceptions towards the efforts of ELB on reducing the negative impacts	of illegal
settlements	40
Figure 4.10 Residents' opinions on alternative housing for illegal settlement	41
Figure 4.11 Residents' perceptions regarding the efforts to address challenges of ille	egal
settlement	42

LIST OF APPENDICES

Appendix 1 Questionnaire	53
Appendix 2: Interview guide for all key informants	58
Appendix 3: Obrservation guide	

ACRONYMS

COVID 19	Corona Virus Diseases
ELB	Epworth Local Board
MDC	Movement for Democratic Change
MNHSA	Ministry of National Housing and Social Amenities
NGO's	Non-Governmental Organisations
SRS	Simple Random Sampling
UN-Habitat	United Nations Human Settlements Program
WASH	Water, Sanitation and Hygiene
ZANU-PF	The Zimbabwe African National Union
ZIMSTAT	Zimbabwe National Statistical Agency

xii

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Since Zimbabwe's independence, land allocations and illegal settlements have caused problems. The rise of informal residential communities has been linked to the swift movement of individuals from rural to urban regions in search of work and improved living conditions. The research is an investigation atop the causes and effects of informal settlement to the environment and people/residents. It sought to identify the causes, social and environmental impacts and to recommend practical solutions that can be put in place to curb the causes and impacts of illegal settlements and retrace the steps necessary for sustainable and inclusive urban development. This chapter aims to look at the background of the study, statement of the problem, aim, objectives as well as the research questions, significance and delimitation of the study, definition of key terms, organisation of the study as well as the conclusion

1.2 Background of the Study

As the number of people living in cities increases, slums, illegal settlements, and improvised residential neighbourhoods proliferate worldwide. Illegal settlement has been a significant issue in several parts around the globe, including Middle East, Africa, Asia and Latin America. Many times, these communities lack essential utilities like power, water, and sanitary facilities and residents are vulnerable to health problems (UN- Habitat 2016).

In some regions of the globe, non-formal settlements have existed since the beginning of the 20th century due to industrial growth; in other parts, however, they have only recently become apparent because of unfulfilled housing needs, an inadequate system of land administration, or even outdated plans that fail to take into account contemporary socioeconomic developments. About 60% of Africans who live in cities do so in informal settlements (CAHF, 2020). There are a number of similar reasons that have resulted in the creation and evolution of illegal settlements internationally, despite the fact that the particular conditions and causes may differ from one location to another. Rapid urbanization, poverty and inequality, inadequate housing rules, problems with land tenure, a lack of essential amenities, and social and political considerations are a few of the causes. Additional investigation is required to investigate the enduring social, health impacts, and environmental repercussions of illegal settlements.

Approximately 8 million people residing in African countries are thought to be inhabiting in slums and uninhabitable places, where they are susceptible to cholera, malaria, and typhoid epidemics, among other hazards and calamities, (UN Habitat 2012). These areas are not well-served by highways, and there are places with poor drainage where waste collection is a pipe dream. The low-cost townships that colonialist administrations established are still present in many African nations and continue to make room for additional backyard shacks. People residing in such circumstances frequently have less access to essential utilities and less usable area than the primary owners or municipal renters.

Back home, Zimbabwe saw a shift in the structure and distribution of settlements during the post-independence era as new policies, including housing initiatives were rolled out, a decentralised system was established, transferring authority from the central government to the local levels. According to UN-Habitat's (2013) report, local governments were tasked with managing population growth in urban areas and providing adequate housing for all urban inhabitants, including those who had been displaced due to the liberation struggle. The Regional Town and Country Planning Act (Chapter 29.12) and the Urban Councils Act (Chapter 29.15) essentially stated that local governments are responsible for overseeing the local process for settlement development clearance and urban planning. Despite these efforts, a number of local authorities are still unable to stem the flow of informal settlements that are being caused by a shortage of housing.

Due to colonial legacies, illegal settlements first appeared in Zimbabwe. According to McGregor and Chatiza (2019, 2020), a new type of urban informality was sparked under the Land Reform Program implemented after 2000, when urban dwellers joined the wave of individuals seeking agricultural land in rural areas for the construction of houses on occupied land. The Zimbabwean government started a land redistribution program after the country gained independence to address historical injustices and land inequalities, but due to difficulties, the program was unable to help the landless and marginalized people, which fuelled the growth of informal settlements where people lived on unofficially granted land. Zimbabwe has had periods of hyperinflation and economic depression, which caused rural-urban migration in pursuit of work and a way of life. The expansion of informal settlements as the sole practical housing choice for many migrants was caused by the shortage of cheap housing and restricted access to legal housing options. More precisely, the massive influx of people moving from the countryside to cities, driven by economic factors, exceeded local governments' ability to provide adequate infrastructure and housing. Since there wasn't

enough housing for everyone, people began to live on undeveloped land in informal settlements.

According to ZimStats (2022), Epworth has a population of about 206 368 with Ward 5 having a population of 17 546 as of the year 2022. Informal settlements have grown significantly in this suburb over time. A number of issues, such as increasing urbanization, land scarcity and the informal market, inadequate urban planning services, poverty and a lack of alternative housing, as well as the informal economy, can be held accountable for the creation of illegal colonies in Epworth.

However, informal settlements are a worldwide issue that are not specific to Zimbabwe. In order to address the problems posed by informal settlements, a comprehensive strategy involving both land reform and urban planning is needed.

1.3 Statement of the problem

Illegal settlements characterised by unauthorised occupation of land inadequate infrastructure, present significant urban challenges globally. According to Ali (2014), understanding the causes and effects of these illegal settlements is essential for effective urban planning and sustainable development. This research thus seeks to look into the factors driving the growth of illegal settlements and the social and environment effects associated with such informal housing arrangements.

Authors like Munyoro & Nyamushamba (2016) as well as Chirisa, (2009) focused on social or environmental aspects of illegal settlements, respectively, but there is need for interdisciplinary research that integrates both perspectives. Understanding the complex interactions between social and environmental factors can provide more holistic understanding of illegal settlements. In addition, with the increasing threat of climate change, there is need to investigate how illegal settlements are susceptible to environmental risks like floods, landslides and fires. Understanding these can inform adaptation strategies and resilience-building efforts.

1.4 Aim of the study

I. The study aims to examine the causes and socio-environmental impacts of informal settlement in Epworth, Ward 5.

1.5 Objectives of the study

- I. Identifying the underlying factors that led people to settling in the illegal area of Ward
 5 in Epworth.
- II. Examine the social and environmental impacts of informal settlements in Epworth
- III. Suggest solutions to negative impacts of illegal settlements from the perspective of the research subjects in Ward 5 of Epworth.

1.6 Research Questions

- I. What are the underlying factors that pushed people to settle in the illegal area of Epworth, Ward 5?
- II. What are the social and environmental impacts of informal settlement in Epworth?
- III. What are the solutions to negative impacts of illegal settlements from the perspective of the research subjects in the study area?

1.7 Significance of the study

The social and environmental impacts that have been emanating in various parts of Zimbabwe due to informal settlements make this research expedient to allow for action to prevent or reduce these informal settlements from growing. The significance of this research work cannot be over emphasized as it has tremendous importance and positive impact on the government departments such as the Ministry of Housing and Social Amenities, local authorities, non-governmental organisations and the society at large. The research helps the planners and decision makers to inform decisions on housing, urban planning and development. It helps in understanding the causes and the issues facing those living in the illegal settlements. Understanding social and environmental impacts can help develop policies that protect the environment and promote sustainable development. It can also help policy makers identify and address gaps in the policy and legal frameworks surrounding this issue and this can lead to more effective laws and regulations that address legal settlements.

The research can also benefit non-governmental organisations by helping them understand the specific needs of those living in illegal settlements and tailor their programs accordingly. For example if the research shows that there is absence of clean water availability in the area of study, an NGO could develop a water sanitation program to address this need and the community can also benefit from the project (Mitlin & Satterthwaite 2014). Researchers and scholars can benefit from research by expanding the knowledge base on urban informality, exploring innovations to address socio-environmental challenges, and contributing to academic discourse on sustainable urban development. Through interdisciplinary research collaborations, academics can generate new insights that shape future research agendas (Roy & Alsayyad, 2014). According to Moser & Mcllwaine (2014), the community also get empowered with knowledge about the cases and impacts of illegal settlements, affected communities can advocate for their rights, engage in participatory planning processes and mobilise resources to improve their living conditions.

1.8 Delimitation of the study

The research was carried out at in Epworth in Wards 5. Ward 5 is situated on the outskirts of Epworth, which is 15 kilometres east of Harare. The focus of the research will be on the factors that resulted in the swift growth of informal settlement in Epworth, the socio-environmental impacts of this settlement, and potential remedies for both the causes and effects of this settlement. The Epworth district case is examined in the research as a sample example of urban areas where informal settlements are growing every day.

1.9 Definition of key terms

1.9.1 Illegal settlement

Gabriel (2007) characterizes illegal settlements as unplanned, spontaneous shantytowns devoid of adequate infrastructure and services. Illegal settlement refers to informal housing developments that are established in violation of land use regulations or property laws (Moser & Mcllwaine, 2015). As a result, this study will use the UN-Habitat (2015), the term "illegal settlement" refers to an urban residential community where the severely poor live because they are unable to access their own land tenure and are forced to squat on either public or private unoccupied space.

1.9.2 Social impacts

According to Lee & Kim (2014), social impacts refer to the positive or negative effects that a particular technology, policy or event has on individuals, communities and society. Social impacts can also be defined as ways in which a technology or innovation influences the social structure, behaviour, and norms of a society (Smith & Marx, 2014). This research will therefore use the definition by Lee & Kim 2014, because it emphasizes that the social impacts can be both positive and negative, which is important when studying illegal settlements as they have complex and multi-faceted consequences on various aspects of society, henceforth considering positive and negative social impacts of illegal settlement provides a more

comprehensive understanding of the issue and its implications for the community or individuals.

1.9.3 Environmental Impacts

Scholz &Binder (2014), environmental impacts are defined as consequences of human activity on the environment including changes in ecosystems, biodiversity loss, pollution and resource depletion. They can also be defined as the changes in ecological systems and natural resources resulting from human actions such as land use changes, deforestation, overfishing and greenhouse gas emissions (Costanza et al. 2014). In this regard this research will use the definition from Scholz &Binder (2014) because it emphasizes on effects of human activities on the natural environment including changes in ecosystems, biodiversity loss, pollution and resource depletion.

1.10 Organisation of the study

The background to the study, statement of the research problem, research aims and objectives, research questions, methodology, significance of the study, and project work plan are all covered in Chapter 1 of the research, the second chapter will cover literature review, research methodology, in the third chapter and Chapter 4 featured data analysis and data presentation and finally, the study's findings, conclusions and recommendations are discussed in Chapter 5.

1.11 Conclusion

This chapter was focusing on the background of the study, statement of the problem, aim, objectives as well as the research questions, significance and delimitation of the study, definition of key terms, and organisation of the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Illegal settlements, characterised by the establishment of human habitation without legal authorisation, pose significant challenges to both the society and the environment. This chapter aims to explore the complex socio-environmental impacts of illegal settlements by other schools of thought through analysing existing research, theories, and case studies to deepen understanding on the causes and impacts of illegal settlements on communities and the natural environment and ecosystems.

2.2 Theoretical framework

This study will utilise the PAR model, which best explains the progression of vulnerability of many communities. In order to help address the underlying issues in the Epworth community, the Pressure and Release model is presented in this research. It illustrates how natural disasters strike communities when susceptible individuals are present. Their susceptibility stems from societal dynamics and fundamental factors that might eventually be relatively far from the catastrophic incident. This model explains how root causes can progress to vulnerability of a community to the impacts of illegal settlement. It explains the pressure stage, vulnerability stage, as well as the disaster stage.

