

UNIVERSITY OF EDUCATION, WINNEBA

**CHALLENGES FACING SLUM INHABITANTS IN GHANA: A STUDY
OF THE WA MUNICIPALITY**

IDDRISU HANAN BALUGUBANUE



MASTER OF PHILOSOPHY

2023

UNIVERSITY OF EDUCATION, WINNEBA

**CHALLENGES FACING SLUM INHABITANTS IN GHANA: A STUDY OF
THE WA MUNICIPALITY**

**IDDRISU HANAN BALUGUBANUE
(200011147)**



**A thesis in the Department of Geography Education,
Faculty of Social Sciences, Submitted to The School of
Graduate Studies in partial fulfillment
of the requirements for the award of the degree of
Master of Philosophy
(Geography Education)
in the University of Education, Winneba**

JANUARY, 2023

DECLARATION

Student's Declaration

I, Iddrisu Hanan Balugbanue, hereby declare that, this thesis with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is the result of my own original research work, and no part or whole has been presented for another degree in this university or elsewhere.

Signature:

Date:

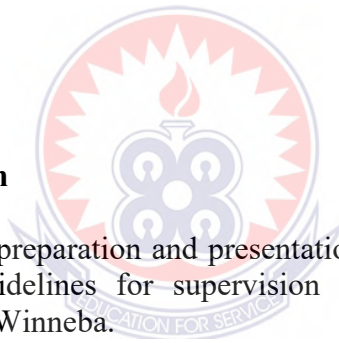
Supervisor's Declaration

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of theses as laid down by the University of Education, Winneba.

Name: DR. BENEDICT ARKO (Supervisor)

Signature:

Date:



DEDICATION

I would like to dedicate this research to my entire family especially my senior brother Iddrisu Abdullahi for his support and in memory of my late father Iddrisu Hamidu Wasaba for letting me know that the only legacy worth emulating is education and to all those wishing for higher education but are deprived.



ACKNOWLEDGEMENT

I would like to express my deepest appreciation to Dr. Benedict Arko of the Department of Geography Education who supervised this work to its completion, for his guardianship and encouragement. I am also most grateful to my parents Mr. and Mrs. Wasaba, my uncle Erasung Ibrahim Issahaku Kunateh for lavishing me with knowledge, for their support and instilling a great level of confidence in me. Special thanks also go to my senior brother Iddrisu Abdullahi for his immense support throughout my studies as well as this research work. I am most grateful to, Mr. Adam Abdul Fatawu Coordinator University of Ghana Distance Wa branch, Issahaque Salim Kulandi and Alhassan A. Hakeem for their unwavering support in gathering information for the study. Special thanks go to Professor Esther Danso-Wiredu of Geography Department of UEW for her encouragement. Finally, my special thanks go to my extended family, my course mates and all teaching and non-teaching staff of the Department of Geography Education and to Abdul Rashid Sualah for his support. I will forever be indebted to all of you may God richly bless you.

TABLE OF CONTENTS

Contents	Page
DECLARATION	iii
DEDICATION	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
ABBREVIATIONS	xi
ABSTRACT	xii
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of the Problem	5
1.3 Purpose of the Study	8
1.4 Objective of the Study	8
1.5 Research Questions	8
1.6 Limitations of the Study	8
1.7 Significance of the Study	9
1.8 Chapter Organization	9
1.9 Research Scope	10
CHAPTER TWO: LITERATURE REVIEW	11
2.0 Introduction	11
2.1 Conceptualization of Slums	11
2.2 Growth of Slums in the World	15
2.3 The Impact of Slums on Growth of a Country	21
2.4 Factors influencing the Growth of Slums	23

2.5	Classification of Slum Challenges	29
2.6	Housing Supply	30
2.7	Policy Responses	31
2.8	Coping Strategies by Slum Inhabitants	34
2.9	Theoretical Underpinning of the Study	35
2.10	Theoretical Framework	38
CHAPTER THREE: RESEARCH METHODOLOGY		42
3.0	Introduction	42
3.1	Research Methodology	42
3.1.1	Research Paradigm	42
3.1.2	Research Approach	43
3.1.3	Research Design	43
3.1.4	Study Population and Unit of Analysis	44
3.1.5	Sample and Sampling Technique	45
3.1.6	Sample Size Determination	46
3.1.7	Sampling Size Distribution	48
3.1.8	Sources of Data	49
3.1.9	Data Collection Instruments	49
3.1.10	Data Processing and Analysis	50
3.1.11	Validity and Reliability	51
3.1.12	Ethical Considerations	52
3.2	Study Setting	53
3.2.1	Economic Activities	54

CHAPTER FOUR: DATA PRESENTATION, ANALYSES AND DISCUSSION	57
4.0 Introduction	57
4.1 Socio-Demographic Characteristics of Respondents	57
4.2 Type of Housing in the Slum Communities of Wa Municipal	62
4.3 The Relative Importance of Factors Driving the Growth of Slums in the Wa Municipality	64
4.4 Living Conditions of Slum Inhabitants in the Wa Municipality	69
4.5 Strategies Adopted by Inhabitants to Cope with the Challenges Faced in the Slums in the Wa Municipality	78
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	85
5.0 Introduction	85
5.1 Summary of Key Findings	85
5.2 Conclusion	86
5.3 Policy Recommendations	87
5.4 Areas for Further Studies	87
REFERENCES	89
APPENDICES	96
APPENDIX A: Questionnaire	96
APPENDIX B: Interview Guide For Key Informants	100
APPENDIX C: Observation Checklist	102

LIST OF TABLES

Table	Page
3.1: Projected Number of Households in slum communities in Wa to 2022	47
3.2: Sample Size Distribution of the slum communities in Wa	48
4.1: Socio-Demographic Characteristics	58
4.2: Type of housing inhabited by respondent of the study in the slum communities of Wa Municipality	63
4.3: Relative Importance of Factors driving the growth of slums in the Wa municipality	65
4.4: Living conditions of slum inhabitants in the Wa Municipality	70
4.5: Coping strategies adopted by the slum dwellers in Wa Municipality	78



LIST OF FIGURES

Figure	Page
2.1: Theoretical Framework	41
3.1: Map of Wa municipality	54
4.1: Dilapidated Housing Structure in Dondoli Community of Wa Municipality	64
4.2: Disposal of refuse in Dondoli a slum community of Wa Municipal	71
4.3: Drains and sewages in Tagrayiri community of Wa municipal	73
4.4: Women sharing proceeds from Savings and Loans (dagbile) in Nayiri	80
4.5: A child engaged in income generation	82



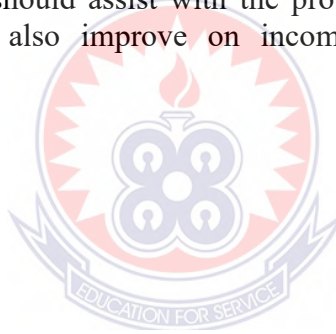
ABBREVIATIONS

BHC	Bank for Housing and Construction
CBD	Central Business District
GBS	Ghana Building Society
GDP	Gross Domestic Product
GDRC	Global Development Research Center
GREDA	Ghana Real Estate Developers Association
MDG	Millennium Development Goal
NGO	Non-Governmental Organization
PHC	Population and Housing Census
RII	Relative Importance Index
SHC	State Housing Corporation
TDC	Tema Development Corporation
WMA	Wa Municipal Assembly



ABSTRACT

Slums are increasingly becoming a ubiquitous feature of the urbanization process in Global South countries such as Ghana. Many slum inhabitants are trapped in poverty, terrible housing conditions, squalor and inadequate provision of municipal services. Despite the numerous studies on the challenges facing slum inhabitants, unclear in the scholarly literature is the relative importance slum inhabitants attached to these issues. The study thus investigated the relative importance slum inhabitants attached to the factors driving the growth of slums. Their living conditions and coping strategies. This was premised on Turner's (1976) theory of slums. A mixed method approach was adopted with the research design been explanatory sequential and a sample size of 386 for the quantitative data and 11 for the qualitative data was used. The instruments used for data collection were interviews and questionnaires. Thematic analysis was used to analyze the qualitative data while Relative Importance Index for the quantitative data. The findings indicate that the factors driving the growth of slums from the perspective of inhabitants were the easy access to accommodation and social networks. Again, majority of the slum inhabitants reported that the worst factors affecting their living conditions were poor sanitation issues and the lack of recreational facilities. The predominant coping strategies engaged in were making credit purchases and taking loans. The study recommends that, to improve slum settlements government should assist with the provision of basic amenities such as affordable housing and also improve on income generating activities of slum inhabitants.



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Globally, urbanization drives socio-economic changes throughout the world. The emergence of slums in urban centres spring up partly as a result of movement of population from rural areas to urban centres. Rural-urban migration therefore becomes one of the major contributors to the emergence of slums. According to Mathenge (2017), future growth in most countries for some time to come will be replaced by urbanization and more developed towns with the higher average population growth rate of 2.3% moving closely to the 0.4% for that of developed countries. Mathenge (2017) further added that two billion people live in urban areas and 70% of this population live in informal settlements. About 54% of the world's populations are urban residents, a billion of whom are estimated to be living in slums (Darteh, 2019).

Rapid urbanization has caused many difficulties for all governments, specifically in major cities and towns throughout the world (Darteh, 2019). Urbanization has been defined as the social process whereby cities grow and societies become more urban. National governments have acknowledged this phenomenon, considering the little provision of urban planning for land, housing and other services have further created challenges authorities have to battle with. For instance, the poor creation of basic utilities and amenities for the needed population, infrastructure and entrepreneur abilities pose further challenges in reducing environmental quality and services. This further manifests the presence of lack of good national and urban policies, inadequate

housing policies, legislation and delivery systems leading to the creation of slums and informal settlements in urban areas (UN-HABITAT, 2016).

Throughout the world, challenges of urbanization and the emergence of slums have become a concern to many governments. The existence and growth rates of slums have regional and global implications, affecting areas such as education, health and child mortality, and political and social exclusion, among many other things (UN-HABITAT, 2016). Studies of Afeadie (2018), suggests tremendous growth in the urban population, but this growth however, has not been uniform. Growth in urban areas especially in less developed countries of the world has been rapid, increasing at an average rate of 2% annually compared to 0.5% in more developed countries. This trend is expected to continue with most of the less developed countries faced with the challenge of absorbing the majority of the future population growth (World Health Organization, 2017).

According to the UN-HABITAT (2018), slums in its view are seen as disorganized areas in deteriorated environments. To elaborate more on slums, the Global Development Research Center (data) states that slums are living places of persons with the lack of basic amenities. To throw more light on the discussions of slums is the UN-HABITAT (2016), suggests that slums are not really places of human abode. Benard (2019), indicated in his study that, slums lack basic amenities coupled with high illiteracy rates among individuals and the absence of social class or clusters. The United States and Europe have close to a million of their citizens living in the slums (ibid). The United Nations Millennium Development Goals (MDGs) pinpoints that, the living conditions of slum inhabitants can be improved by ensuring access to water and sanitation (Afeadie, 2018).

It is an undeniable fact that the problems of urban slums go beyond housing concerns. In Ghana, the emergence of slums is attributed to rapid growth of cities and the inability of successive urban governments to provide sufficient investment in sustainable housing and infrastructure to meet the demands of urban population (Danso-Wiredu, 2017). Adarkwa and Post (2001), added that poverty and housing deficit in rapidly growing cities are reasons for emergence of slums. The operational definition of slums pertaining to this work is a neglected parts of cities where housing and living conditions are appallingly poor and lack one or more of the following conditions: access to sanitation, secured tenure, durability of housing, and sufficient living area. These conditions of slums pertain because a slum is often not recognized and addressed by the public authorities as an integral or equal part of the city.

Frowd (2018), cited in Benard (2019), indicates that the nature of slums has a lot to do with the location of the area and the physical characteristics of the area. This makes the settlement of slums to increase largely due to migration of population from rural to urban areas. It is estimated that half of the world's population live in the urban centers and has the ability to increase to 4.7 billion in 2030 (ibid). Due to the disturbing statistics, the United Nations (data) identified three alternatives in determining the characteristics and location of a slum. The first option is to find shelter in existing inner-city slums and or informal settlements. The second alternative is to occupy vacant land in areas that are risky to inhabit and lack any form of environmental protection. For instance, wetlands near rivers and streams. The third and final alternative is to move into semi-legal settlements where self-proclaimed property owners illegally sub divide existing plots of land.

According to Frowd (2018), sub-Saharan Africa is home to 61.7% of slum inhabitants. Places such as Africa, the Caribbean and Pacific countries have close to 70% of their population living in slums, thereby increasing the challenges of national and local governance in most developing countries. How to deal with slums and the maintenance of environmental quality are the major battles bedeviling most developing nations (Benard, 2019). Other researchers such as Asiedu and Agyei Mensah (2016), estimate that 80% of urban centers in developing countries are occupied by the vulnerable and destitute. They are not able to afford good accommodation and the use of quality basic amenities which leads to the creation of slums. Slums in these low developing countries accounts for close to 70% of urban population. There is a general lack of urban land use planning in such settlement areas (UN-HABITAT, 2018).

Ghana is not an exception to the challenges and growth of slums. The nature of slums in Ghana is an issue of population and lack of basic amenities (Frowd, 2018). It is estimated that as at 2001, the slum population had been estimated to be about 4.5 million and increases by 1.8% annually making the yearly increment from 2010 and 2014 to be 4.9 million and 5.3 million respectively (UN-HABITAT, 2016). According to Benard (2019), the national policy framework of Ghana in the year 2010 indicated that about 12.5 million people were living in slums in Ghana, confirming the effect of migration from rural areas to urban towns. Benard further added that the slum population in most cities in Ghana was increasingly rising to say the least. Researchers such as Frowd (2018) added that slums are unable to adequately meet the demands of the growing population, and have emerged and continue to increase rapidly in the cities in Ghana such as Kumasi and Accra.

In the Upper West Region, studies such as Benard (2019), have several accounts on the nature and causes of the growth of slums. For instance, Benard pinpoints from his empirical studies the challenges slums bring to the improper planning of the Upper West Region that has reduced quality urban planning, sanitation and waste management in the region. Slums in the Upper West Region are numerous with various degrees of challenges that have posed high capital expenditure on the finance of the municipalities and district assemblies in the region. The most popular slums in the region include, Limanyiri, Nayiri, Dondoli all located Wa municipality, Yikpe in the Lawra municipality and Talawonaa in the Wa West District.

1.2 Statement of the Problem

Ghana has over the years experienced rapid slum formation as a result of increased urbanization and the inability of successive governments to provide sufficient investment in sustainable housing and infrastructure to meet the demands of the urban population (Frowd, 2018). These have contributed to an ever-increasing homelessness and streetism nationwide. Ghana has an estimated housing deficit of about 100,000 units annually (ibid). The inability of city authorities to plan effectively as well as enforce urban planning and land laws have given rise to haphazard development of settlements and the emergence of slums. Slums are growing in line with the acute housing shortage (Frowd, 2018).

Policy debates have more or less established that urbanization is an irreversible phenomenon with more positive than undesirable externalities. The biggest challenge accompanying urbanization is that it has not kept pace with the housing needs of those living in cities and those migrating to the cities. Population trends in Accra from population data gathered by the Ghana Statistical Service show an ever-increasing

urban population growth rate (GSS, 2022). The State Housing Company (SHC) and the private sector combined are said to be delivering 30,000 new housing units onto the market each year but that is far below what needs to be provided to meet the increasing demands (Otto, 2018). According to Mathenge (2017), to address this deficit and accommodate new households there is the need for an annual delivery of about 150,000 housing units for the next 20 years.

Poor housing in Ghana was less discussed in existing literature and in the country's media until recent times (Danso-Wiredu, 2017). This is because housing provision has traditionally been a responsibility of the family. Housing provision was part of the family compound housing system in the past. Access to affordable housing in most towns in Ghana has become a socio-economic problem and researchers have attempted to delve into the depths of this problem. It is however known that accessibility is a problem given the scarce supply over the huge demand level. Kiosks and small containers gradually contribute to the expansion of already existing slums which pose a major problem in the towns (ibid). The gradual demise of the rent-free family compound housing, stemming from actions of people living in smaller numbers and also migrating from their family root-homes, demanded more houses to be built. Houses built by the private sector are expensive and the poor cannot afford them, hence the recent emergence of poor communities in the cities leading to the growth of slums, hence posing more challenges to the slum inhabitants (Danso-Wiredu, 2017).

Various studies have been conducted on slums and its related challenges on inhabitants. The challenges include but not limited to sanitation, provision of affordable houses and threat of eviction by government (Raqeeb, 2015; Danso-

wiredu, 2017; Otto, 2018; Benard, 2019). Even though there has been much discussion in the literature on the challenges facing slum inhabitants as cited above, there is a lack of nuance in understanding these challenges to better be able to proffer workable solutions. For instance, lacking in the literature is an appreciation of the relative importance slum inhabitants attached to these challenges especially those driving the growth of slums, those adversely affecting their living conditions and the coping strategies they result to. This study therefore aims to close the literature gap by examining the challenges of slum inhabitants of Wa municipality in the Upper West Region of Ghana from the perspective of slum inhabitants.

The Wa Municipality provides a very suitable context within which such a study can be pursued. The Municipality has benefited from the projects and mitigating strategies in solving the challenges faced by slum inhabitants. For instance, the construction of the affordable housing projects to reduce the deficits in the housing sector with the aim of decongesting the inner city. Despite the urbanization status of the municipality, about 59% of the inhabitants live in slums with almost all living conditions deteriorating (WMA, 2012). Slum inhabitants of the Wa municipality lack services such as routine collection of waste which results in the accumulation of waste in huge quantities. Governments and other stake holders have contributed significantly in enhancing housing, water and sanitation conditions. This aimed at reducing the inadequacy of these basic amenities" deficits in the region. Despite the efforts by governments, the housing sector and its challenges still persist, leading to the growth of slums in the Upper West Region (Raqeeb, 2015). Having the Wa municipality as a case study thus provides a good avenue within which to examine the challenges facing slum inhabitants in order to elicit the nuanced understanding required.

1.3 Purpose of the Study

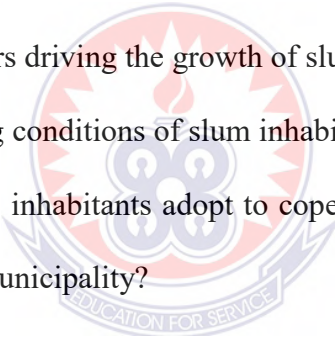
The main purpose of the study is to investigate dwellers appreciation of the challenges facing them in the Wa municipality.

1.4 Objective of the Study

Specifically, this study seeks to:

1. explore the factors driving the growth of slums in the Wa Municipality.
2. examine the living conditions of slum inhabitants in the Wa Municipality.
3. examine the strategies adopted by inhabitants to cope with the challenges faced in the slums in the Wa Municipality.

1.5 Research Questions

1. What are the factors driving the growth of slums in the Wa municipality?
 2. What are the living conditions of slum inhabitants in the Wa municipality?
 3. What strategies do inhabitants adopt to cope with the living conditions in the slums in the Wa municipality?
- 
- The logo of the University of Education, Winneba, is a circular emblem. It features a central sun-like symbol with rays, surrounded by a banner that reads "EDUCATION FOR SERVICE". The emblem is overlaid on the text of the research questions.

1.6 Limitations of the Study

The study does not have sources of funding and that delayed the time of completing the study. Gifts to interviewees during the questionnaire administration become a challenge as NGOs would normally do to respondents as token to retrieve information from them. Despite these limitations, enough data was collected to make the study credible.

1.7 Significance of the Study

This study throws more light on the challenges facing slum inhabitants in the Wa municipality. Again, the research will serve as a spring board to generate interest for further research into the other aspects of slum growth in Ghanaian cities especially Wa municipality in the Upper West Region. The findings from this study will provide reliable information on the challenges faced by slum inhabitants in the Wa municipality and also provide data about the nature and characteristics of slum communities in the Upper West Region particularly the Wa municipality by generating a better understanding of slum related issues. The research document will also serve as a reference material for students and lecturers, and may also lead to investments into developing slums in the municipality by interested stakeholders.

1.8 Chapter Organization

The study is organized in five chapters. The first chapter consists of introduction of the study, which consists of the background to the study. The section also discusses the statement of the problem, study objectives and the research questions, significance and scope of the study, as well as the organization of the study. The second chapter focuses on theoretical and empirical literature on the subject of discussion. Chapter three also shows the methodology adopted for the study. Thus, it seeks to indicate the research approach and design used, the target population, sample size, sampling technique, data collections, study instrumentation, data analysis and its presentation as well as the methods used in achieving the research objectives. The fourth chapter covers data analysis and findings of the study. The final chapter constitutes the conclusions and recommendations based on the findings.

1.9 Research Scope

Conceptually, the focus of the study is to investigate the challenges facing slum inhabitants in the Wa Municipality. Geographically, the study area is the Wa Municipality. The study has been conducted across the ten predominant slum communities in the Wa Municipality. The study spans through the period from 2021-2022.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter provides a review of literature related to the challenges facing slum inhabitants. The chapter consists of ten sections. The second section is the conceptualization of slums. The third section discusses Growth of Slums in the world, followed by nature of slums in Africa in section four. Section five deals with economic conditions of slum communities, section six of this chapter talks about the impact of Slums on growth of a country. The next section also discusses factors influencing the growth of slums. The eighth section considers the classification of slum challenges. The ninth section covers housing supply, coping strategies by slum inhabitants. Finally, the chapter discusses the theoretical underpinnings of the study based on the objectives set, as a concluding section.