According to Wisner et al. (2004), finding the underlying causes of illegal settlement formation is a key component of the pressure stage. These elements fall into two categories: dynamic pressures and underlying causes. Long-term, systemic problems including poverty, inequality, a shortage of affordable housing, and restricted access to essential services are frequently the root causes of problems. Dynamic pressures, such as fast urbanization, rural-urban movement, political unrest, and natural disasters, are more urgent causes that increase susceptibility. The vulnerability stage takes into account the traits and circumstances that render particular communities or groups more vulnerable to the effects of illegal settlements. This might involve things like inequality in wealth and access to healthcare and education, prejudice, and a lack of knowledge about one's legal rights. Finally, there is the disaster stage, which refers to the negative socio-environmental impacts resulting from such settlements (Wisner, 2012). These impacts can include overcrowding, inadequate infrastructure,

environmental degradation, health hazards, social marginalization, and increased vulnerability to natural disasters. This research is focusing on how to deal with the underlying issue and lessen dynamic pressures, such as improving the delivery of utilities like water and sanitation. Therefore the model helps in understanding the interplay of different factors that contribute to the formation and persistence of illegal settlements, as well as the resulting social and environmental consequences.

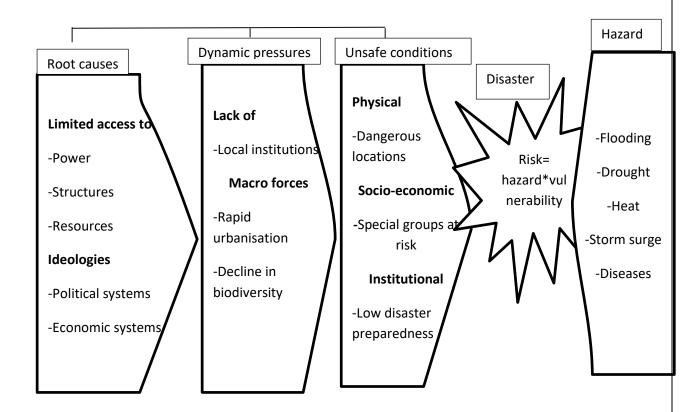
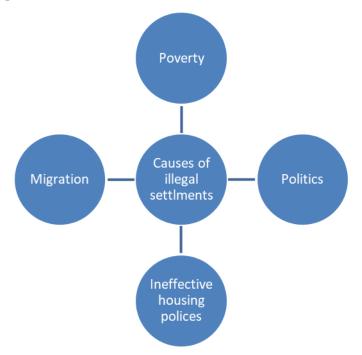


Figure 2.1 the pressure and release model Source: Adopted from (Blaikie et al. 2004)

2.3 Empirical Literature

Illegal settlements are a prevalent issue in many urban areas, including Epworth where residents often face different challenges. Understanding the root causes and socio-environmental impacts of illegal settlement is effective interventions to address these issues. Empirical literature sheds light on the factors contributing to proliferation of illegal settlements. These conditions often force individuals to seek shelter in informal settlements, leading to a range of negative consequences for both the residents and the broader community (UN-Habitat, 2017).

2.3.1 Causes of illegal settlement





2.3.1.1 Poverty

In informal settlements, poverty encompasses far more than just unemployment or financial constraints. The primary causes of its growth are the decline in health and nutrition rates, crowded housing, a rise in school dropout rates, and increasing stress on the social and physical surroundings of low-income urban dwellers. In most countries, one of the main reasons of informal settlements is poverty, claims Kamete (2006). It leads to lack of affordable housing options for low income families. This can force people to seek out informal settlements or squatter communities as a means of securing shelter

According to Smith and Lipsky (2014), the inability to afford formal settlements pushes people towards informal settlements as the last option. UN-Habitat (2003) defines poverty as a state in which there are insufficient opportunities together with elevated levels of social instability, illiteracy, hunger, and malnourishment. It is further distinguished by an ongoing deficiency in economic, social, and political engagement that denounces individuals to social marginalization. Unemployment, corruption, lack of investment, collapsing of financial structures in Zimbabwe among others, is leading factors contributing to poverty in Zimbabwe. Tibaijuka (2006) noted that the Zimbabwe is failing to provide safety nets to all

citizens that are being affected by poverty. The Epworth Local Board has proposed a number of housing-related projects, most of which will be out of the reach of the majority of people. The impoverished also have challenges in obtaining house financing from banking institutions, since their operational frameworks disenfranchise them from financial resources and undermine their faith in those employed in the unorganized sector.

According to the research that was done by Tawodzera, et.al. (2019) in Epworth, it was discovered that the majority of respondents earned their money through wage labour and casual jobs, which is not unexpected considering Zimbabwe's high unemployment rate. Even with the low pay in the nation, a sizable portion of households make their living from formal wage labour. The majority of respondents who are formally employed, according to the report, worked as security guards or domestic workers in various sections of Harare. Because of the nature and constancy of their jobs, they saw their jobs as formal. A small number of households reported getting hand-outs as income, which is consistent with Zimbabwe's lack of an advanced social state. This shows how poverty can force people into illegal settlements and they may engage into activities that are not regulated as well.

2.3.1.2 Politics

According to the reviewed research, distributive politics and patronage have taken hold in the housing sector for low-income urban groups throughout the past few years, regardless of regime type democracy or authority (Mutsindikwa et al., 2015). Epworth's informal settlements began to take shape during the Second Chimurenga, which saw an influx of conflict refugees from the countryside between the early 1970s and the early 1980s. In an effort to empower African Americans and those with low incomes, organizations running on the Zimbabwe African National Union (ZANU PF) platform in the run-up to the 2008 and 2013 elections encouraged the annexation of open space and the distribution of housing stands. As suggested by Golden and Min (2013), distributive politics was present in this instance and is linked to the notion of democratic accountability. Politicians are involved; taxes, transfers, and in particular, the choice of how to distribute public goods and services are central to the political process. Patronage politics, which allocates residential stands are accessible along biased lines, has delayed the urban poor. These stands eventually became unlawful colonies because individuals settled there on unsuitable, not serviced land without adequate infrastructure planning. Although the random parcelling of property is an obvious campaign tactic, it has resulted in the mingling of local and state board land (Kadirire, 2016).

These unofficial agreements endangered local board plans and drove away possible investors. Most of the land set aside for future development has been encroached upon by individuals building buildings. Olympic Africa's plan to build a cutting-edge sports centre was abandoned, according to Mhlanga (2015), because individuals connected to the Movement for Democratic Change (MDC) took over the land designated for it in an attempt to undermine ZANU PF, their rivals, who had also taken over an open space next to it. Similar invasions have also occurred on a number of properties that have been set aside for schools, public facilities, and urban growth.

2.3.1.3 Ineffective housing policies

The ongoing expansion of informal settlements shows that despite the strategies developed by both the local and central governments to increase housing delivery, they have proven to be unsuccessful. According to Moyo (2014), low-income earners' housing demands have been marginalized by trends in housing policy since 1980. The supply of homes has lagged well behind the demand. Tibaijuka (2006) claims that Operation Murambatsvina was intended to get rid of illegal housing, which had a direct impact on many urban poor people. After illegal and unplanned constructions were demolished in 2005, more persons who had previously rented from other landlord properties found themselves stranded and the number of informal settlements rose. The local government and commercial land developers have recently engaged into collaboration agreements to serve the property and supply the necessary planning and buildings prior to settling residents. As per Epworth Profile (2015), the reduction of the housing backlog is expected to bring down the council's housing waiting list, which is estimated to be approximately twenty thousand. Although there are flexible payment options, the cost of the serviced land is often out of reach for many, leaving many people without a place to live. Consequently, the number of informal settlers in Epworth has increased.

2.3.2 The socio-environmental impacts of informal settlement

Numerous difficulties arise in informal settlements. They are typified by a lack of proper housing, poor access to health and educational facilities, inappropriate environments, uncontrolled and unhealthy population densities, inadequate infrastructure, poor access to basic services, and ineffective local government administration because the area is seen as informal. The majority of people in Epworth use unventilated pit latrines, which are typically found extremely close to shallow wells, providing a health risk due to water pollution. This was discovered in a 2018 study carried out by Herald Zimbabwe.

2.3.2.1 Lack of Basic Services

Resources that are essential to human functioning and overall well-being make up basic services. Certain indications, such power, water, and sanitary facilities, define these services. Because informal settlements lack structure and planning, it is difficult to provide essential services there. The majority of informal settlements are not backed by the local government and are hardly ever connected to the primary sources of potable water. Although the state of sanitation in the non-formal settlements was already poor before Murambatsvina, Mukonoweshure (2014) observed that as the population grew and those impacted in Harare primarily relocated to Epworth, the severity and scope of the problem worsened. The few clean water sources, such as boreholes, that are still available are severely strained by the rise in the size of households brought about by the operation, which caused the affected population to relocate to the informal settlements. Additionally, the increased amount of garbage due to improper waste disposal raises the risk of health risks related to water, sanitation and hygiene (WASH). High population densities, insufficient water supplies, subpar buildings, poor sewage and drainage systems, and a typical practice of utilizing unimproved pit latrines for the disposal of human waste are characteristics of informal settlements. Owing to their dense population, informal settlements serve as a hub for the spread of pandemics and outbreaks of diarrhoeal illnesses. This is demonstrated by the 2008 cholera and typhoid outbreaks that hit most urban areas; the main causes were crowded water supplies, inadequate waste disposal systems, poor sanitation, and poor drainage. Similarly, the COVID-19 pandemic spread quickly because more people were living in close proximity to one another and had higher population densities.

The Public Health Act 15:9 mandates that local authorities supply inhabitants with water and sanitation supplies in accordance with health criteria, however they do not recognize informal settlements, hence no services are offered in these locations. The majority of people living in these illegal communities rely on uncovered wells, the most of which are dug in backyards and pose a significant danger of pollution. Eighty percent of respondents to Mulega's (2013) study of the Farmagrida informal communities in Gutu reported getting their water from unprotected sources that were tainted with contaminants from trash dumps. According to Mukonoweshuro (2014), technical departments in government and local authorities were concerned that giving informal settlers access to piped water, sanitation, drainage, and waste collection would recognize and reinforce their claim to the property and make their expulsion more difficult. Manase and Fawcett (2010) pointed out that low cost recovery and the

difficulty faced by the centralised government, local governments, and other organizations in raising funds to provide services to underdeveloped urban regions have been linked to insufficient sanitation in informal settlements.

2.3.2.2 Pollution

The main factor for water source contamination has been the growth of informal settlements. Water flow is decreased as vegetation around water sources is lost, and water pollution results from the discharge of liquid and solid waste. Due to the lack of services provided by the local government, including garbage collection, waste is being disposed of in open spaces and near bodies of water (UNEP, 2018). Since people are gradually moving into the streams to build homes and even dwell in floodplains, the streams that run through these towns have also vanished. One of the numerous issues that contribute to the negative environmental effects of informal settlements is waste. Improper handling of waste can lead to serious social and environmental problems in addition to health risks (WHO, 2016). Garbage collection in informal settlements is challenging for a number of reasons. This is a result of several informal settlements' extensive lack of road access, inhabitants' disobedience, high population density, and insufficient funding. This suggests that it is difficult to collect rubbish since waste collection trucks cannot enter informal communities. This is a worldwide problem since it affects all informal settlements (The Lancer Commission on Pollution and Health, 2017). Due to a lack of trash pickup, some locals choose to bury, burn, or dump their waste in open spaces, which encourages the creation of illegal dumpsites nearby that pollute the land and water.