2.1 Conceptualization of Slums

According to Kubra *et al.* (2015), slum is defined as an area of poor-quality housing, typically found in the inner city in rich countries and in other parts of cities in poor countries. In their study, they observed that, slum housing is usually densely populated and in a bad state of repairs. There are inadequate services including poor sanitation, poor supply of electricity and irregular water supply among others. Slum inhabitants are often poor with low rates of literacy. A study by Turkstra and Raithelhuber (2016), also described slum as any settlement that lacks any one of the following indicators: access to water and sanitation, sufficient living area, housing with durable materials, non-hazardous location and tenure security. UN-HABITAT (2018), in attempt to define what constitutes a slum, described a slum household as a

group of individuals living under the same roof that lack one or more of the following conditions: access to potable water, access to sanitation, secured tenure, durability of housing and sufficient living area. These factors constitute the key variables for the identification and measurement of the manifestations of slums in cities.

Researchers such as Agouris *et al.*, (2016), in their contribution to the subject matter highlights the neglect, refusal and violation of housing rights, as well as the fulfillment of these rights. Agouris *et al.*, (2016), further added that the definition, however, does not capture the full degree of deprivation faced by slum households, nor does it include information on how the extent and type of deprivations change over time. In attempt to contribute to literature, McFarlane (2018), in a study on the types of slums, points out that the type of informality experienced by slum inhabitants is far from being static, and instead, is in a dynamic state that changes over time.

Consequently, it is important to monitor continuously whether implemented policies and other interventions are changing the conditions within slums. An enhanced definition for slums proposed by United Nations (2018) groups slums into broad categories of moderately deprived (one-shelter deprivation), severely deprived (two-shelter deprivations) and extremely deprived (three- or more-shelter deprivations). The main issue with this enhanced definition, as with those previously mentioned, relate to the absence of a social dimension, and the difficulty in capturing information as it relates to security of tenure within slums. These factors are therefore not present in any global comparison of slums.

In connection with this, Engstrom *et al.*, (2017), argued that the risk posed to human life has been extremely downplayed in the previous definitions of slums without assessing risk factors. It is difficult to provide adequate resources to mitigate risk for

individual slums, as each slum is unique with its own set of associated risk factors. A variety of definitions and the lack of consensus on the appropriate means by which slums could be studied pose serious challenges for the monitoring and reduction of their populations. Multiple definitions further result in different estimates of slum populations, variations in the types and quality of data being collected on slums (Patel *et al.*, 2019). Moreover, without a common definition of slum in place, issues in monitoring the growth of slums and determining the overall success of slum policies will prove challenging. Consequently, efforts to estimate the magnitude and extent of slums as a global issue will equally be hindered. At the same time, a common definition alone without adequate data for identifying and monitoring slums will be of limited benefit from a practical viewpoint (Walker, 2016).

Slums are the manifestation of extreme inequalities reflected not only in the immediate living conditions of slum inhabitants, but also through many aspects such as access to healthcare and education that affects their lives. Despite decades of governmental interventions at the city, regional, and national levels to address this challenge, slums still persist. One of the main reasons for the policy failure is the top-down nature of design and implementation of interventions that follows a (one-size-fits-all) approach (Tiwari & Rao, 2016). These policies have traditionally sought solutions from the technocrats and bureaucrats but rarely relied on the people themselves to find alternatives. Policies have also failed to recognize the variation in the multi-dimensional nature of housing challenges commonly found in slums (Crooks *et al.*, 2015).

Slums pose a challenge that could be considered a „wicked“ problem. These problems have also been referred to as „messy“ or ill-structured (Davis, 2017). Davis posits that, the challenges that slum dwellers face have many of these characteristics. First, conceptualizing slums has its own difficulties. For example, there is an inconclusive debate about conceptualizing a slum as a place versus a household“s living condition (Agouris *et al.*, 2016). Secondly, there is no single explanation for slum formation and growth. There are multiple causes cited in literature includes extreme income inequality, rapid urbanization rates, lagging infrastructure provision and lack of affordable housing supply (Walker, 2016). Thirdly, multiple stakeholders are directly or indirectly related to this policy challenge, including local, state, and national level governments, non-government and community-based organizations, slum inhabitants, and non-slum residents in the neighborhoods. Slums have been studied using multiple disciplinary approaches and varying perspectives. Common approaches include ethnographic studies that focus on a particular intervention or community, estimations using demographic surveys and censuses, delineating slum boundaries and housing structures using satellite images. Moreover, these approaches primarily rely on aggregation of socio-economic data, which fail to capture the complexity in the lives of slum inhabitants, and their multi-tiered and interrelated connections within society and environment (Mahabir *et al.*, 2016).

This study adopts the proposed definition of slums by the UN-HABITAT expert Group on slum indicators which states that, “a slum is a contiguous settlement where the inhabitants are characterized as having inadequate housing and basic services. A slum is often not recognized and addressed by the public authorities as an integral or equal part of the city” (UN-HABITAT, 2018).

2.2 Growth of Slums in the World

In recent past, rapid population growth and its concentration in cities around the world has constituted a crucial element that is affecting the long-term outlook of humanity. Besides causing the burgeoning of new kinds of slums, urbanization has led to the growth of squatter and informal housing all around the rapidly expanding cities of the developing world (Mahabir *et al.*, 2016). According to studies of Simone (2020), squatter settlement is any housing which contradicts existing legislations on the occupation of land or the construction of dwellings. The study further added that squatter settlement is a non-conventional housing, constructed by the predominantly poor rural-urban migrants, without government approval. According to UN-HABITAT (2018), urban populations have increased explosively in the past 50 years and it is estimated that this increase will continue for the next 30 years. This shall be as a result of population increase within the cities and which is brought about by the increase in the number of people born in cities, and due to increased rural to urban migrations. It is envisaged that the increased growth in population (the urban labour force) will not be met with a similar rate of creation of formal sector urban jobs and therefore, majority of these new residents will squeeze out an informal living thus, ending up in the slums (UN-HABITAT, 2018).

During the first United Nations Conference on Human Settlements in 1976, the world population was estimated to be just over 3.5 billion people. Two decades later at the second United Nations Conference on Human Settlements the world population stood at 6 billion. The world's urban population had doubled in only two decades. UN-HABITAT (2018) noted that the developing world which had been predominantly rural was rapidly turning urban. In 1950 only 18% of people in developing countries lived in cities while in 2000 the proportion was 40%, and by 2030 the developing

world is predicted to be 56% urban. It is envisaged that future urban growth in developing countries will be absorbed by urban centres, which have a high average annual urban population growth rate of 2.3%.

Davis (2017), estimated that there were more than 250,000 slums in the world. In the developed world they are noted to have been in existence since the industrial revolution and currently over 6% of the population in these countries live in slums while China and India together house 37% of the world's slums. According to Davis (2017), the five great metropolises of South Asia (Karachi, Mumbai, Delhi, Kolkata and Dhaka) are considered to be home to over 15,000 distinct slum communities with a total population of more than 20 million. UN-HABITAT (2016) reveals that over 90% of slum inhabitants are in the developing world with sub-Saharan Africa, where urbanization was seen to be virtually synonymous to slum growth, having 72% of its urban population living in slums.

In 2016, the UN-HABITAT stated that the world's highest percentages of slum-inhabitants are in Ethiopia with an amazing 99.4% of the urban population living in the slums with a similar percentage for Chad, Afghanistan (98.5%) and Nepal (92%). The poorest urban populations were noted to be Maputo and Kinshasa where two-thirds of residents earned less than the cost of their minimum required for daily nutrition. Tiware and Rao (2016) highlighted the situation in Delhi where planners complained about „slums within slums“ as squatters took over the small open spaces of the peripheral resettlement colonies from which the old urban poor were brutally removed in the mid-1970s, while in Cairo and Phnom Penh, urban inhabitants were squatting or renting space on rooftops thus creating slums in the air.

2.2.1 Nature of slums in Africa

In today's Africa, most of the cities are characterized by rising urban poverty, unsustainable environmental practices and social exclusion that have incited the slum situation. It was estimated that as at 2018, 61% of urban residents in Africa were living in slums with 54% being in the Sub-Saharan Africa and 7% in Northern Africa (Santos *et al.*, 2019). The slum incidence in Egypt at the time was considered to be 39.9% of the total urban population while that of Libya was 35.2% and 32.7% for Morocco (*ibid*). In Chad and Ethiopia virtually all the population living in cities and towns are considered to be slum household in statistical terms meaning that all individuals living under the same roof lacked one or more of the five indicators that characterize slums (Arimah, 2018).

2.2.2 Socio- Economic Conditions of Slum Communities

According to Singh *et al.* (2016), in most cases, the social status of slum inhabitants is very poor. Most slum inhabitants live in marginalized sections of society that contain poorly-built structures where access to the basic amenities of life is difficult. They are often engaged in low level economic activities such as tailoring, construction, alcohol retailing, cleaning of houses, rag keeping, auto driving, rickshaw pulling, herding of goats, sheep, fowls and some illegal activities (Singh *et al.*, 2016). This, coupled with the high illiteracy rate makes it difficult for many slum inhabitants to work in any formal employment and are therefore unable to earn any meaningful income let alone afford the basic needs of life.

According to Prasad and Prasad (2017), occupation plays a key role in the socioeconomic status of people. It affects other elements such as the living conditions of the population, development and progress. Socio-economic status depends upon the

living standard of individuals, while living standards also depend on the income of family. Socio-economic status is very useful in the improvement of the life of an individual or society. Occupation in turn depends on educational level, employment facilities and skills. Sajjad (2019), in his contribution, argues that the rate of unemployment among slum inhabitants is very high. The high unemployment rate among slum inhabitants compels them to work in daily wage employment. Such daily wage employments are mainly in the informal sector and offer them minimum returns. Major businesses operated by slum inhabitants include street vending, selling of handicrafts and petty shop keeping Sajjad (2019).

Apart from creating job insecurity, which in turn leads to financial problems, irregular employment leads to various forms of social vices and crimes. Highlighting on the ordeal that slum inhabitants undergo in the cities, Asiedu and Agyei- Mensah (2016), in their quest to examine employment of slum inhabitants noted that in Accra for instance, poor street traders are always running away from the city officials in order to avoid arrest. They further added that the challenge of working in the informal sector which is characterized by unhygienic environments and over working hours, with low incomes as compared to their counterparts working in the formal economy put the slum inhabitants in devastating conditions.

Other researchers have also dealt with the subject matter, key among them is the study by Prasad and Prasad (2017), on the living conditions and socio-economic conditions of slum residents of Mankhurd, Mumbai. The study suggests indicators relating to socio demographic characteristics including age group, occupation, educational level, cast, religion, marital status, household size, wealth quartile and age at marriage contribute to the kind of work available for slum inhabitants. Other socio-economic

indicators are used to better illustrate the socio-economic conditions of slum inhabitants, and these include demographic characteristics, literacy level, types of houses, number of people in a room, ownership pattern, drinking water facility, availability of electricity, availability of separate kitchen, types of fuels used for cooking, radio and television facility and drainage facility (Chandramouli, 2016). Based on the above indicators the study concluded that the social status and the living conditions of Chennai slum residents are very poor.