Since informal settlements lack a sewage system, liquid waste including water used for cooking, bathing, laundry, and other household tasks is carelessly dumped there (Ali and Sulaiman, 2006). This activity contaminates rivers, groundwater, and marine environments and is a major cause of the spread of diseases carried by water. Water loses biological composition due to open defecation and the usage of pit latrines. Open defecation causes people to contaminate the nearby water sources they use for drinking, making the water they drink unsafe.

2.3.2.3 Vulnerable to natural disasters

It is well recognized that informal settlements are more vulnerable to the consequences of natural disasters (Small, 2007). Disease outbreaks and floods have severely damaged these villages. People who live in slums and unofficial settlements are more susceptible to loss of

life, property, and livelihoods due to increased exposure to harsh weather, flooding, and rising sea levels. A large number of these villages are located on ground that is considered undesirable or unsuitable for official development, such as steep slopes, low-lying areas designated for storm drainage, and the edges of cities. Residents in these areas are disproportionately vulnerable to flooding, landslides, and extreme weather, according to UNICEF et al. (2022). The susceptibility of families to dangers associated to climate change is also influenced by the use of substandard construction materials and practices, as well as by inadequate infrastructure. In order to resist flooding, weather extremes, and strong storms, resilient building materials are required. In slums and informal settlements, a number of factors can contribute to heat stress, such as a lack of trees and other vegetation, subpar building materials, inadequate ventilation, a lack of effective and reasonably priced cooling technology, a lower elevation, and a lack of drainage systems that make residents more vulnerable to flooding that damages infrastructure and disrupts livelihoods.

2.3.2.4 High population density

ZimStats (2022) estimates that there are 206,368 people living in Epworth, with half of them thought to be residing in informal settlements. The unplanned, two- or three-room dwellings on the extremely tiny stands are incredibly close to one another. According to estimates from the Epworth Profiling Report (2012), almost 70% of Epworth residents depart in an unofficial manner. Due to the small lanes, it is challenging to supply services in areas where roads, sewers, and drainage systems are being built. According to McCallin et al. (2014), the majority of informal settlements had less square meters per household than the SPHERE requirements required for building new homes.

Because there isn't enough land in urban areas to accommodate people, illegal communities frequently appear there. Because of this, residents in those places typically construct their homes next to one another, making use of every square inch of space that is available (UN-Habitat, 2017). Additionally, individuals are migrating from rural to urban regions on a regular basis in pursuit of employment possibilities. Consequently, the number of individuals shifting to informal settlements in search of homes in metropolitan areas may rise as a result of the rapid influx of migrants into these regions beyond the capacity of formal housing (IOM, 2017). In order to preserve social ties and support systems, members of the same community often build their residences adjacent to one another. The high population density found in informal settlements is a result of all of this.

Both the environment and the people's means of living can be significantly affected by the high population density in these informal communities. The capacity of the current waste management, sanitation, and water supply infrastructure and services is exceeded by the population. Additionally, infections can spread more easily and fire threats become more vulnerable due to overcrowding (WHO, 2019). Because of the strong demand for resources, there is restricted access to them. The surrounding ecology was also strained by a high population. Because the communities lack adequate waste management systems, trash and pollution build up. Inadequate sanitation facilities and open defecation have the potential to pollute water sources and worsen environmental deterioration (Smith and Johnson 2014).

2.3.2.5 Substandard housing and poor infrastructure

There are a variety of dwelling structures in informal settlements, from temporary improvised homes to semi-permanent ones. The homes are built with substandard green bricks that are prone to natural disasters like floods, or they are made of poles and dagga units (Internal Federation of Red Cross and Red Crescent Societies, 2017). According to the Epworth Profile (2012), people living in Ward 5 make use of makeshift facilities such pit latrines, wells, and constrained pathways. Unauthorized schools have sprung up in the informal settlements as a result of the Local Board's lack of engagement, and the majority of them don't adhere to the requirements set by the Ministry of Education, according to Zimbabwe Poverty Atlas (2015).

2.3.3 Solutions to negative impacts of illegal settlements from the perspective of the research subjects in the study area

2.3.2.1 Regularising and upgrading settlements

Comprehensive actions are necessary for the regularization and upgrading of informal settlements. In order for a regularization exercise to be successful, it must be integrated into the socioeconomic framework. In this case, this might entail efforts to reduce poverty, such reaching Sustainable Development Goals. According to UN-Habitat (2010), the problems associated with urban slums and informal settlements ought to be seen in the context of a larger picture of the pervasive failure of welfare-oriented and market-based low-income housing policies and initiatives in many countries. Economic Commission for Europe (2008) highlighted that, in-situ upgrading is thought to be a better option than resettlements, which need more land. A more all-encompassing approach that prioritized participation and

teamwork along with sustainable development and the need for environmental, social, and economic action is needed to formalise settlements.

Epworth Local Board worked with the residents of these settlements to develop solutions, with the community funding the program and the council identifying land surveyors; all payments would be made through the local authority's offices. The Economic Commission for Europe Report (2008) states that understanding various local circumstances and strategies for resource mobilization at the local level are essential to developing a comprehensive and lasting solution to non-formal settlements. It should be mentioned that the people, the responsible local government, the size and location of the community, and their political will all play a pivotal role in the decision of how best to formalize informal communities. The upkeep and regulation of non-formal settlements emphasizes the significance of involvement at three levels which include the residents of the informal settlements, the responsible local authority (in this case, Epworth Local Board), and the government, through the department of National Housing and Social Amenities.

According to McCallin et al. (2014), contacts at the community level with town planners, local authorities, community organizations, and people aid in identifying and resolving the settlers' immediate difficulties so that definitive solutions may be developed. It should be highlighted, although, that disputes between the local government, surveyors, and locals may arise throughout the integration process, and that some individuals may be using the procedure to further their political careers. There have been instances of ongoing disputes between the settlers and the council on the process. Some locals said that the opposition party's supporters were being forced out of the settlement by the council, and that the governing party's supporters would be the only ones to gain from the process, (McCallin et al., 2004). This caused some people to decide not to take part in the regularization process, which slowed the regularization process' progress.

2.3.3.2 Relocation and resettlement

This may be a workable way to address the issues associated with informal settlement. The vulnerable populations and marginalized individuals must be the focus of resettlement. UN-Habitat (2003) pointed out that limited implementation and further funding are required to fully undertake this exercise. Relocations and resettlements are more relevant in the context of urban renovation and urban renewal where there are issues with informal settlers in countries where the government and private sector have strong ties (Economic Commission

for Europe Report, 2008). Since the council lacks the space to relocate people and the means to maintain the property before doing so, Epworth has not considered reorganizing the informal settlements. Seldom are the local political and administrative structures able to provide suitable ideas and plans. It is worth noting that in nations such as Zimbabwe, lacks a framework for social housing that would assist the poor and vulnerable populations in obtaining independent dwelling within the confines of the area.

2.3.3.3 Housing Policies

Housing for citizens is the responsibility of local government, the central government, and other relevant parties working together. Although social policies and initiatives that guarantee informal inhabitants equitable access to cheap housing are widely acknowledged, they frequently exceed the institutional and financial capabilities of local authorities and the government. Operation Garikai was launched by the government in recent years to give homes to low-income earners and people primarily impacted by the clean-up program. Although it is believed that this strategy was implemented and benefitted those who were pro-ruling party, it did assist many victims and low-income earners (Muderere, 2010). In this instance, other stakeholders give the money, labour, and material resources, but the council primarily provides the land and services it needs for infrastructure like roads and sewer systems. The Epworth Local Board has also created a new settlement area named Glenwood, with the goal of helping low-income individuals gain from the developments. Due to the high density suburb status of the region and the fact that most amenities were established prior to residents beginning to occupy the stands, many locals profited from this.

In places like Epworth, addressing poverty and deprivation in non-formal settlements is hindered by the widespread and entrenched nature of urban poverty, which creates a cycle of disadvantage that is difficult to break. Despite the challenges, it is essential to implement policies that support informal settlers, particularly vulnerable groups, to promote their inclusion and social integration within the community. Local governments are more reliant on loans and subsidies from the central government, have limited capability, and have poor income bases that are still eroding. According to Section 301(3) of the Constitution, the provinces and local authorities must receive their share of the national revenues earned in each fiscal year, not to exceed five percent of such revenues. But this hasn't happened since the government can't generate money because of the economic difficulties that people are facing, which has resulted in revenue decline

For the time being, local governments are dealing with an increase in demands for their services, development control, land management, and planning. According to Economic Commission for Europe (2008) report, local governments are dealing with a rise in the number of activities and obligations they have to handle, such as land management and planning, development and control, and service demand. Because of a firm belief in the ability of the market to self-regulate and the idea that economic growth benefits all, which hasn't materialized as the affluent become richer and the poor stay poor they are placing a higher priority on economic growth than social concerns. The private housing market is not affordable, and housing regulations are restricted to particular localities and primarily target the impoverished. The targeting tactics used by the housing sector hinder the effectiveness of its programs by concentrating those who have limited capacity to obtain the necessary funds and pay back housing charges. Solutions to the housing crisis that are based on social responsibility, public-private partnerships, and the establishment of supporting legislation are all necessary.

2.4 Research gap analysis

Local authorities play a part in the expansion of informal settlement, even if this is not extensively discussed in the content provided in this chapter. Research on the reasons for the councils' reluctance to deal with informal settlements has been scanty. Several academics have observed that rather than taking a proactive approach, the majority of local authorities are more like reactors to the settlement's expansion. Local governments are responsible authorities under several laws, and in this situation, it is their duty to take the initiative in overseeing their spheres of influence clause 28 of the constitution to give its citizens shelter. The state has failed to fulfil this commitment, and the literature study has not addressed this issue or the reasons behind the government's failure to do so. Researchers in this subject did not consider the emergence of informal settlements to be caused by the unwillingness of local authorities. Therefore, the researcher is willing to engage dialogue with the Epworth Local Board members and advise them to seek support from international organisations that work on housing rights, community development or urban planning to provide affordable stands and renting housing to the people to reduce the expansion of illegal settlements.

Because local governments are unable to house the whole population, those in need of housing have been granted the freedom to choose accommodation on their own, which has resulted in their settling in public areas and the formation of informal settlements, (Manyenyeni (2016). According to Epworth Profile (2012), there are an estimated 120,000

individuals on the Epworth Local Board waiting list. Using this number, one might claim that local governments are equally at fault because they haven't been creating settlements to accommodate the expanding urban population. It is stated that this has contributed to an invasion of land speculators and questionable land barons who have taken use of this gap to extort asylum seekers and to acquire land from the state and council in order to buy political favours.

Additionally, the majority of local governments have not committed much funding to capital initiatives like housing provision, instead spending the majority of their earnings for ongoing expenses. The majority of councils prioritize enhancing official settlement service delivery above house supply in response to urban population expansion. When it comes to maintaining housing land, local governments have primarily relied on non-governmental organizations and the private sector. Plots were given out to homes in the target income categories at a reduced cost, but this mainly benefited a select few. Therefore the council should provide affordable stands and design payment plans for everyone to have access formal settlements.

2.5 Chapter summary

The chapter was focusing on Epworth as the chapter attempted to describe and explain the reasons that led to the establishment of illegal settlements in Zimbabwe as well as the challenges they are facing. Based mostly on data found in the literature, a multitude of variables, such as immigration, poverty, politics, and poor housing regulations, have contributed to the establishment of these settlements. Urban population expansion has been absorbed in informal settlements due to rising population growth and unsustainable housing regulations, which has resulted in a number of issues. Since poverty and other issues are the main reasons of the creation of informal settlements, the government must develop policies to address this issue and develop ways to reduce it.

CHAPTER THREE: RESEARCH METHODOLGY

3.1 Introduction

This chapter outlines the research methodology and data collection techniques employed by the researcher to gather and analyse the data used in this study. To ensure the authenticity and consistency of the instruments that will be utilized, the methodology, population, sampling processes, and data collection tools employed in this study are emphasized and discussed. Questionnaires and interviews were the methods of data gathering that were employed. The importance of the study design, also known as a technique of investigation, will be explored in this chapter.

3.2 Study area

Epworth settlement lies 15km just outside Harare towards the east. John White, the Methodist Church's leader, founded the town in the late 1890s. Adelaide, Glenwood, and Epworth are the three farms in the region that the Church purchased. As a Church Mission, the community expanded during the colonial era. Nonetheless, a population boom occurred in the late 1970s as a result of individuals fleeing the liberation struggle that had intensified in the countryside. Once more, more people moved into the cities in pursuit of employment following independence in 1980, and Epworth's informal structure made it simple for new arrivals to settle down.

In response to this extraordinary expansion, the Church gave the government a portion of the Epworth Mission property so that a local government could be established. This led to the formation of the Epworth Local Board in 1986, whose primary duty was to direct and restrain the settlement's expansion. Regularization and formalization efforts were therefore unveiled at the time of the Local Board's founding. The construction of extensions to relieve congestion in busy locations is one of the other projects.

In the meantime, Epworth's formalization process also made it more desirable, which is why more people keep moving there. In the end, when people flocked to the remaining open areas, even greater informality emerged. The places that are now often referred to as Ma-Gada are the outcome of these unchecked developments. Due to this history, Epworth has managed to place 30% of its thirty thousand families in official zones and 70% of them in informal settlements.

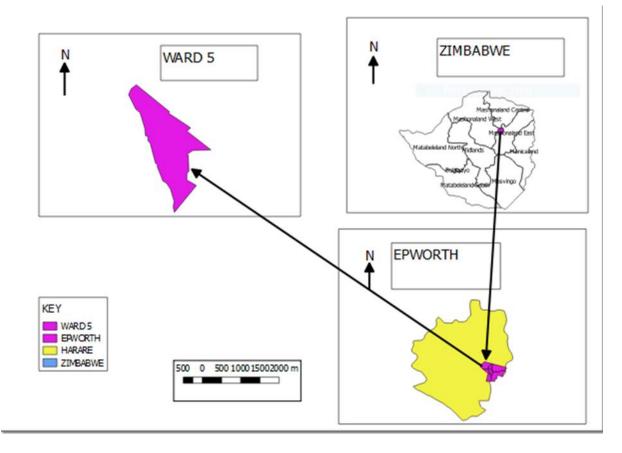


Figure 3.1 Epworth District Map, Ward 5 Source (Author)

3.3 Research design

A research design, according to Yin (2003), it is adaptable framework that connects theoretical approached to research methods and techniques for collecting data, bridging the gap between conceptual ideas and practical investigation. According to Kothari (2004), it serves as the "glue" that binds every component of a research endeavour together. It is the framework and strategy of an inquiry that is employed to find solutions to research issues. In order to address the research problem, the processes for data collection, analysis, and interpretation are provided by the study design.

To emphasize views on unlawful settlements in Epworth District Ward 5, the researcher adopted a descriptive approach. In order to get the required data, the researcher will communicate with the participants and conduct surveys or interviews. In essence, the design is selected based on its capacity to define the features, functionality, and composition of the variable being studied. Descriptive investigations, according to Bickman and Rog (1998), can provide answers to queries like "what is" and "what was."

A mixed methods approach was used in this study. Qualitative research methods such as interviews provide in-depth insights into the lived experiences, perceptions and needs of individuals living in illegal settlements. This approach can help the researcher to understand the reasons why people chose to settle in those settlements and the impacts it has to the environment, and challenges being faced by residents (Bryman, 2016). Surveys and other quantitative research techniques were also employed to gather data on the demographic characteristics, access to basic services, health outcomes and environmental conditions in illegal settlements (Creswell, 2013). This approach help the researcher to identify patterns, trends and correlations related to socio environmental impacts.

3.4 Target population

In relation to this, the target demographic consists of Ward 5 settlers, staff members of the Epworth Local Board (ELB), and settlers who contribute to, influence, or have an impact on these informal settlements. The ward's councillor, who serves as the non-executive representative in the council, will also not be overlooked. Each of the aforementioned people is a member of the influential population in ward five, where samples will be collected. According to Zimstats (2022), there are 4 859 houses and a population of around 17 546 in Ward five.

3.4.1 Sample size

The study has a sample size of 96 participants derived from the Slovin's formula, sample ratio illustrated below calculated from a target population of 4859 at 99.9% confidence level and a margin of error of $\pm 0.01\%$.

$$n = \frac{\mathrm{N}}{1 + \mathrm{N}(\mathrm{e})^2}$$

$$n = \frac{4589}{1 + 4589(0.1)^2}$$
$$n = \frac{4589}{1 + 4589 \times 0.01}$$
$$n = \frac{4589}{1 + 45.89}$$

 $n = \frac{4589}{46.89}$

$$n = 96$$

Whereas N= population, n= sample size, e= margin of error. A sample size of 96 was calculated from a population of 4859. Sample size can be described as number of participants or observations included in a study.

Key informants

- Ward 5 councillor (1)
- Ministry of national housing and social amenities (2)
- Epworth local board staff members (2)

3.5 Sampling procedure

The researcher randomly selected residents of Ward5 to receive questionnaires using Simple Random Sampling (SRS). SRS is a probability sampling method in which each individual residing in Ward 5 of Epworth had an equal opportunity of being included in the sample (Saunders, 2005). SRS attempts to gather data objectively, which aids in choosing a representative sample and ensuring data validity and dependability. The target population were the residents of ward 5 (96). These people provided the indispensable information needed to meet the research objectives. Each household member had an equal probability of being selected for the study, as a random sampling technique was used to choose participants. The researcher obtained a comprehensive list of all households in the population, which was

drawn from census data (Zimstats, 2022). She then assigned a unique number to each household on the list and used random number generator to develop a set of random numbers within the range of the total number of households. She then selected the households corresponding to the generated random numbers which resulted in a sample of 96 households. SRS lessens sample selection bias, ensuring that the sample is an accurate reflection of the population (Teddlie and Yu 2007).

Researcher used purposive sampling to interview the key informants. Patton 2015 argues that purpose sampling in a non-probability sampling technique used to select participants with expertise and experience relevant to the research topic. In this research, purposive sampling enables the selection of key informants with in depth knowledge and experience with regards to illegal settlements and these include the Epworth Local Board members, the Ward 5 councillor and the members from the Ministry of national housing and social amenities. This approach allows for the consultation of participants who were able to provide rich, detailed insights into the study, enhancing the accuracy and dependability of the results (Guest et al., 2017). It also enables the identification of experts and stakeholders with valuable perspectives and experiences.

3.6 Research methods

All of the approaches/techniques utilized in conducting research operations are referred to as research methods. To make data validation easier, multiple data gathering methods were deployed in tandem. Data was gathered by surveys, interviews, and observations. Valid and trustworthy data pertinent to the study are gathered with the use of questionnaires, interviews, and observations (Saunders 2003).

3.6.1 Key informant interviews

The researcher was able to obtain detailed, qualitative data using in-depth interviews. According to Annum (2014), an interview consists of a dialogue between the interviewer and the interviewee during which the interviewer uses standard oral questions and the interviewee answers questions to gather information. The researcher used structured interviews and clarified questions to encourage understanding and gather more information. She conducted face to face interviews using open ended questions to encourage participants to share their stories and insights. In this instance, the researcher collected data from five (5) key informants using purposive sampling. The key informants include the Epworth Local Board members (from the department of housing and from health department), authorities from the

Ministry of Housing and Social Amenities and the Ward 5 councillor. This helped the researcher to gain a deeper understanding of the complex dynamics surrounding illegal settlements in Epworth.

3.6.2 Questionnaire

This is a document with questions intended to collect data needed for the research's analysis. As to Innum (2014), a questionnaire is a meticulously designed document consisting of a series of questions specifically intended to elicit responses from research participants, mostly for the purpose of gathering data. A total of ninety-six (96) questionnaires were created by the researcher and dispersed at random among the occupants of the illegal communities. It enables the researcher to obtain information directly from people with first-hand knowledge and experience with illegal settlement. According to Leedy (2002), a questionnaire is a document with questions intended to gather pertinent data for study. These were employed because they enable respondents to offer rich, extensive qualitative data in the form of explanations, elaborations, and descriptions. The chosen homes were given a structured questionnaire with both closed- and open-ended questions. The 96 questionnaires made it possible to translate the goals of the research into precise questions that needed to be addressed. In order to obtain the highest quality data feasible, one-on-one interviews were used to administer the questionnaire. The questionnaire was translated from English to Shona to guarantee that the words were comparable in meaning and could be readily comprehended. It was simpler to present, analyse, and discuss the data since the study's standardized questions and response forms ensured that every participant provided an identical response. Respondents have flexibility in terms of daily activity interruption due to the utilization of questionnaires.

3.6.3 Observations

Bogdan (1972), referenced in Birmingham and Wilkinson (2003), states that observation is defined as an extended period of social contact between the researcher and the study area during which unprompted data in the form of observation notes are gathered. In order to keep an eye on and assess the environmental issues as well as the fundamental services that are offered in the study region, the researcher conducted field trips. Because researchers depend more on what they observe than what they are told, observation helps to decrease biases in study results.

3.7 Data analysis methods/ techniques

In order to effectively present and explain the information, data from the study was analysed and reported using both qualitative and quantitative methods. Microsoft Excel software was utilized to analyse study data. The researcher examined variables related to living conditions, and access to services. It provided an overview of these variables highlighting disparities between formal and informal settlements. Regression analysis helped the researcher to identify key factors contributing to the negative impacts of informal settlements. For example inadequate sanitation facilities in informal settlements are associated with higher rates of water borne diseases (Roy & AlSayyad 2004). The researcher will also use thematic analysis to analyse qualitative data reporting patterns or themes within data. The data is coded to identify key concepts, patterns and ideas related to the causes and impacts of illegal settlements. It is then developed into themes by grouping together related codes that capture common patterns or trends in the data (Flick 2014).

3.8 Ethical considerations

The investigator adhered to the ethical guidelines outlined by Salkind (2014), which included safeguarding the participants from any physical or psychological damage, keeping information anonymous, getting informed permission from the subjects, and keeping the information collected private. It was up to the respondents whether or not to participate in the study. All names and personal information are safeguarded, and the data is solely used for academic reasons. Respondents are free to stop taking part at any time. We will gather participant feedback to make the data gathering tools even better.

3.9 Chapter summary

This chapter covered research methodology, which includes the study area, research design, target population, sample size, and sampling technique to be employed in the investigation. Additionally, three distinct approaches of gathering data were presented. The topic of simple random sampling was carefully considered. Since ethics is one of the crucial factors that must be followed when doing research, it was also covered throughout the discussion.

CHAPTER FOUR: RESULTS, PRESENTATION AND DISCUSSION

4.1 Introduction

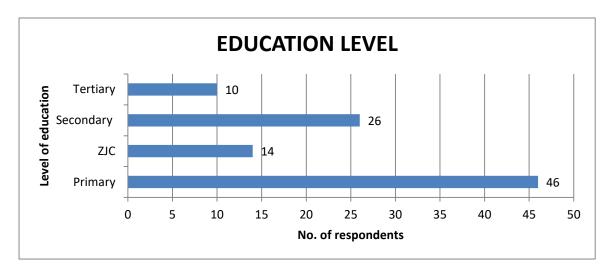
The main study findings are presented and discussed in this chapter. This chapter's data analysis employs both interpretative and narrative methods. This chapter contains parts that describe the social, environmental, and cause-and-effect implications of illegal settlement in Epworth District's Ward 5.