Similarly, Sen (2015) found that the socio-economic conditions of slum inhabitants in the Basirhat Municipal Area in West Bengal was found to be very poor based on characteristics such as educational level, age, male- female ratio, occupational status, family size and annual income. Education plays an important role in these characteristics of households. In spite of this, formal educational facilities are lacking in most slum communities. This has created a situation in which the majority of slum inhabitants lack formal education. Though some NGOs, and other organizations try to provide them with some form of informal education (ibid).

Danso-Wiredu (2017) conducted a research in Old Fadama, the largest slum in Ghana inhabited mainly by migrants from the rural north of the country. These migrants earn their living from business transactions within the slum itself, and they are mostly engaged in informal sectors of the economy. The study disagrees with assertions portrayed in most literature that income earned by poor urban communities are always low and nothing to write home about. The study further added that earnings of slum inhabitants in the informal sector are often meager and irregular. That notwithstanding some of them still earn more than some civil servants Danso-Wiredu (2017). Study by Teye *et al.* (2015) focus on migrants in two communities in the Greater Accra Region.

Their study suggests that significant proportion of the migrant slum residents were earning adequate incomes. The migrant slum residents were engaged in e-waste business popularly referred to as “Kaayya Boula” meaning salvage of old and wasted electrical and electronic equipment. The migrants who were mostly male from the northern part of Ghana, Niger and Nigeria mainly carried out this particular type of occupation. According to Prasad and Prasad (2017), the study indicated that despite the risks involved in the chain of e- waste activity, the business is very lucrative as it provides a daily earning of ₵15 about USD 7.50 at the time of the study, for those involved in scrap collection. Those engaged in e-waste refurbishment and happen to be higher in the labour hierarchy earned between ₵40 to 200 which is about USD 20 to USD 100 respectively.

These earnings, when compared to the salaries of both lower and middle level officers in Ghana's public service, are better than what these migrants in slum areas were earning back home before they migrated to the slums. Also, on individual cases as highlighted in the study, suggest migrants scrap dealers from Nigeria could earn as much as ₵1,000 which is about USD 500 on a good business day. When these earnings are compared to what they were earning before they migrated, it is clear that migration has improved their lives (Mahmud, 2017). Teye *et al.* (2015), also add that, though the jobs and livelihoods that slum inhabitants are engaged in are usually demeaning when compared to other high-income earners in the urban economy. They are able to save the little money they earn, which helps them to support the families they have left behind in their places of origin. It must therefore be acknowledged that, the economic activities of poor migrants in informal urban settlements show that they provide valuable services to the formal sector and are part of an urbanizing Africa.

2.3 The Impact of Slums on Growth of a Country

The growth of slums is expected to have major consequences on both humans and the environment, which are inextricably linked. On one hand, the conditions that exist in slums such as living under physical threat from natural and man-made disasters and improper housing have direct impacts on the residents (Afeadie, 2018). This is mainly due to the low capacity of slums inhabitants to recover from disasters, such as floods and earthquakes, compared with more formal communities (Afeadie, 2018). On the other hand, slum residents themselves can influence their environment due to lack of basic services, which results in contaminated soil and polluted air and waterways. There is perpetuated cycle of decline for both slum inhabitants and the environment with the possibility of externalities extending to communities beyond the slums such as floods (Patel, 2019).

Growth and expansion of slums can also affect the national and regional economy, both negatively and positively. For example, the negative aspect of slums relates to the fact that they are often burdened with high transaction costs, including increases in transportation expenditures due to inadequate infrastructure, and disease burden on urban inhabitants because of the large number of people living in slums (Fox, 2017). In addition, ambiguous property and tenancy rights can reduce the efficiency of urban land and housing markets, and may discourage investment or reduce participation in urban labour markets (Frowd, 2018). This may potentially affect a country or a region's overall economic outlook in the global economy, making it less competitive in the worldwide arena (ibid).

According to Darteh (2019), slum inhabitants subsidize the middle classes and the business world by providing a comparatively cheap source of labour. Furthermore, Darteh argued that their low economic standing and general lack of education forces them to accept low-paying jobs that may not be readily accepted by middle- and upper-class people. Other researchers such as Gruebner *et al.* (2015), tried to link the kind of job to its equivalent payment to indicate that slum inhabitants often find jobs in the informal sector, which is usually linked very closely to the needs of surrounding formal communities. Most informal sectors in African economies have significant contribution to the national GDP (ibid). Other places such as Delhi, Bangalore and Kolkata all in India, suggest that, the population depend heavily on the informal sector for supporting much of their day-to-day manufacturing activities (Chandramouli, 2016). Some of these menial jobs have the capacity to pay an amount of US\$700 million annually. For instance, Dharavi -a slum in India has the capacity to generate income to the tune of US 700 annually (ibid).

Lastly, the poor conditions that exist in slums and daily struggles that slum inhabitants face continue to be recognized as a global challenge. Many governments, regional and international non-governmental organizations (NGOs) have put in place legislation or systems recognizing the need to protect and improve the lives of slum inhabitants (UN Millennium Project, 2005). Likewise, Target 7D of the United Nations Millennium Development Goals (UN MDG) aimed to improve significantly the lives of 100 million slum inhabitants worldwide by 2020 (United Nations, 2018). This target was further advanced with Goal 1 of the UN's Sustainable Development Goals, the MDG's successor. Goal 1 aims to reduce at least by half the population of all people living in poverty in all its dimensions according to national definitions by 2030 (United Nations, 2016). Failure to take part in such global initiatives may have

negative impacts on countries that depend on others for financial and political support. These impacts highlight the critical need to manage slum populations worldwide. To achieve this goal, it is necessary to understand the factors that have led to the emergence of slums (Prasad and Prasad, 2017).

2.4 Factors influencing the Growth of Slums

A number of factors over the past decade have contributed to the increasing rate of growth of slums in many parts of the world. Some of the factors are discussed below. To begin with, location choice is one of the most important factors influencing the growth of slums. The emergence of slums has been linked to a number of socio-cultural, economic and physical factors. Cost of accommodation has been a contributory factor in determining the residence of slum inhabitants especially in Pune a place in India (Shalizi *et al.*, 2018). This determinant has an influence in their socio-economic decisions (*ibid*). This enables them to benefit from the state providing public goods in their neighborhood that will enhance their taste and preference. According to UN-HABITAT (2016), new immigrants do settle in slums since they find people with common identities in those slums. Attributes such as language, culture and skills have always influenced the choice of migrants to live in particular slums in Ghana. Research by Ahmed *et al.* (2017), has suggested that people born in slums remain there making the slum areas their immediate social structure. It is therefore difficult for them to address slum issues until external support is given to them.

With respect to physical factors affecting the location of slum inhabitants, the availability of land has been highly cited in the literature. It has been shown that slum inhabitants typically inhabit marginal locations such as river banks, steep slopes or

dumping grounds (Sietchiping, 2016). This is mainly due to the low purchasing power of slum inhabitants in formal land markets when compared with high-income groups (ibid). Slums in South America, for example, Rio de Janeiro in Brazil and Lima in Peru, are notoriously known for building on steep slopes (Fernandes *et al.*, 2017). Such locations are usually unsafe, posing a risk to human life because of the occurrence of natural disasters such as landslides (ibid). Furthermore, slums are also found both within and on the outskirts of cities (UN-HABITAT, 2018). These unique physical characteristics of slums and the complex interplay with the various socio-economic factors pertaining to their growth and persistence represent a challenging task that has yet to be holistically addressed (Galiani *et al.*, 2017).

Secondly, rural-urban migration influences the growth of slums. Within the literature, rural-urban migration not only has been the driver for the growth of cities, but also has been identified as one of the primary drivers for the growth of slums (Jha, 2016). In less developed countries, the current rapid and immense net movement of the rural population to urban spaces has intensified, this is due to push and pull factors (Prasad & Prasad, 2017). These pulls include the relative perception of better economic opportunities (ibid). Push factors include rural poverty. Such events have pushed rural inhabitants to urban areas. There has been a lack of economic growth in many of these countries and when combined has been touted for the growth and persistence of slums, especially in African countries (Fox, 2017). Whether a pull or a push factor, the net result of rural-to-urban migration is overwhelming to the urban centers in less developed countries. These countries are not equipped to support the additional population, especially when combined with the socio-economic factors faced with nowhere else to go, people turn to slums to meet their most basic housing needs (Vasudevan, 2015).

Another factor considered is poor- urban governance. Other factors relating to the upward growth of slums in many less developed countries is the use of rigid and often outdated urban planning regulations, which are typically bypassed by slum inhabitants to meet their housing needs. This is a reflection of poor urban governance (Glaeser, 2018). Many local and national governments are also unable to enforce planning regulations due to lack of resources (Agouris, *et al.*, 2016). In Cote d'Ivoire for example, high infrastructure cost and rigid building standards have led to a slow pace of development, which resulted in unaffordable housing for many large segments of the population (Patel, *et al.*, 2019). In Nigeria, official fees involved in the registration process to acquire land can be as much as 27% of the property value, presenting a challenge for slum inhabitants with limited finances. These circumstances ultimately lead to high rates of insecurity of tenure and provide conducive conditions that continue to drive the growth of slums due to poorly functioning land markets (World Bank, 2021).

Another issue in many less developed countries is the failure of governments to incorporate slum inhabitants as part of the overall planning process (Alliance, 2014). This is often due to the inability of many governments to keep abreast with urbanization due to lack of resources and corrupt governments (*ibid*). Some governments also refuse to provide urban services to slum inhabitants in fear that this will only escalate the issue of slums or lead to more established property rights, which many governments are unwilling to provide (Fox, 2017). As discussed by Opeyemi *et al.* (2016), without more established property rights for slum inhabitants, governments lack the ability to force slum residents into paying for public services and improving their homes. Opeyemi further reiterated that it is also the case that some governments simply lack the political will to address these issues. Overall, one could argue that not

enough attention has been given to the plight of slum inhabitants on the part of government, further enabling the continued growth of slums.

More also, ill-designed policies influence the growth of slums. Closely related to poor urban governance are the inappropriate policies developed by local and national governments, and regional-led organizations to curb the growth of slums (Gruebner *et al.*, 2015). During the 1950s and 1960s, a time when urbanization was viewed as positive, with large labour forces needed to fuel economic growth in cities, macro-policy intervention with respect to slums was largely ignored. This led to the widespread growth of slums (Fekade, 2020). To tackle this issue, a sites and services approach was introduced in the 1970s. This policy provided infrastructure such as road and electricity at new sites. Slum inhabitants were relocated to these sites (Fekade, 2020). Existing slums were demolished and inhabitants were expected to pay for the newly developed serviced land as well as all home construction costs (*ibid*). With limited finances, and the added challenge of competing with the greater demand by higher income groups for the same available land, slums continued to grow (Jaiyebo, 2016).

Rising material costs and labour costs resulting from labour shortage is another reason for the growth of slums as it makes developers unable to deliver affordable housing to the market (Kshetrimayum, *et al.*, 2020). The gap between growing demand for affordable urban housing and insufficient supply has encouraged the formation of slums. Whenever the demand surplus is not met by formal sectors, this gap is typically filled by an informal dwelling such as a slum.

The failure of the sites and services approach led to a new wave of thinking during the 1980s, in which slums were upgraded with improved communal infrastructure and services. This prevented the unnecessary demolition of settlements while lowering costs in many instances (Gilbert, 2018). However, the slum-upgrading approach has been criticized at four major levels: failed financial commitment, negative socio-economic impacts, non-replicability of best practices and insecurity of tenure (ibid). Legal occupational status was given to slum inhabitants in the hope that they would be more willing to improve their own circumstances. This approach relied heavily on the assumption that most slum inhabitants owned the dwelling in which they lived (Gilbert, 2018). However, this was not the case, as most slum inhabitants did not do so and this remains the plight of many slum inhabitants today (ibid).

Further on the subject matter is studies of Desai and Loftus (2018), who argues that security of land tenure adds an additional burden on slum inhabitants since landlords are more likely to increase rental prices and evict those slum inhabitants unable to pay. Moreover, Souza (2017) in his contribution suggested that the perceptions of security of tenure may vary widely from household to household. The study further reveals that slum inhabitants were more willing to invest in improving their housing conditions irrespective of land tenure status. Such finding goes a long way to challenge the notion that security of land tenure alone would be enough to motivate slum inhabitants to improve their own living conditions.

The most recent approach, at least from a macro-policy viewpoint, is to reduce the growth of slums in cities without action plan, introduced during the 2000s. This approach forms part of the MDG, to improve the lives of 100 million slum inhabitants by 2020 (UN-HABITAT, 2016). Central to this idea is the understanding that both

poverty and slums are interrelated, and with any attempt to fix one, the other has to be considered (ibid). However, several issues have been identified with the Cities without Slums action plan. These include little attention being given to other important poverty-related variables such as political instability, natural disasters and the non-comparability of metrics because of issues with data in many countries and the unique characteristics of slums (Saith, 2019). Furthermore, as no metrics are available for monitoring newly emerging slums, it has been suggested that the goal of improving the lives of at least 100 million slum inhabitants by 2020 is far too modest to generate a meaningful reduction in slums globally (Sietchiping, 2016). Finally, the key terms used for measuring the improvement of slums includes access to the area and improved conditions of the area. However, the use of the two key words to better define slums has been disputed by studies of Cohen (2014), suggesting that it is far too abstract for capturing and monitoring change rigorously.

As this section has discussed, the continued failure of implemented slum policies has, in reality, facilitated the propagation of slums. One could argue that this is due to the inability of governments to understand fully the needs of slum inhabitants and incorporate their needs when developing appropriate policies (Fekade, 2020). In addition, the location decisions of slum inhabitants, rural-urban migration and poor urban governance in general are all interrelated factors that have contributed to the growth of slums. Taken holistically, these various factors are all important for designing more appropriate slum policies. Failure to do so will only lead to the continued growth and persistence of slums (Khan *et al.*, 2017). However, to grapple fully with the problems discussed, it would be argued that, one needs also to understand the various operational challenges encountered when trying to address the issue of slums, which we turn to next.

2.5 Classification of Slum Challenges

Slums spread in different ways and vary from country to country. Two major types have been identified. These are slums of hope or progressing settlements and slums of despair or declining neighborhoods. The first classification identified is made of “old” city center slums and “new” slum estates, whilst the latter is made of squatter settlements and semi-legal sub-divisions (UN-HABITAT, 2018). These two major slum settlements are sub divided into four categories. These are city center/inner city slums, slum estates, squatter settlements and illegal sub divisions which differ in terms of their formation, condition and extent of service or deprivation (Davis, 2017). In Ghana, Afrane (2018), classifies slums as indigenous communities with traditional homes and without permits, migrant communities without permits and finally the newly emerging squatters with no land titles and poor housing quality. Afrane study was found to be similar to that of UN-HABITAT’s and Global Development Research Center (2013) categorization because they have similar features. The GDRC suggest that slums are the highly congested urban areas marked by deteriorated unauthorized insanitary buildings, poverty and social disorganization. Other researchers such as Patel *et al.* (2019) suggest other definitions of slum to be the environment of an area occupied by inhabitants who are mostly disadvantaged.

The increasing rate at which Ghanaian cities are developing has created spatial problems, practically in all aspects of human life (Benard, 2019). One of the most pressing problems is undoubtedly the shortage of good accommodation for people, especially the urban poor, that affects these rapidly growing cities (Ministry of Works & Housing, 2017). Housing is a basic need, an essential part of the infrastructure of a productive society (ibid). It serves as protection for occupants, provides employment and is a way by which we can produce, consume and accumulate capital. Shelter

ranks next to food and in terms of quality, it indicates one's personality in society (Ministry of Works and Housing, 2017).

2.6 Housing Supply

Supply of housing is one of the biggest challenges slum inhabitants and government face in Ghana. According to Afeadie (2018), one of the important factors that subvert owning a building is the lack of secure and transparent access to land title. Land ownership and administration is reported to be very complex in Ghana with the formal modern system attempting to function in conjunction with the traditional system whereby local chiefs are mostly permitted to allocate lands (World Bank, 2021). Asare and Whitehead (2016), also note that because of discrepancies and inefficiencies in land administration in Ghana, there is insecurity in land title and land tenure which disturbs the land market. This means that it cannot operate effectively to either enable the development of a formal market for mortgage or to act as security for mortgage finance. There has also been a sharp rise in building materials over the last few years more than doubling over a period of just two years making prices of cement blocks and roofing materials all shoot up (Asare & Whitehead, 2016).

According to UN- HABITAT (2018), the Ghanaian market is flooded with cheap imported building materials which may not be as durable as home-produced equivalents and which weaken the market share of local manufacturing industries. Local building materials, such as burnt clay bricks, pozzolana cement and compressed earth could reduce housing cost by 20%.

The issue of home financing has also been a major challenge affecting the supply of housing in Accra. The private real estate developers struggle to get loans from banks to put up mass houses (Asare & Whitehead, 2016). Real estate companies sometimes

have to partner with foreign investors who assess the viability of their investments. This makes the government to venture into the creation of the affordable housing project in order to reduce the cost of housing needs. Yet, consumers still cannot afford the project, notwithstanding the provision of infrastructure like electricity, good roads and water (ibid). Research conducted by the UN showed that Ghanaians do not borrow money to build houses, they borrow for business and use profits to build (UN HABITAT, 2018).

Although there is a conventional formal sector finance system, notably through Home Finance Company, which was set up ostensibly to serve ordinary Ghanaian households, currently, however, the banks only deal with the few rich people and impose high down-payment and high interest rates (ibid).

2.7 Policy Responses

The housing problem in many third world countries is said to be part of the general development problem. Thus, the seriousness of urban housing conditions largely results from a policy that encourages mass rural migration to a few urban centers (UN HABITAT, 2016). According to Majale (2014), urban growth has been accelerating for the last few decades and shows no sign of stopping in the foreseeable future. Attempts by many governments to control urban growth have proved expensive and inefficient and are possibly incompatible with the principle of freedom of movement enshrined in most democratic constitutions (ibid). The World Bank (2021), notes that it is unlikely that the housing problem can ever be solved satisfactorily so long as population continues to grow and with the excessive size of cities. In broad terms, Ghana's housing policy has been branded as fragmented and piece-meal, and not comprehensive enough (GoG/MWRWH, 2017).

A research conducted by Nsiah-Gyabaah (2009) revealed that the late 1950s to the early- 1980s marked the period which can be described as active and direct involvement of the state in the provision of mass housing. Two state institutions were set up, that is the State Housing Corporation (SHC) and the Tema Development Corporation (TDC) to provide housing units. While the TDC was recognized for the purpose of developing houses for the industrial city of Tema as part of a major industrialization drive, the SHC was formed to develop residential units in all the regions of Ghana. In addition, state-owned financial institutions such as the Bank for Housing and Construction (BHC) and the First Ghana Building Society were also time-honored to provide financial support for public housing (Nsiah-Gyabaah, 2009). This active involvement of the state in housing provision as explained by Nsiah-Gyabaah continued through the 1970s under the various military regimes of the time. Special mention can be made of the construction of (low-cost) houses in district and regional administrative capitals under the Supreme Military Council (SMC) regime of General I.K. Acheampong (ibid). The impact of the state provision was largely due to the period's low level of urbanization.

However, deepening poor economic conditions of the country, especially in the late 1970s, due to economic mismanagement and political instability, resources allocated to public housing agencies ran dry (Nsiah-Gyabaah, 2009). These government housing agencies consequently turned out to be a near drain on public wealth and incapable of pursuing their fundamental mandate of public housing provision (ibid). The year 1985 marked the peak of the period and was still characterized with delivery deficits of 250,000 units. It can therefore be deduced from these that the schemes did not meet the national objectives (ibid). A National Housing Policy and Action Plan 1987-1990 then emerged as government's effort to boost the supply of housing units

(Nsiah-Gyabaah, 2009). After appointing a committee on 2nd June 1986, government went on to increase the rate of developing housing units and dealt with bureaucratic processes for land acquisition and ownership. Government encouraged maintenance of existing units, promoted the construction of more affordable housing, improved government program and encouraged an expanded role of the private sector (ibid).

According to Nsiah-Gyabaah, (2009), the government at that time was undertaking affordable housing schemes in the nation's capital Accra, to deliver housing units for the urban inhabitants so as to ease the housing delivery deficit. The aim of the program was to build 100,000 housing units for the middle- and low-income groups through public-private partnership. According to Majale (2014), a proper regulatory framework will have a significant bearing on urban development in general and in particular on planning, zoning, land use and plot development, space standards and infrastructure services. Majale went on to state that a good framework is also one of the few instruments available to governments to influence urban land and housing market and the investment decisions of private-sector developers. It is however incomplete to ignore the efforts of the private sector as far as urban housing supply is concerned, since government liberalized the supply of housing schemes to include private real estate developers to also help supplement the growing deficit (ibid).

According to Majale (2014), a number of policy documents on housing since the mid-1980s have emphasized strongly the role of the private sector in housing delivery. Although there has been no national housing policy guiding the activities of some private real estate developers, the private sector-oriented policies concerning housing has been under the umbrella of the Ghana Real Estate Developers Association (Khan & Kraemer, 2014). The members of the association have been using international

ethics of building codes over the years (ibid). Khan and Kraemer (2014), further added that the largest number of registered property developers in the country is found in the Greater Accra Region, mainly the Accra and Tema Metropolitan areas. These constitute not less than 70% of the total number of developers in the country under the association.