4.2 Demographic profile study respondents

This section provides a summary of the demographic profile of the respondents in Ward 5. The demographic features of the respondents include occupation/source of income and level of education. The respondents were residents of Ward 5 and the key informants were the staff from Epworth Local Board, Ministry of Housing and Social Amenities as well as the Ward 5 councillor.

4.2.1 Level of education

The research revealed a diverse distribution of educational levels among the participants. As shown on Figure 4.1 below, the data indicates that most of respondents have completed primary education, followed by secondary, ZJC and lastly tertiary. This highlights the prevalence of primary education in the sample, with significant portion of participants having completed this level of schooling.



N= 96

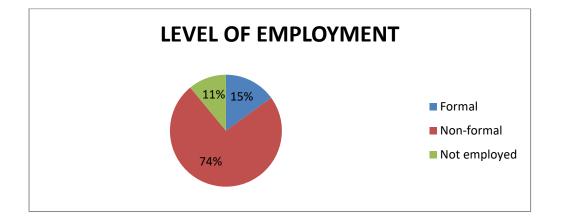
Figure 4.1 level of education

Source: Primary data (2024)

The research reveals that most respondents have completed primary and secondary education as their highest level of education, constituting 46% and 26%, respectively. ZJC constituted 14% and Tertiary 10%. Education is often linked to economic opportunities and employment prospects. People with lower levels of education may face difficulties in finding stable jobs or earning sufficient income. As a result they might be more likely to settle in illegal settlements due to lower cost of housing or inability to afford legal alternatives. With prevalence of primary and secondary education, individuals face challenges in accessing better paying jobs, leading to economic instability and potentially driving settlement in illegal areas. As argued by Mukomane et al. (2017), education can be a crucial element in breaking the cycle of poverty. They argue that education empowers individuals with the skills and knowledge required to access better economic opportunities, which can help to lift them out of poverty. Deininger and Garcia, (2016) also highlighted that individuals with lower levels of education are tend to face economic challenges and have limited access to formal housing services.

4.2.2 Levels and form of employment in the informal settlements.

Employment is a critical aspect of people's lives and it plays a role in the perpetuation of illegal settlements. The study aims to explore the level of employment among residents of Ward 5 and how it affects their livelihoods and the overall development of these illegal settlements. Findings indicate that most of the residents are not formally employed leading to poverty and dependency on informal economic activities and this has an important implication for understanding the causes and effects of illegal settlements.



N=96

Figure 4.2 Level of employment

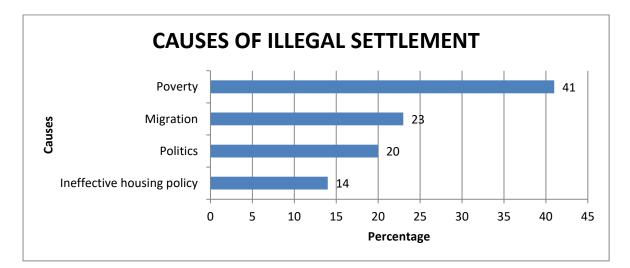
Source: Primary data (2024)

According to Fig. 4.2, the majority of settlers work in the unorganized sector, accounting for 74% of all settlers. This is a result of the nation's ongoing economic difficulties. According to the data, 15% work in the official economy, while 17% are jobless and rely on charity from friends and family. The study discovered a strong correlation between education level and employment. Low levels of education typically make it more difficult for urban poor people to find respectable jobs that pay well enough to support their living in cities. Because of this, locals lack the necessary skills to work in higher-paying jobs in the formal sector. There is a significant concentration of urban poverty in this area. Due to inadequate performance by the government and industry, the informal sector has risen to become the main employer. Since they saw themselves as "landlords," the residents of Epworth's informal settlements do not pay taxes to the council, nor do they pay monthly rental fees or usage charges. Additionally, the council does not offer any services to them because they are seen to be unlawful. Due to their poor income, they were forced to relocate to these settlements since the cost of land in

planned communities is too high for them to buy the nice houses there. Observations shows that some residents are doing waste picking and scavenging and engaging in small scale buying and selling and selling of goods as their sources of income. According to Sigauke (2003), the majority of those living in unofficial zones work for themselves, this puts them in poverty because their earnings fall below the federal poverty threshold.

4.3 Causes of the growth of informal settlement

The research aims to uncover the underlying causes of illegal settlement and the findings indicate that a combination of factors contribute to the proliferation of illegal settlements. The findings indicate that poverty, migration, political instability and ineffective housing policies are the drivers of illegal settlement.



N=96

Figure 4.3 Causes of illegal settlements

Source: Primary data (2024)

Based on the research, it was shown that the main factor contributing to the expansion of informal settlements is poverty. The responses were divided into four categories: politics, migration, poverty, and inefficient housing policy. Out of the 96 respondents, 41% said that their reason for relocating to an informal settlement was poverty, followed by poor housing policy at 14%, politics at 22%, and migration at 23%.

4.3.1 Poverty

According to the study, poverty accounts for 41% of the total. Epworth Ward 5 has a high poverty rate because to the nation's economic difficulties, unemployment, and poor earnings.

Poverty is a state in which individuals are condemned to social exclusion due to a chronic lack of political, social, and economic engagement, high rates of hunger, illiteracy, malnourishment, and social instability (United Nations, 2003). Respondents from the ELB noted that they understand the gravity of the situation in Ward 5 and they acknowledge that poverty and lack of affordable housing are driving factors behind the proliferation of illegal settlements. Rakodi (2002) noted that the inability to afford housing in the formal sector drives the growth of slums.

4.3.2 Migration

Migration contributes 23% according to the research, due to financial difficulties, people have moved to Epworth in pursuit of a cheaper lifestyle because rent there is lower than in other parts of Harare. It was noted from the research that people migrated from rural areas, in the formal settlements as well as from other illegal settlements. People migrated from rural areas to Epworth looking for business possibilities, but due to lack of affordable housing, people may choose to settle in informal settlements as a more affordable alternative. One of the workers from the Epworth Local Board stated that;

"Migration plays a significant role in the emergence of illegal settlement in Epworth. The rapid influx of people from rural areas or other regions seeking better economic opportunities and improved living conditions has put immense pressure on the available housing resources. This population movement often outpaces the ability of local authorities to provide adequate formal housing options. Consequently, some individuals resort to establish informal settlements as a means of shelter."

This means that migration is a contributing factor to the emergence of illegal settlements and it is increasing due to inability to pay rental or to buy stands or houses in the formal settlements. Gilbert and Gugler (2012) emphasise the link between migration and the proliferation of informal settlements, noting that the influx of migrants to urban areas puts pressure on already limited housing stock and infrastructure. This results in spontaneous formation of illegal settlements as migrants seek shelter in marginalised areas where land is cheaper. David (2006) also argues that rural to urban migration, driven by poverty and lack of economic opportunities leads to the rapid expansion of informal settlements as migrants move to urban areas in search of better livelihoods and they often end up living in makeshift housing on the outskirts of cities due to lack of affordable housing options.

4.3.3 Politics

Eviction and demolition policies have influenced the expansion of Epworth's informal settlement. These were done to illegal settlements due to perceived illegality and as part of renewal initiatives. However, these actions often displace residents without providing adequate alternative housing that led to the development and growth of informal settlements in the first place. Some respondents noted that they moved from evicted areas such as Mbare and Amsterdam moving to unauthorised areas, including Epworth because the government failed to provide adequate alternative housing options to the people who had been rendered homeless by the evictions (Moyo 2018). McGregor (2006), highlights that lack of proper relocation assistance after forcibly displaced leads to the establishment of illegal settlements as affected individuals have no other viable choice. Chagonda 2018 also asserts that without adequate alternative housing for the displaced populations, they are compelled to occupy land illegally.

4.3.4 Ineffective housing policies

Ineffective housing policies contribute 14% according to the research. When housing policies fail to address the needs of low-income individuals and families, there is scarcity of affordable housing options. This therefore forces people to seek alternative housing options, which result in the growth of informal settlements. As a result, people may resort to occupying vacant or unused land and constructing makeshift dwellings. Policies like Garikai / Hlalani Khule was implemented in Epworth but it did not benefit everyone and mostly people in the Illegal settlement. Most of the relocated families during Operation Murambatsvina were unable to afford the housing due to the program's housing allocation conditions, which include verification of formal job, a defined salary, and the payment of an initial deposit and monthly instalments. Roy and AlSayyad (2004) argue that rigid housing regulations, lack of affordable housing options can push marginalised populations to settle in informal settlements. This situation is exacerbated when the government policies fail to address the housing needs of low income residents, leading them to seek shelter in unauthorised areas.

4.4 Social and environmental impacts of illegal settlement

4.4.1 Social impacts of illegal settlements

Illegal settlements often face significant barriers in accessing essential services. The research aimed to investigate the perceived impacts of illegal settlement on accessibility to basic services. The results of the research are presented in the diagram on Figure 4.4 below.

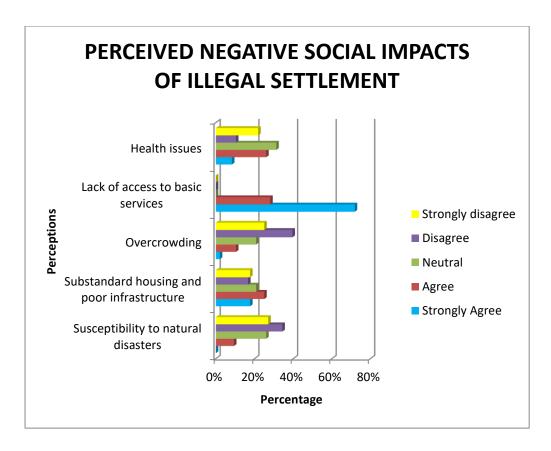


Figure 4.4 Social impacts of illegal settlement

Source: Primary data (2024)

4.4.1.1 Lack of access to basic services

From the research findings, an overwhelming majority, 72% of the respondents strongly agree that illegal settlement lead to lack of access to basic services in Ward 5 of Epworth. A small minority agree, 28% agreed with statement and no one of the respondents disagreed or strongly disagrees with statement. The data virtually confirms that the majority of the residents believe that illegal settlements are a significant factor in the lack of access to basic services such as water, sanitation and electricity. This perception is likely rooted in the ward's history of informal settlements and limited municipal services. One study by Murisa and Matondi (2013), investigated the impacts of illegal settlements on access to basic services in Zimbabwe. The researchers discovered that residents of these settlements frequently encounter difficulties in accessing essential services like water, electricity and sanitation. They argue that the lack of legal recognition of these settlements is a significant contributing factor to the inadequate infrastructure and limited service provision, ultimately leading to poorer living conditions for the inhabitants.

4.4.1.2 Substandard housing and poor infrastructure

The respondents were asked to rate their level of concurrence with the statement that illegal settlement lead to substandard housing and poor infrastructure. From research findings, 18% of the respondents' strongly agree while 25% agree with this statement. This means that a total of 43% of the respondents hold a positive view on the impact of illegal settlement on housing and infrastructure. On the other hand 17% of the respondents disagree and 18% strongly disagree with the statement, indicating a total of 35% hold a negative view on this issue. Additionally 21% of the respondents chose the neutral option, suggesting that they neither agree nor disagree with the statement. The fact that a larger portion of the respondents agree or strongly agree with the view compared to those who disagree indicates that there is general consensus among the respondents that illegal settlements have negative impact on housing and infrastructure. Harvey (2012) argues that informal settlements, often lack basic infrastructure and services due to their marginalised status in urban areas. He highlighted how these settlements are often neglected by governments and face challenges in accessing essential resources, leading to substandard living conditions. Sassen (2018), also discussed how illegal settlements can exacerbate inequalities in access to housing and services, resulting in poor living conditions for residents.