2.8 Coping Strategies by Slum Inhabitants

Several difficulties exist in the slum areas and a lot of strategies are employed to cope with the challenges some of which includes, the practice of child labour, this has also been witnessed by Jaiyebo (2016), who noted that most women seem to be engaging their children in income generating activities to help generate additional income for the households. Subsequently, savings and investments prove to be more formal types of coping mechanism (Raqeeb, 2015). This strategy for survival was the main method utilized by the households that had their livelihood activities within the service sector.

Families also cope by selling their valuable properties and also include their children in income generation activities (Raqeeb, 2015). Most inhabitants also rely on borrowing and remittances from friends and family members who are mostly formal government workers relying on saving and investment. The chief coping mechanism for slum inhabitants is income diversification through the involvement in what they termed as “supplementary occupation”. This mechanism is mostly utilized by those inhabitants whose livelihood strategies dwelled within the secondary sector (ibid). It is pertinent noting that almost all supplementary occupations involved in by the slum inhabitants included some form of trading activity. Moreover, in deciding to choose supplementary occupations; the demand for products in order to estimate returns and the essential need to invest are the main factors individuals consider (Raqeeb, 2015).

2.9 Theoretical Underpinning of the Study

The study utilizes the Turner Theory (1976). John F. Turner was one of the first to develop a theory on the phenomenon of slums and squatter settlements drawing conclusion from Latin America. Turner describes two ways to define housing, housing as a noun and housing as a verb. Housing as a noun refers to it as the physical structures: The house as a product or commodity. Housing as a verb focuses on the universal activity of housing.

Turner stresses on the adverse effects side of housing rather than on the material side. Turner observes that a squatter settlement can be considered as housing not in terms of what it is but in terms of what the effects it has on inhabitants. This observation becomes important in developing countries where resources, especially finance, are extremely limited and the inhabitants are in dire poverty. Turner (1976), indicates that the important thing about housing is not “what it is but what it does in people’s lives and advocates that the value of slums be measured not in terms of how well it conforms to the image of the inhabitants’ standards of living”. For example, poor or good sanitary conditions, overcrowding leading to disease contamination, pollution of water sources, flooding just to mention but a few. Tisong (2018), citing Turner (1976), notes that for slum households whose building activities are not regulated pertaining to criteria, households, if given the autonomy to design, build, and manage the maintenance process on their own, prospective households will be able to make their own arrangements for accommodation.

Turner (1976) deduces his theory based on some triggering causes leading to slum development. Such causes include but not limited to the following, urbanization, house and land related issues, governance and policy related issue and social related

problems. By contrasting housing that emanate from a decentralized decision process where the occupants have the authority and that which results from a process where a large centralized authority controls major decisions. Turner substantiates his theory by observing the self-help housing process in slums and squatter settlements and that of public housing programmes which produce large scale standardization (Turner, 1976). In conclusion, Turner points out that, when tenure of property is secured and individual households have the authority to control major decisions regarding their accommodation arrangements with respect to standards, location and tenure. Both the process and the environment produced are economically viable as well as will incite the wellbeing of the residents which are necessary conditions to propel an orderly urban growth (Turner, 1967).

In many cities, slums evolve from sparsely settled rural areas and settlements into urban slum neighbourhoods and develop further over time into densely packed and physically saturated neighborhoods (Darteh, 2019). The framework shows incremental and unstructured type of slum development process. However, other types of development are also possible. Slum developments may happen at the expense of prime agricultural land, with the destruction of natural landscape or public open space (ibid). Every slum passes through various stages during its development. This process includes formation of various nuclei, expansion of older nuclei and intensification of the oldest (Tisong, 2018). In this study, three stages of slum development are considered, namely, infancy, consolidation and saturation stages.

Infancy is the initial occupancy stage where patches of vacant land like on steep sided land, swamps, near river banks, hazardous area, conserved area, etc. become available to the slum inhabitants (Tisong, 2018). They can also occur on suitable lands. Also,

there is the possibility of slum formation decaying from formal areas. Due to the job insecurity, slum inhabitants prefer to live on hazardous areas than to live on suitable land at faraway places (ibid). In this stage public amenities and services are quite inadequate, for example, supply of water is the main problem. According to Tisong (2018), consolidation stage is the intermediate stage between infancy and saturation. There is fast outward expansion and the available land will be reduced by filling up additional building. Saturation stage is the stage at which the expansion stops as the vacant lands gets filled up. At this stage overcrowding is highest and lowers the living standards of slum inhabitants (ibid).

Analysis of the location of slums is a typical variable in understanding how slum develops. This is because factors such as the location of city center and availability of marginal lands may be important factors for slum inhabitants (Seith, 2019). Hence the study of slum location shows both the spatial pattern of slums and process of physical change of slum development stages. Generally, the speed of slum growth is not uniform (ibid). In the study made by Seith (2019), spatial change in slum area is the result of change in construction materials, change in socio-economic state and tenure status.

There are many factors that contribute to the continued formation and expansion of slums. Among these are rapid rural-to-urban migration, policy failure, increasing urban poverty and inequality, population growth and globalization (Tisong, 2018). While more people are migrating from rural areas to towns, and cities, urban areas are not expanding enough. There are not enough affordable houses, and municipalities are not being able to provide enough accommodation. Therefore, the immigrants are forced to occupy illegal settlements on marginal lands at the urban periphery, along

railways and riversides, or on other hazardous areas that is not suitable for development leading to expansion of slums (ibid). Not only rural-urban migration, urbanization or population growth that is the cause of slum formation, but also the failure of governments, failed policies, corruption, inappropriate regulation, dysfunctional land markers and unresponsive financial systems to provide low-income people with essential public infrastructure and services (ibid).

The result of lack of basic public services and facilities to sustain slum inhabitants exposed them to many problems related to health. For instance, water-borne disease, such as malaria, cholera, typhoid, malnutrition, and child mortality are common in slum settlements (Darteh, 2019). There are also wide range of social problems and psychological burdens on slum dwellers which often leads to homelessness and social exclusion. In addition, slum inhabitants are prone to polluted hazardous areas, for example next to toxic plants, on areas threatened by landslide or waste disposal areas, flood, and environmental hazards and they are vulnerable to risks (ibid).

2.10 Theoretical Framework

This sub-section highlights the causes and effects of slum formation in a broader context. The theoretical framework gives a quick overview of the inter-relations between factors driving the growth of slums and effects of slum dwelling. With Figure 2.1 in view, the diagram has four main headings guiding the study. The headings include, factors driving the growth of slums, stages of slum formation, effects of slum dwelling and coping strategies. Figure 2.1 is a bottom-up diagram.

To begin with, figure 2.1 has its first step being factors driving the growth of slums. Urbanization is one of the major driving factors of slum growth. Migration, which is the movement of people from one geographical area to another mostly cause slum

development. Population growth also drives slum formation, that is, the increase in the number of people in a population or dispersed group. When population increases without corresponding increase in infrastructure people are forced to create slums. Inadequate affordable houses in an area also drive the formation of slums, thus inhabitants of areas where the population is increasing without corresponding affordable houses inhabitants will create slums just to have shelter. High land value in most areas also causes the growth of slums. Greater value is attached to lands in most areas thereby making it difficult for people to build even if they can afford to build houses. Land owners prefer to release their lands for different activities that may bring them much money than building, thereby creating slums in the towns and cities (Benard, 2019). Another factor driving the growth of slums is ineffective policies (ill-designed policies). The policies developed by local and national governments, and regional-led organizations to curb the growth of slums are not effective. In recent times where urbanization is viewed as positive, with large labour forces needed to fuel economic growth in cities, policy interventions with respect to slums is largely ignored, leading to the widespread growth of slums (Darteh, 2019).

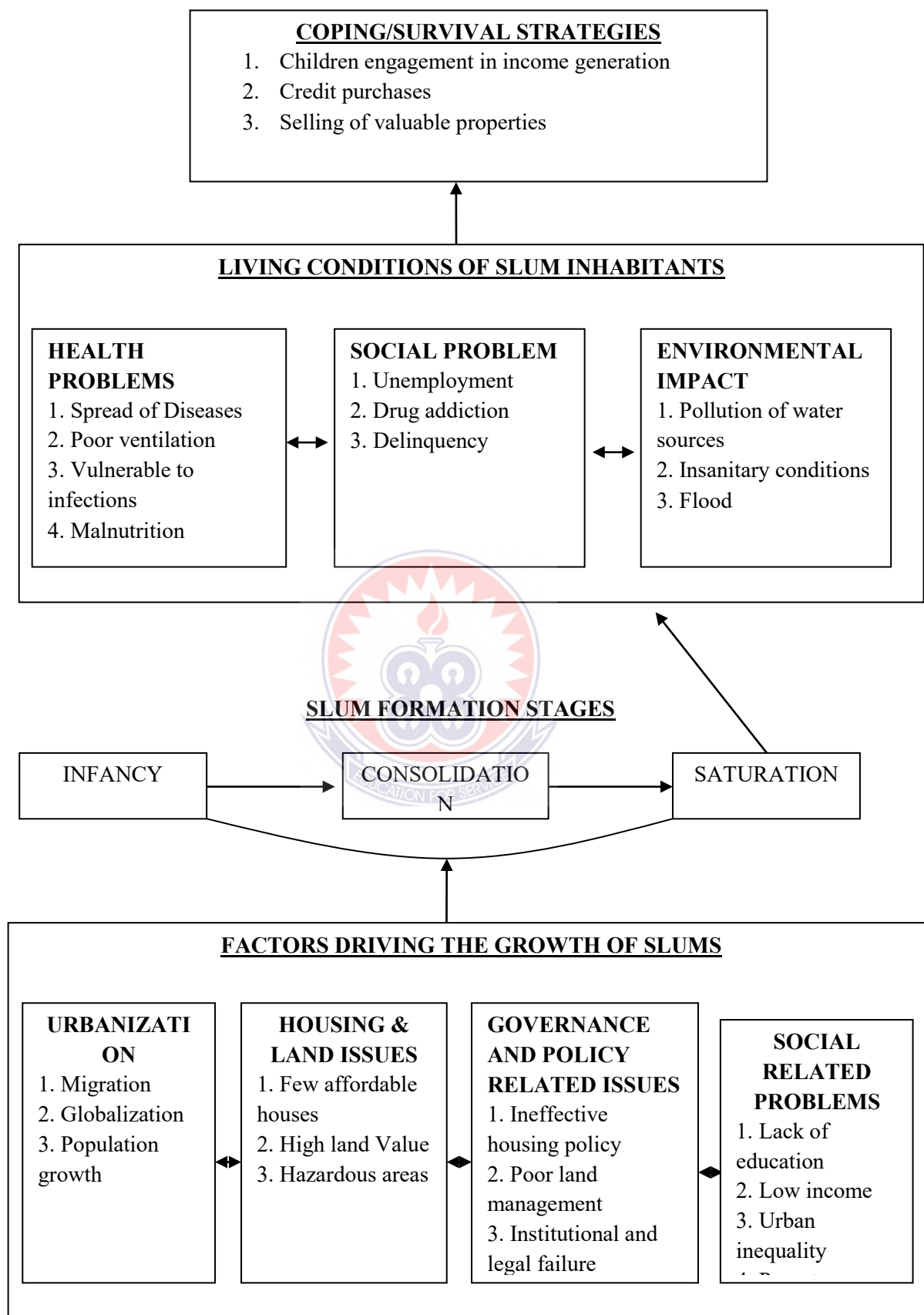
The second stage in figure 2.1 is the slum development stages. This study utilizes Tisong's concept of slum formation. Three stages have been identified, namely, infancy, consolidation and saturation (Tisong, 2018). Infancy is the initial occupancy stage where patches of vacant lands like, swamps, near river banks, hazardous areas, and conserved areas become available for the slum inhabitants to occupy. Consolidation stage is the intermediate stage between infancy and saturation. There is fast outward expansion and the available land will be reduced by filling up with additional building. „Saturation“ which is the last stage is the stage at which the

expansion stops as the vacant lands gets filled up. At this stage overcrowding is highest and lowers the living standards of slum inhabitants (ibid).

The third stage of the diagram is on the effects of slums on slum inhabitants. Slum inhabitants face numerous challenges which include health, societal and environmental challenges. In relation to health, sicknesses such as malaria cholera, typhoid, and malnutrition are common in slum settlements. There are also wide range of social problems and psychological burdens on slum inhabitants which often leads to homelessness and social exclusion (Turner, 1976). Some of them include unemployment, delinquency and drug addiction. Slum inhabitants are prone to polluted environmental hazardous areas, for instance next to toxic plants, on areas threatened by landslide or waste disposal areas, flood, and they are vulnerable to risks (ibid).

The last stage in the diagram is coping/survival strategies by slum inhabitants. Several difficulties exist in the slum areas and a lot of strategies are employed to cope with these challenges which include, women engaging their under-age children in income generating activities to help generate additional income for the households (Raqeeb, 2015). Savings and investments prove to be more formal types of coping mechanism engaged in by the slum inhabitants. This strategy for survival is the main method utilized by the households that had their livelihood activities within the service sector (Raqeeb, 2015). Slum inhabitants also cope by selling their valuable properties. Most inhabitants also rely on borrowing and remittances from friends and family members. Another coping mechanism for slum inhabitants is income diversification. This mechanism is mostly utilized by those inhabitants whose livelihood strategies dwelled within the secondary sector (Raqeeb, 2015).

Figure 2.1: Theoretical Framework



Source: Adapted from Turner (1976)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter illustrates how the study was conducted. It consists of the research design, the methods of data collection that were employed and the instruments used in the data collection and the analyses of the data. It also considers the profile of the study area. In brief, this chapter outlines the overall methodological framework of the study.

3.1 Research Methodology

This section consists of the research paradigm, the approach used in the study, the research design, the methods of data collection that were employed and the instruments used in the data collection and the analyses of the data.

3.1.1 Research Paradigm

The foundations on which research are conducted are on their ontological and epistemological positions. In this regard, Bryman (2016), argues that research methods are inevitably rooted in epistemology and ontology. Epistemology is regarded as a theory of knowledge. It is concerned with what is (or should be) regarded as accepted knowledge in a discipline (Bryman, 2016). Bryman argues further that one of the most crucial aspects of epistemology is the question of whether or not a natural science model of the research process is suitable for the study of the social world.

Ontology is concerned with the "nature of social entities" thus whether social entities should be considered objective or constructive (Bryman, 2016). Again, to Bryman, the crucial question of ontology is whether social entities can and should be

considered objective. Entities that have a reality external to social actors (objectivism), or whether social entities can and should be considered social constructions built up from the perception and actions of social actors (constructivism).

From the discussion above, this study is grounded on Pragmatism. According to studies of Selcuk (2018), pragmatism is the belief in realism and idealism or the practical nature of philosophical phenomena in most surveys.

3.1.2 Research Approach

The approach that is used in this study is mixed method. Mixed method is a methodology for conducting research that involves collecting, analyzing and integrating quantitative (e.g., experiments and surveys) and qualitative (e.g., focus groups discussions, interviews) data (Selcuk, 2018). According to Selcuk, the use of the mixed method reduces the weaknesses of each single method that would have been used separately. The study therefore used mixed method of data collection to satisfy the research objectives. Mixing means the use of both qualitative and quantitative methods in the conduct of the research. This makes the study use limited period of time to complete the study and the understanding of pertinent issues of the study. The study with the support of the mixed method becomes pragmatic in nature.

3.1.3 Research Design

A research design is the total plan of a scientific study. It outlines how a study is conducted with the minimum difficulties or refers to the overall master plan that has the ability to link different parts of the study in a uniform manner (Selcuk, 2018). Explanatory Sequential is used to carry out the study. An explanatory sequential design according to Creswell (2016) consist of first collecting quantitative data and

then collecting qualitative data to help explain or elaborate on the quantitative results. The rationale for this approach is that the quantitative data and results provide a general picture of the research problem; more analysis, specifically through qualitative data collection is needed to refine, extend or explain the general picture.

According to Creswell (2016), a research design is the overall plan for connecting the conceptual research problems to the pertinent and achievable empirical research. It is an enquiry which provides specific direction for procedures in research. The design that is used had the capacity for observation by the researcher as it enables empirical understanding of the status quo within a particular phenomenon under investigation. The design also considers descriptive behaviors of different respondents without being biased, and is very cost effective to practice. The design being considered is therefore the most appropriate for the study, since the study examined facts.

3.1.4 Study Population and Unit of Analysis

Population is a group of people, who have one or more common characteristics, on which the research study envisage (Selcuk, 2018). Wa Municipality has an overall population of about 107,214 people. There are 16,516 households in the municipality of which 8,805 live in slum settlements within the Municipality (WMA, 2010). A projected total population of the Municipality is 126,727 using 2010 as the base year to 2022. The target population for this study covers all the slum inhabitants in the municipality. There are ten (10) slum communities in Wa municipality. Most of the slum communities are located close to the Central Business District (CBD) of the Municipality and have the characteristics of slums such as poor living standards, lack of basic services-inadequate provision of sanitation facilities, water and so on. A

projected household figure is calculated to be 10, 404 using 2010 as the base year to 2022.

3.1.5 Sample and Sampling Technique

The part of the population selected to represent the entire population is referred to as the sample. Sampling then is the process of selecting the individual to represent the population, while sampling technique is the method use for selecting the sample (Selcuk, 2018). The study uses a multi-stage sampling approach to undertake the study with easy, meaning different research techniques are used in the conduct of the study. Within the multi-stage, stratified sampling was used to get the number of households to contact in each community while convenient sampling was used to get the households.

The study employs stratified sampling. Stratified sampling is a method of sampling that involves the division of a population into smaller sub-groups known as strata. The procedures this study adopts include, first contacting the representative of the study areas, dividing the whole population into smaller sections and finally getting the slum communities.

According to Selcuk (2018), convenient sampling is the type of sampling which focuses on gaining information from participants who are convenient for the researcher to access. The selection of the sample was done conveniently by the selection of the households' heads that were available and ready to respond to the questions in each of the slum communities. For example, in the Dondoli community 95 households were contacted, those that were available and ready to respond were contacted.

With respect to this study, purposive sampling technique was adopted for the collection of qualitative data. The purposive sampling is used to get the key informants (planning officer and the assembly members of each of the communities). According to Creswell (2016), purposive sampling makes it easy for the selection of respondents or objects with much knowledge on the objective or phenomena. Objects that have direct bearing on the matter under investigations are easily identified. Studies of Selcuk (2018), indicates that purposive sampling allows for the intentional selection of a particular technique for a study.

3.1.6 Sample Size Determination

Wa Municipality has ten (10) slum communities and 8,805 households live in these slum settlements within the municipality (WMA, 2010). A projected household figure is calculated to be 10, 404 using 2010 as the base year to 2022. Households in the ten (10) slum communities in the Wa Municipality constituted the sample frame for the study. In order to have a fair representative sample size, the sample size is determined at a 95% confidence level (at a 0.05 significance level). 10,404 (projected figure) of the total number of households living in the ten slum areas are used for the study.

Projected Figure Calculation

$$P_n = P_o (1+i)^n$$

P_o = Number of households in the Baseline year

P_n = number of households under consideration,

i = growth rate, 1.4%

n = number of years from base year to year of consideration

$$P_n = 8,805(1+0.014)^{12}$$

$$P_n = 8,805(1.014)^{12}$$

$$P_n = 8,805(1.182)$$

$$P_n = \underline{10,403.6} \approx \underline{10,404}$$

Projected Figures To 2022

$$\begin{aligned} \text{E.g., Dondoli} &= 2,175(1+0.014)^{12} = 2,175(1.014)^{12} = 2,175(1.182) \\ &= 2,570.85 \approx \underline{2,571} \end{aligned}$$

Table 3.1: Projected Number of Households in slum communities in Wa to 2022

S/N	Community	Number Of Households
1	Dondoli	2571
2	Tagrayiri	639
3	Nayiri	1427
4	Sandamuni	1273
5	Tamarmuni	1067
6	Jangbayiri	421
7	Nakori	150
8	BusaYikori	254
9	Limanyiri	2425
10	Kpogu	180
Total		10,407

Source: Author's construct (2022)

The aim of the sample size is to select part of the population from which information will be gotten to make conclusions about the whole population.

A statistical formula is used.

Where **n** is the sample size, **N** is the population size or sample frame and (**e**) is the level of precision (**5%**) with confidence level of **95%**.

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

$$n = 10,404 / [1 + 10,404 (0.05)^2]$$

$$n = 10,404 / [1 + 10,404 * 0.0025]$$

$$n = 10,404 / 27.01$$

$$n = 385.19 \approx \underline{\underline{385}}$$

3.1.7 Sample Size Distribution

The sample size of each of the ten (10) study areas is determined using the proportional method of sample size distribution as follows (see, Table 3.2), based on projected figures.

$$C_p = \frac{\text{Number of households in a community}}{\text{Total number of households}} \times n$$

Total number of households

C_p refers to community proportion **n** refers to sample size

$$(2571 * 385) / 10,404$$

$$\text{E.g., Dondoli} = 95.13985 \approx \underline{\underline{95}}$$

Table 3.2: Sample Size Distribution of the slum communities in Wa

Name of slum settlement	Number of Households (HH)	Sample Size
Dondoli	2571	95
Tagrayiri	639	24
Nayiri	1427	53
Sandamuni	1273	47
Tamarmuni	1067	39
Jangbayiri	421	16
NakoriYiri	150	6
BusaYikori	254	9
Limanyiri	2425	90
Kpogu	180	7
Total	10,407	386

Source: Author's construct (2022)

3.1.8 Sources of Data

The study used both primary and secondary data collection methods to collect the data. Primary data sources included questionnaires, photographs, oral interviews and observation. Secondary data sources included journals, other related research thesis, books, papers and other literature relevant to the study.

3.1.9 Data Collection Instruments

According to Creswell (2016), data collection is defined as the collection and measurement of information on concerned variables that would support an investigation in a systematic manner by answering the study objectives and research questions. To be able to evaluate measurement outcomes, interview, observation and questionnaires were used to gather the data.