4.4.1.3 Health issues

The survey reveals a complex landscape of opinions on the effects of illegal settlement on health. The data provided on the perceptions of respondents regarding this matter reveals the range of opinions, with 8% strongly agreeing, 26% agreeing, 31% neutral, 10% disagreeing and 22% strongly disagree that illegal settlement lead to health problems. The percentage of respondents who strongly agree and agree (34%) indicates that a considerable portion of the respondents believe that illegal settlement have negative impacts to health of the residents. On the other hand high percentage of respondents who are neutral (31%) implies a degree of uncertainty or lack of awareness among this group regarding the negative impacts of illegal settlement on health. Furthermore, the percentages of respondents who disagree and strongly disagree (32%) suggest that there is a significant portion or sample who do not perceive a direct link between illegal settlement and health issues. During an interview with one Environmental Health Officer from the Epworth Local Board, he drew attention to the absence of proper sanitation and waste management in these settlements leads to constant outbreaks of waterborne diseases, making residents vulnerable to illness. One study by Smith et al. (2018) examined the health outcomes of residents living in informal settlements. The

researchers found out that individuals living in these settlements had higher rates of respiratory illness and waterborne diseases.

4.4.1.4 Susceptibility to disasters

With 0% of the respondents strongly agreeing, 9% agreeing, 26% neutral, 34% disagreeing and 27% strongly disagreeing that illegal settlement make residents susceptible to disasters, it is evident that there is a diverse range of opinions on this issue. The sizable population disagreeing and strongly disagree with this statement shows that disasters are not a significant concern compared to other challenges they face. From the interviews that were conducted, a respondent from the Epworth Local Board mentioned that houses are destroyed every year by floods due to inadequate drainage systems, poor construction quality and proximity to flood plain. The researcher observed some of the houses that were destroyed by heavy rains during 2022 to 2023 rain season and the images are shown in Figure 4.5 below.



Figure 4.5 Substandard houses that were destroyed by heavy rains during 2022-2023 rainy season (Source: Primary data 2023)

4.4.1.5 Overcrowding

From the research that was conducted, 2% of the respondents strongly agree that overcrowding is a negative social impact resulting from illegal settlement while 10% agree, 21% neutral, 40% disagree and 25% strongly disagree. In the data provided 12% of the respondents agree that overcrowding is a negative social impact resulting from illegal settlement. This indicates that relatively small proportion of the sample holds strong or moderate agreement with the idea that overcrowding is a significant issue stemming from illegal settlements. This is because overcrowding is a minor issue as compared to lack of

basic services and substandard housing and poor infrastructure. Scholars such as Smith (2018) highlighted the complexities of public perceptions regarding illegal settlement as vibrant communities with strong ties, despite challenges like overcrowding. Menezes (2019) in contrast, explored public attitudes towards informal settlements and their social impacts, underscoring the nuanced views individuals hold on issues such as lack of basic services and substandard housing in comparison to overcrowding.

4.4.2 Impacts of illegal settlement on accessibility to basic services

Access to basic services such as healthcare, education and sanitation is a fundamental human right, yet all illegal settlements often face significant barriers in accessing these services. The research aimed to investigate perceived impacts of illegal settlement on accessibility to basic services. Respondents strongly agree, agree, others were neutral, disagree and strongly disagree as shown on Figure 4.6 below.

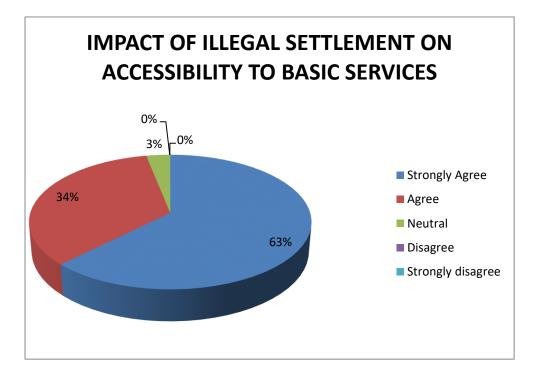


Figure 4.6 Impacts of illegal settlement on accessibility to basic services (Source: Primary data 2024)

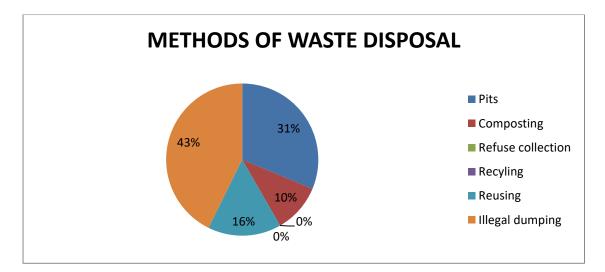
The data provided revealed that a significant majority of respondents strongly agree (63%) and agree (34%) that lack of access to basic services contributes to the social challenges faced by residents. A small percentage is neutral (3%), while no respondents disagreed with this statement. The data indicates that vast majority (97%) of the respondents strongly agree or agree that lack of access to basic services contributes to social challenges faced by

residents. Strong agreement from 63% of the participants indicates a high level of conviction among a majority of individuals regarding detrimental effects or insufficient access to essential services. The additional 34% agreement further reinforces the sentiment, demonstrating a widespread acknowledgement among respondents. While only 3% of the respondents expressed neutrality towards the statement, it could be because of lack of information, personal experiences or differing opinions on what constitutes basic services. Absence of despondence disagreeing with the statement may indicate a widely accepted belief in the correlation between inadequate access to basic services and prevalent social challenges within the community. Research by Smith et al. (2018) found that limited access to healthcare facilities in underserved areas was associated with higher rates of preventable diseases and increased healthcare disparities among vulnerable populations. Similarly Jones and Brown (2019) highlighted how insufficient access to leducation perpetuates cycles of poverty and inequality between communities, leading to long term societal repercussions.

4.4.3 Environmental impacts

4.4.3.1 Waste disposal methods

Effective waste disposal is a crucial aspect in maintaining public health, environmental stability and community wellbeing. The research aimed to investigate the current practices and trends of waste disposal to gauge their environmental impact. The findings show that various methods are being employed including pits, composting, refuse collection, recycling, reusing and illegal dumping as presented on figure 4.7 below.



(N= 96)

Figure 4.7 Methods of waste disposal

Source: Primary data (2024)

From the research that was conducted, it was noted that illegal dumping which consists of 43% is the most common method of waste disposal because there is no refuse collection from the Epworth Local Board. The use of pits consists of 31%, reusing 16%, composting 10% and recycling and refuse collection have 0%. Illegal dumping accounts for the largest portion; this is quite concerning as illegal dumping and waste pits can lead to irreversible harm to the environment and public health.

A respondent from the department of health from the Epworth Local Board noted that due to lack of proper waste management, residents resort to illegal dumping, leading to unsanitary conditions and pollution of water sources and drains which then later lead to high record of diarrhoeal cases in the area. Findings from the observation indicated that waste is being dumped in the empty lots, roadsides, drains and in water sources as shown on Figure 4.8 below. Improper waste disposal sites create ideal breeding grounds for disease carrying insects like rodents, mosquitoes and houseflies which can significantly increase the spread of foodborne, vector borne and waterborne diseases such as cholera, typhoid and malaria. They also turn to block drains, leading to flooding and water overflow. Jones and Brown (2019) highlighted that exposure to contaminated water sources due to improper waste disposal practices is a significant risk factor for diarrhoeal diseases among residents. It also results in the release of greenhouse gases such as methane, further exacerbating climate change. Jones and Brown (2019) also emphasize that the breakdown of organic waste in landfills releases methane, a highly potent greenhouse gas that contributes to climate change and global warming which results in extreme weather events such as droughts or heavy rainfalls which later on affect people.



Figure 4.8 Waste being dumped in water sources, drains and along roadsides (Source: Primary data 2024)

Also, there is poor maintenance of waste pits and there is presence of insects that were flying around the pits and there are a lot of mosquitoes during the night. It contaminates soil, water, air and can attract pests and rodents. That is why residents are noticing some health concerns that are arising from illegal settlement. These include spread of communicable diseases like diarrhoea as well as vector borne diseases such as malaria that results as a result of water contamination by waste and those areas where waste is dumped create environments ripe for disease transmission. Smith et al. (2018) noted that improper waste management practices can create breeding grounds for mosquitoes, leading to upsurge in malaria cases in affected areas.

Reusing and composting which accounts for 16% and 10% respectively are not very common although they are preferable waste management strategies that conserves resources, reduces landfill waste, and reduces environmental impact as well as fostering sustainable waste management practices. The researcher observed a few composts on few households which were used in the gardens for nutrient rich soils. On reusing, at one of the households, the researcher saw a man using torn clothes to make door mates and drink bottles were used to store water. Smith (2018) noted that reusing products is an effective strategy to minimise waste generation and promote resource efficiency. Also, in a study by Johnson et al. (2020), composting was highlighted as an environmentally friendly practice that contributes to waste reduction and soil improvement.

4.5 Perceptions on the efforts being done by the Epworth Local Board to reduce the impacts of illegal settlement

Effective response and management of illegal settlements require prompt and proactive actions from local authorities. However, the extent to which local authorities are addressing the impacts of illegal settlements remains a pressing concern. The research aimed to investigate the perceived effectiveness of local authorities' response to the impacts of illegal settlement and the perceptions are presented on Figure 4.9 below.

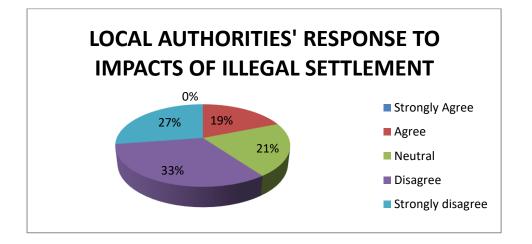


Figure 4.9 Perceptions towards the efforts of ELB on reducing the negative impacts of illegal settlements (Source: Primary data 2024)

Residents of Ward 5 hold a bleak view of ELB's efforts to address the social and environmental impacts of informal settlement in Epworth, with 0% of the respondents strongly agree, nineteen percent 19% agree, 21% neutral, 32 disagree and 27% strongly disagree. The fact that the majority (59%) either disagree or strongly disagree with the statement indicates a lack of confidence in the efforts of local authorities to address the issues in informal settlements. This suggests that there is a gap between the actions taken by authorities and the expectations of the community in addressing these critical issues. The data reveals that only 19% of the respondents agree that local authorities are addressing the social and environmental impacts of informal settlements, while 21% remain neutral. This indicates a lack of consensus among the respondents regarding the effectiveness of the measures taken by the Epworth Local Board. One of the respondents from the Local Board said in an interview that the Epworth Local Board have no enough alternative housing options to relocate illegal settlers which makes it difficult to address the issue as they cannot leave people homeless. Another respondent from National Housing said that the swift expansion of informal settlements in Epworth due to urbanisation poses a significant challenge for them to

keep up with the pace of development and provide basic services to all residence living in these areas. Scholars have also identified similar challenges in the context of the informal settlements. Smith and Jones (2018) found that local authorities often struggle to effectively address the social and environmental impacts of informal settlements due to limited resources and capacity.

4.6 Residents' opinions on alternative housing for illegal settlement

As we strive to address the complex challenges posed by informal housing, alternative housing options have emerged as a potential solution the research aimed to gauge opinions on alternative housing options for illegal settlement and the results are shown on Figure 4.10 below.

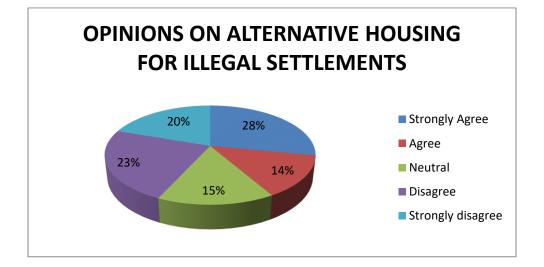


Figure 4.10 Residents' opinions on alternative housing for illegal settlement (Source: Primary data 2024)

The respondents were asked to express their level of agreement with the statement that offering alternative housing options for individuals living in illegal settlements would help mitigate their impact. The responses are strongly agree 28%, Agree 14%, neutral 15%, disagree 23% and 20% strongly disagree. The high percentage of respondents who strongly agree suggest that there is a considerable segment of the population that believes offering alternative housing solutions is an effective strategy for dealing with the negative impacts of illegal settlement. On the other hand the 20% who strongly disagree indicate a contrasting viewpoint. This group likely holds reservations about the efficacy or feasibility of providing alternative housing options for residents of illegal settlements. Johnson (2019) highlighted on providing alternative housing options for residents of illegal settlements. He argued that

while such interventions may offer short term benefits, they also perpetuate dependency on external assistance and fail to address underlying structural issues contributing to informal settlement growth.

4.7 Residents' perceptions regarding the efforts to address challenges of illegal settlement

The study aimed at exploring the opinions and attitudes of residents towards the initiatives aimed at tackling illegal settlements. The surveyed sample showed a range of opinions, from strong agreement to strong disagreement on the effectiveness of these efforts as shown of Figure 4.11 below.

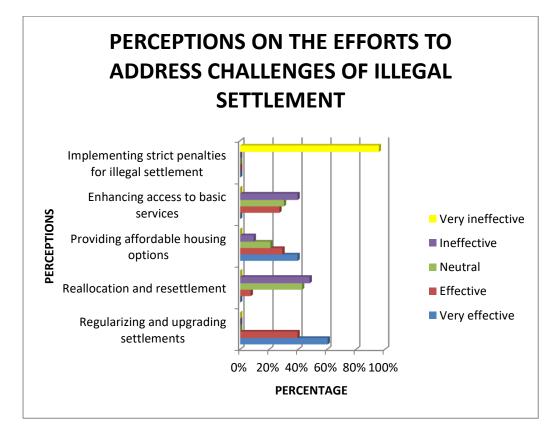


Figure 4.11 Residents' perceptions regarding the efforts to address challenges of illegal settlement (Source: Primary data 2024)

4.7.1 Regularising informal settlements

The majority of responders seemed to believe that regularizing the research is the best course of action with 60% strongly agreeing, 40% agreeing, and 0% were neutral, disagree and strongly disagree. Regularizing the colony will provide residents with tenancy security and create opportunities for the region to thrive. Upgrading a settlement is crucial because, at the time the research was conducted; all respondents agreed that upgrading an informal settlement was less expensive than eradicating it, even though settlers had already committed time, money, and skills to building the homes. Respondents from the National Housing and Social Amenities during an interview with the researcher highlighted that regularising informal settlements is the key. They agreed that, there is need to recognise the rights of residents and provide them with security of tenure. This will encourage them to invest in their homes and community leading to improved living conditions and reduced negative impacts. Research conducted by Payne et al. (2017) examined the outcomes of regularization efforts in African cities and concluded that regularisation not only improve living conditions for residents but also lead to increased access to essential services such as water, sanitation and electricity. UN-Habitat also highlighted the role of regularization in improving housing conditions, promoting economic opportunities and fostering sustainable urban growth.

4.7.2 Providing affordable housing

In the survey data provided, it is observed that 40% of the respondents strongly agree, 29% agree, 21% are neutral, 9% disagree and 0% strongly disagree that providing affordable housing options is very effective in addressing challenges faced by the community. A respondent from the ELB during an interview with the researcher mentioned that affordable housing is crucial. He said that there is a pressing need to boost the availability of affordable housing units to cater for the escalating demand however, there is limited funding and resources for affordable housing initiatives, making it challenging to scale up their efforts. This will reduce pressure on informal settlements and provide residents with a viable alternative. The high percentage of respondents who strongly agree with the effectiveness of providing housing options aligns with findings from the study by Smith and Lipscomb (2011) on housing affordable rental units and subsidized homeownership opportunities can lead to improved housing stability, enhanced social wellbeing and reduce the growth of informal settlement.

4.7.3 Relocation and resettlement

The perceptions of relocation and resettlement as a solution to their challenges are overwhelmingly negative with 48% deeming it ineffective, 0% very ineffective, 43% neutral, 7% effective and 0% very effective. Low percentage (7% effective and 0% very effective) of respondents viewing relocation and resettlement positively suggest that there is limited belief in these approaches as viable solutions to the challenges faced in illegal settlement. This could be due to past failures, lack of success stories or general mistrust in government led

initiatives. This result is consistent with the research done by Davidson et al. (2018) who argued that relocation and resettlement can lead to a range of negative outcomes, including displacement and disruption of social networks.

4.7.4 Enhancing access to basic services and implementing strict penalties for illegal settlement

The distribution of responses showed that none of the respondents rated it as very effective, 27% considered it effective, 30% were neutral and 40% found it ineffective with no one rating it as very ineffective. A few respondents acknowledged the importance of improving access to basic services and prioritised provision of affordable housing and regularization of informal settlements because by addressing these two, access to basic services can be significantly improved, leading to better living conditions. These include fines, demolitions, evictions and legal actions against violators. 96% of residents believe that implementing strict penalties for illegal settlement is very ineffective in addressing the challenges faced by their community. Davis (2006) argues that punitive measures can lead to further marginalisation and displacement of already vulnerable communities. However as suggested by the councillor of ward 5, there is need to address the root causes of informal settlements, including poverty and lack of employment opportunities which requires a comprehensive approach that involves social and economic empowerment programs, job creation initiatives and access to education and healthcare.

4.8 Conclusion

The study identified the causes and consequences of illegal settlement inward 5 of Epworth. The chapter presented, analysed and discussed research findings. It is also revealed that the main causes of illegal settlement are poverty, migration, politics as well as ineffective housing policies. However regularisation of these settlements and provision of affordable housing options were seen to be more effective than relocation, enhancing access to basic services and implementing strict penalties for illegal settlement in addressing the challenges faced by residents.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary, draws conclusions and suggests recommendations with regards to the study on examining the causes and consequences of illegal settlement in Ward 5 of Epworth. The report provides an overview of the investigation, demonstrates how the goals of the research were met, and draws conclusions based on the major discoveries. The goal of this research is to address and resolve the concerns brought up by the project's goals. In order to answer the research challenge, it also derives conclusions from the data analysis. Regarding the main findings, suggestions were given.

5.2 Summary of the research findings

The study managed to examine the causes and socio-environmental impacts of illegal settlements in Ward 5 of Epworth District. According to the research, poverty was the primary reason why the majority of respondents (41%) were residing in this illegal location. However there are other factors that drove people to settle in this area which include migration from rural areas in search of employment, political reasons, where people moved to Epworth after operation Murambatsvina when the government failed to provide shelter to the victims of the operation as well as ineffective housing policies. The survey also assisted in identifying the issues that Ward 5 inhabitants were facing. Environmental and social impacts were found from the research. These include lack of access to basic services such as water and sanitation which is the main challenge is the area, overcrowding, health issues, substandard housing as well as vulnerability to disasters. Poor waste management that is being done has negative impacts on the environment as well as to the health of the community. From the research, there is no refuse collection in the ward by the local authority; people use pits, composting, reusing and illegal dumping as methods of disposing waste which lead to environmental pollution and diseases in the community. Nonetheless, a variety of approaches were seen by the respondents to be useful in addressing the problems associated with illegal settlement in order to eliminate the settlements and restore order. These are regularization of these settlements as the main solution to the problem, provision of affordable housing options relocation and resettlement and others so that they will be on the same level with those living in formal settlements.

5.3 Conclusion

Illegal settlement is a complex issue with multifaceted causes and socio- environmental impacts. It has been found out that primary causes of illegal settlement in Ward 5 include poverty, migration, politics and lack of proper hosing options. These factors drive individuals and families to settle on undeveloped land leading to expansion of informal settlement. The settlements often lack basic services such as clean water and sanitation facilities as well as waste management systems posing social and environmental impacts to both people and the environment. The research underscores the need for holistic and sustainable solutions to address the root causes of illegal settlement. This include efforts to increase affordable housing, regularising settlements relocating and resettling people as well as providing access to basic services.

5.4 Recommendation

- It is necessary to regularize settlements in order to exterminate informal settlements. Responsible authorities and government organizations should recognize informal settlements as places where people live in order to improve the quality of life for the residents of these areas. They should also provide essential amenities like health and water to the residents of these settlements.
- To lessen the effect of disasters on vulnerable populations residing in or close to unlawful settlements, include disaster risk reduction strategies into land use planning regulations.
- To support housing cooperatives in the settlements so that residents may band together to demand regularization from the appropriate authorities and to mobilize their own resources for the improvement of the communities.
- To improve the standard of living for the majority of citizens, the national government must implement economic reform. The economic problems facing Zimbabwe seemed to be the main cause of informal settlement, including poverty and migration to Epworth in search of less expensive housing.
- Since informal settlements' incapacity to house people from diverse socioeconomic backgrounds is one of the elements contributing to their expansion, the regulations governing housing provision need to be amended. The laws do not benefit the impoverished and obstruct their access to quality housing inadvertently. This is achieved by zoning urban areas into low, middle, and high-density suburbs; yet, the

impoverished are unable to even pay the rental costs in high-density regions because of factors like poverty.

References

Annum, L. (2014). Research Instruments for Data Collection. [Electronic]. Accessed www.campus.educadium.com/newmediart/file.../UgradResearch/.../resInstr.pdf.

Birmingham, A., and Wilkinson, F. (2003). Atlas of landscape and settlements of East Canada. Gorge William University.

Brown, A., Smith, B., & Jones, C. (2019). Challenges in addressing social and environmental impacts of informal settlements: A case study. Journal of Urban Studies, 15(2), 87-104.

Bryman, A. (2004). Research Design and Methods, Eagles Printers: New York.

Centre for Affordable Housing Finance in Africa (CAHF). (2020). 2020 Yearbook: Housing Finance in Africa. Johannesburg, South Africa. Http://housingfinanceafrica.org/.

Chagonda, T. (2018). Legal aspects of displacement and resettlement: A case study of Epworth, Zimbabwe. Journal of African Law & Business, 59(3), 1-24.

Chirisa, I. (2009). The Geography of Informal Settlers: A perspective of urban Zimbabwe. Journal of Urban and Regional Planning.vol 2(4) pp. 66-79 April 2009.

Costanza, R., de Groot, R., Sutton, P., Vander Ploeg, S., Anderson, S., J., Kubiszewski, I., & Tumer, R.K. (2014). Changes in the global value of ecosystem services. Global Environment Change.

Davis, M. (2006). Planet of slums. Verso Books. Davis explores the relationship between urbanization, housing policies, and the proliferation of informal settlements worldwide, highlighting the social and economic consequences of inadequate housing solutions

Deininger, K., & Garcia, M. (2016). What do we know about poverty in South Africa? In K. Deininger & M. Garcia (Eds.), Rural development strategy in South Africa: A new approach (pp. 47-64). World Bank Publications.

Epworth Profile (2012). Ministry of National Housing and Social Amenities.

Economic Commission for Europe (ECE). (2001). Land Administration Review: Georgia. Geneva: United Nations Economic Commission for Europe Fawcett, B., Mulenga, M., and Manase, G. (2004). Building Links for Improved Sanitation in Poor Urban Settlement: Recommendations from Research in Southern Africa. Institute of Irrigation and Development Studies. UK: University of Southampton.

Flick, U. (2014). An introduction qualitative research. Sage

Gilbert, A., & Gugler, J. (2012). Cities, Poverty, and Development: Urbanization in the Third World. Oxford: Oxford University Press

Golden, A., and Mi, S. (2013). Sustainable Urban Development? Low-cost Housing Challenges in South Africa: Habitat International, 31, 291-302.

Harvey, D. (2012). Rebel cities: From the right to the city to the urban revolution. Verso Books.

Kadirire, A., (2016) Harare to demolish illegal settlements. Daily News 25 July 2016.

Kamete, F. (2006). Revisiting the urban housing crisis in Zimbabwe: Some forgotten dimensions? Habitat International, 30(4): 981-995.

Lee, K., & Kim, J. (2014). Social Impacts: A review and synthesis of existing literature. Social Science Research.

Manyenyeni, B., (2016) City of Harare State of the City Address. Available on

http://www.hararecity.co.zw/. Accessed 3 January 2024.

McCallin, A., McGregor, J., and Chatiza, K. (2014). Urban informal settlers displaced by disasters: challenges to housing responses: Disasters climate change and displacement report. Available on www.unhcr.org. Accessed 10 December 2023.

McGregor, J and Chatiza, K. (2020). Geographies of Urban Dominance: The politics of Harare's Periphery. ESID Working Paper No. 162.

McGregor, J., and Chatiza, K. (2019). Frontiers of Urban Control: Lawlessness on the City Edge and Forms of Clientalist Statecraft in Zimbabwe. Antipode, 51(5), 1554-1580.

Menezes, M. (2019). Public attitudes towards informal settlements: A qualitative study. Urban Studies, 56(8), 1785-1802

Mhlanga, M. (2015). OlympAfrica Project in disarray. The Herald. Available on www.herald.co.zw/olympafrica-project-in-disarra. Accessed 24 December 2023

Moser, C. O., & Mcllwaine, C. (2014). Informal Settlements in Latin America: A Critical Literature Review. Habitat International.

Moyo, T. (2018). The Political Economy of Land and Housing in Zimbabwe: A Case Study of Epworth. African Journal of Agricultural Research.

Moyo, W. (2014). Urban Housing Policy and Its Implications on the Low-Income Earners of a Harare Municipality, Zimbabwe. Zimbabwe Open University. International Journal of Asian Social Science, 2014, 4(3): 356-365.

Muderere, S. (2010). Think Globally, Act Locally: The Reverse Osmosis of Housing Rights In Transitional Democracies, Vol 13 No 6 July 2011, University of Zimbabwe, Harare.

Mukonoweshure, M., (2014). Barriers to the Provision of Basic Sanitation in Two Selected Informal Settlements in Harare. PhD Thesis (unpublished). The Wits University. Available onhttp://mobile.wiredspace.wits.ac.za/bitstream/handle/10539/14902/FINAL%20Full%20Th esis%.

Munyoro, G. (2014). An evaluation of the effectiveness of hand-outs in enhancing teaching and learning in higher education: Africa Development and Resources Research Institute: pISSN: 2343-6662 ISSN-L: 2343-6662 VOL. 6, No.6 (2), pp. 95-107Higher Education.

Mokomane, Z. Zulu, & M. Otukile-Mongae, M. (2017). Poverty in South Africa: A profile based on recent household surveys (pp. 129-146). Human Sciences Research Council Press.

Palinkas, L. A., & Horwitz, S. M. (2014). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Administration and Policy in Mental Health, 42(5), 533-544.

Patton, M. Q. (2015). Qualitative research and evaluation methods. Sage Publications

Murisa, T., & Matondi, P. (2013). The impact of informal settlements on access to basic services in Zimbabwe: The case of Epworth. Journal of Sustainable Development in Africa, 15(6), 1-16.

Payne, G. (2006). Land tenure regularisation in African cities: A comparative study on progress made and lessons learned. Environment & Urbanization, 18(1), 67-87.

Mutsindirwa, I. Chirisa, B, E., and Mutsindikwa, T.N. (2015) "Distributive politics at play in Harare, Zimbabwe: case for housing cooperatives" Available on https://bandungjournal.springeropen.com/articles/10.1186/s40728-015-0015-9 Accessed 24 August 2016.

Roy, A., & Alsayyad, N. (Eds.). (2014). Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia. Lexington Books

Sassen, S. (2018). When the city itself becomes a technology of war. In T. Keenan & E. Weizman (Eds.), Mengele's skull: The advent of a forensic aesthetic Smith, A., Johnson, B., & Lee, C. (2018). Health outcomes in informal settlements: A comparative study. Journal of Urban Health, 45(2), 210-225.

Scholz, M., & Binder, U. (2014). Environmental impact of human activities. Environmental Science and Pollution Research.

Sigauke, N. (2003). Improving Urban Livelihoods: Epworth Sustainable Livelihoods Benchmark Study, URL: <u>http://practicalaction.org/docs/region_southern_africa/Epworth_Benchmark_Study.pdf.</u> <u>Accessed 16 April 2024</u>.04.11.

Small, A., Small, C., and R.J. Nicholls (2003), "A global analysis of human settlement in coastal zones", Journal of Coastal Research Vol 19, No 3, pages 584—599.

Smith, D., & Jones, E. (2018). Local authorities' responses to informal settlements: A comparative analysis. Urban Policy Review, 10(3), 215-230.

Smith, S. J., & Lipscomb, C. E. (2011). Housing affordability for lower income households: A summary report of research findings. US Department of Housing and Urban Development.

Tibaijuka, A, K. (2006). Report of the Fact- Finding Mission to Zimbabwe to Assess the Scope of Operation Murambatsvina by the UN Special Envoy on Human Settlements Issues in Zimbabwe. New York. United Nations.

UN-HABITAT., (2003). The Challenge of Slums. Global Report on Human Settlements 2003. 310p. United Nations Human Settlements Program. London and Sterling: Earth scan Publication Ltd.

UN-Habitat. (2016). World Cities Report: Urbanisation and Development-Emerging Futures.

UN Habitat. (2013). The challenge of slums- Global report on human settlements.

Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2004). At Risk: Natural Hazards, People's Vulnerability and Disasters (2nd Ed.). Routledge.

Wisner, B., Gaillard, J. C., & Kelman, I. (Eds.). (2012). The Routledge Handbook of Hazards and Disaster Risk Reduction. Routledge.

Xie, J., You, L., Wielgosz, B., & Ringler, C. (2014). Estimating the impact of crop production on the environment: A review of methods. Journal of Integrative Agriculture.

UN-HABITAT (2010) Informal Settlements and Finance in Dar es Salaam Tanzania: Dar es Salaam Profile.

Zimbabwe National Statistical Agency (ZimStats) (2022). 2022 Census Report. Government Printers. Harare.

APPENDIX 1 QUESTIONNAIRE

I am Talent N Kandira a fourth year student at Bindura University of Science Education doing Bachelor of Science Honours Degree in Disaster Management. It is a pre requisite for final year students to undertake research project and I am carrying out a research on **EXAMINING THE CAUSES AND SOCIO-ENVIRONMENTAL IMPACTS OF ILLEGAL SETTLEMENT, A CASE STUDY OF WARD 5, EPWORTH, HARARE, ZIMBABWE.** I am appealing for your assistance, contributions and relevant information regarding the study. The aim is to to examine the causes, social and environmental impacts of informal settlement. Responses will be strictly presented privately and confidential to pursue academic fulfilment.

Instructions:

- Please fill in the space provided
- Place a tick where appropriate

Section A

1. Gender

Male	Female

2. What is your current employment status? Please select the option that best describes your situation.

Formally employed	
Non-formal job	

Not employed	
Other (Please specify)	

3. Do you believe that lack of affordable housing option is a major cause of illegal settlement in Ward 5?

Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	

4. In your opinion, what are other main causes that led you to settle in this area?

Ineffective housing policies	
Poverty	
Migration	
Politics	

Section B

5. How do you usually dispose your waste?

Pits	
Composting	
Refuse collection	
Incineration	
Recycling/Reusing	

6. Are there specific health concerns related to illegal settlement that you are facing in this community?

Yes	
No	
If yes spec	cify

.....

7. Please rate your level of agreement with the statement regarding the observation of negative social impacts resulting from illegal settlement in ward 5. Use a scale of 1 to 5 with 1 being strongly agree, 2 being agree, 3 being neutral, 4 being disagree and 5 being strongly disagree.

Negative social impacts	Rating
Susceptibility to natural disasters	
Substandard housing and poor infrastructure	
Overcrowding	
Lack of access to basic services	
Health issues	

8. Is there environmental degradation caused by any activities in this area?

Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	

9. Do you think lack of access to basic services in informal settlements contribute to the social challenges faced by residents in Epworth?

Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	

Section C

10. Do you think local authorities are addressing the social and environmental impacts of informal settlements in Epworth?

Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	

11. Please use the effectiveness of the following efforts in addressing the challenges you are facing in this community. Use scale of 1 to 5, with 1 being very effective, 2 being effective, 3 being neutral, 4 being ineffective and 5 being very ineffective.

Action	Rating
Regularizing and upgrading settlements	
Reallocation and resettlement	
Providing affordable housing options	
Enhancing access to basic services	

Implementing	strict	penalties	for	illegal	
settlement					

12. Do you think providing alternative housing options for residents of illegal settlements would be in addressing their negative impact?

Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	

Thank you for your time and co-operation

APPENDIX 2: INTERVIEW GUIDE FOR ALL KEY INFORMANTS

PROJECT TITLE: EXAMINING THE CAUSES AND SOCIO-ENVIRONMENTAL IMPACTS OF ILLEGAL SETTLEMENT, A CASE STUDY OF WARD 5, EPWORTH, HARARE ZIMBABWE

My name is Kandira Talent Natsai. I am a student currently studying Bachelor of Science Honours in Disaster Management Studies at Bindura University of Science Education. This interview guide has been designed to collect information from representatives in the study area. You are requested to provide the following information to the best of your knowledge. The information will be treated with strict confidentiality.

Interview date..... (Interviews done after the consent by the respondents)

- 1. How long have you been working at the Epworth Local Board?
- 2. Have you observed any illegal settlements in Epworth Ward 5?
- 3. What do think are the main factors contributing to the proliferation of illegal settlements in Epworth Ward 5?
- 4. In your opinion, what are the social impacts of illegal settlements in Epworth Ward 5?
- 5. In your opinion, what are the environmental consequences of illegal settlement in terms of waste management, pollution and resource depletion?
- 6. How do you think the community can be involved in addressing the issue of illegal settlements in Epworth Ward 5?

- 7. What are the challenges faced by the Epworth Local Board in trying to address the issue of illegal settlement in Ward 5?
- 8. In your opinion, what specific recommendations or actions would you suggest to improve the situation regarding illegal settlements and their negative impacts in the area?

Thank you for your time and co-operation

APPENDIX 3: OBRSERVATION GUIDE

- 1. Main reasons why people choose to settle in this settlement.
- 2. The main sources of income in this area.
- 3. Environmental consequences of illegal settlement in terms of waste management, pollution and resource depletion.
- 4. How the residents dispose their waste.
- 5. The sources of water and how sewage systems are managed.
- 6. The health hazards and safety concerns associated with living in thus settlement.
- Initiatives or organisations working to address the challenges faced by residents in this area.