➤ Questionnaire

The main instrument that was employed to collect data for the research was a questionnaire. A questionnaire is defined as a research instrument that consists of a set of questions or other types of prompts that aims to collect information from a respondent (Creswell, 2016). The two most common types of questionnaires are close-ended questions and open-ended questions. Respondents replied to them on their own free will without any influence from another person. The researcher had a helping hand from two research assistants. The researcher took them through a brief training on how to administer the questionnaires and gather data.

➤ Interview Guide

One of the data collections tools that was employed in this study is semi-structured interviews with the municipal planning officer and assembly members of the communities. Interview is a face-to-face meeting between a questioner and a

respondent. It is often used in collecting data for descriptive studies, action research and correlation studies. The main task in interviewing is to understand the meaning of what the interviewee says.

➤ **Observation Guide/ Checklist**

This was used in order to get additional information from the field. The physical environment of the households was observed and the information on their physical status was noted. This includes all forms of social amenities e.g., water provision, sewerage, electricity and road network among others. The process was guided using observation guide or a checklist during a transect walk through the study areas. Pictures and field notes were taken.

3.1.10 Data Processing and Analysis

Data that was quantitatively gathered from the questionnaires was coded, inputted and analyzed with a statistical approach with Statistical Packages for Social Sciences (SPSS) version 24 and descriptive results were also generated. Inferential statistics tool known as Relative Importance Index (RII) was used to analyze the quantitative data. Relative Importance Index was used by the study to ascertain the most important factors or predictors of slums in the study area. The Relative Importance Index is calculated for each of the statements using the formulae below

$$\text{Relative Importance Index} = \frac{4n_4 + 3n_3 + 2n_2 + 1n_1}{A * N} \text{ where;}$$

n_4 = number of the respondent for “none”

n_3 = number of the respondent for “Low”

n_2 = number of the respondent for “moderate”

n_1 = number of the respondent for “high”

A = highest weight (4)

N = total number of respondents (386)

With regards to objective two, the same formulae was also used with the following codes;

n_4 = number of the respondent for “very good”

n_3 = number of the respondent for “good”

n_2 = number of the respondent for “poor”

n_1 = number of the respondent for “very poor”

A = highest weight (4)

N = total number of respondents (386)

In this study, the results were presented using tables. Thematic analysis was also used to analyze the qualitative data. Thematic analysis is a method for identifying, analyzing, and interpreting patterns of meaning within qualitative data (Braun & Clarke, 2017). Thematic analysis provides accessible and systematic procedures for generating codes and themes from qualitative data (ibid). The data was transcribed and then analyzed.

3.1.11 Validity and Reliability

Validity and reliability are indispensable to the efficiency of any data-collection procedure. Validity is defined as the appropriateness, meaningfulness, and usefulness of specific inferences made from the instrument or procedure results. Kahn (2018), stated that, reliability is a needed condition for validity but not adequate. A test must be reliable for it to be valid, but a test could be reliable and still not be valid. The reliability of a research instrument concerns the extent to which the instrument yields the same results when repeated on several occasions (ibid). To ensure the validity of the questions, the preliminary questionnaire was given to course mates and other

colleagues to read through and offer suggestions for revision. Appropriate suggestions were given, and the questionnaire was restructured accordingly. It was also viewed by other experienced researchers who went through and ensured that the necessary suggestions and corrections are done. Pre-testing of the instruments was done before its delivery to the participants. The piloting was done with a small slum community known as Tampaala located in the Jirapa Municipality, which is not part of the study.

3.1.12 Ethical Considerations

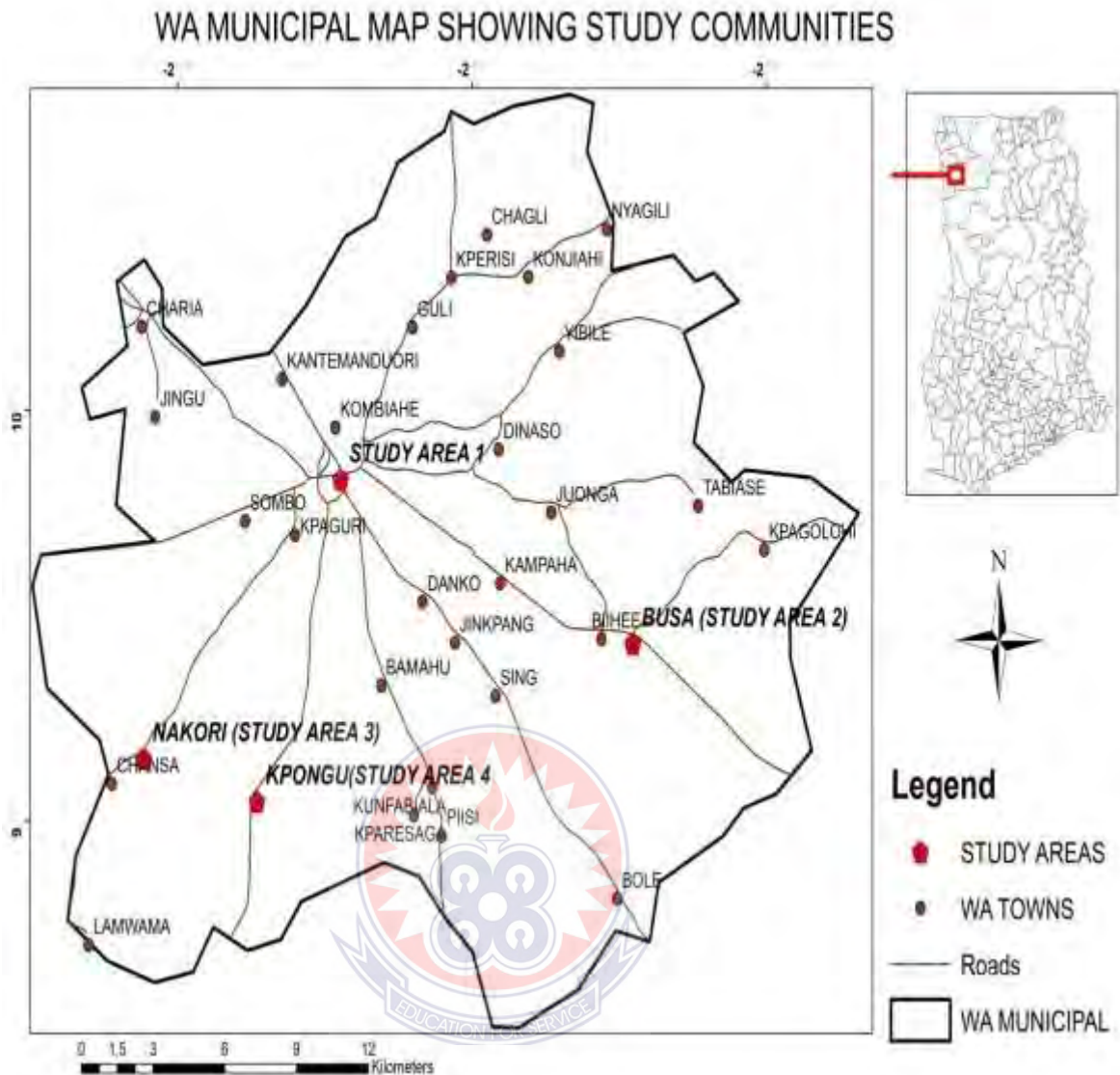
The data collection methods gave chance to the researcher to carefully gather information regarding the area under study. This was possible because some ethical issues were taken into consideration. The data collection started after the researcher was introduced with a letter from the Geography Education Department at the University of Education, Winneba to the imam, assembly members and opinion leaders before the field work was embarked on. The participants were informed about the purpose of the project and their informed consent was sought before participation. Their identity as well as the households they belong to were kept in strict confidentiality, thus meeting the requirements of the code of ethics of the university. Finally, all the information that was collected in the course of this thesis was used only for the purposes of the study, and is kept confidential. During the administration of the questionnaires and interview schedules, the researcher identified himself to the respondents to avoid impersonation. The purpose of the study and the nature of the questionnaires and interview schedule were made known to the slum inhabitants. Participation in the study was based on the willingness of respondents. Anonymity of respondents was respected. During the field work, all forms of identification including names and telephone numbers of respondents were avoided.

3.2 Study Setting

The Wa Municipality is one of the nine administrative areas (District Assemblies) that make up the Upper West Region of Ghana. It has administrative boundaries with the Nadowli District Assembly to the north, the Wa-East District Assembly to the east and south and the Wa West District Assembly to the west. It lies within latitudes 9.822109° N to 10.100129° N and longitudes -2.460505° W to -2.439041° W. Wa Municipality has its capital as Wa which also double as the regional capital. The Municipality has a landmass area of approximately 234.74 km^2 , which is almost 6.4% of the region (GSS, 2012).

Most of the slum settlements in the Municipality are located in the central part of the Municipality close to the Central Business District (CBD). Thus, eight slum communities are within the Central Business District. Kpogu is also a slum locality located at the southern part, and Busa to the eastern part of the Municipality. The Wa Municipality is one of the fast-growing municipalities in Ghana, and as such slums are developing every day.

Figure 3.1 presents a map depicting the Wa Municipality boundaries, major communities and the slum settlements.



Source: Authors own construct (2022)

Figure 3.1: Map of Wa Municipality

3.2.1 Economic Activities

Despite the fact that the Municipality is the commercial hub of the region, agriculture still remains the main economic practice of the people. Cultivation of crops and rearing of animals still remains the largest contributor to the local economy and it employs about 70% of the active population (Raqeeb, 2015). The staple crops grown in the municipality include millet, sorghum, maize, rice, cowpea, and groundnut but mostly cultivated on subsistence basis (ibid). Notwithstanding the above, soybeans,

groundnuts, bambara beans and so on are produced as cash crops. The economic trees within the municipality include teak, mango, shea, baobab and dawadawa among others. It has been reported by the Wa Municipal Assembly that, about 70% of the inhabitants of the Wa municipality are in agriculture sector. According to the Wa Municipal Assembly (2012), agriculture is the dominant livelihood activity in the Wa Municipality, followed by commerce which constitutes about 9% whilst the industrial sector consists of about 3%. Some other key sectors of the local economy are energy, communication, tourism and transportation. Inhabitants of the slum settlements of the Municipality have their livelihoods in the agricultural, commercial and industrial sectors. Less than 5% of the inhabitants of the Municipality are engaged in communication, tourism and transport sectors (ibid).

The service sector is second to agriculture in terms of employment in the Wa Municipality. The main activities are retailing, transport, finance, public service among others and all constitute 9% (WMA, 2012). The Wa Municipality is currently the regional commercial center. The market facilities (shops), however are not in good shape even though currently works are ongoing to give the shops a face lift. Shopping amenities and facilities lack space and trading on the street is common. One-stop shopping centers and shopping malls are just but a few in the Municipality.

According to Raqeeb (2015), the industries in the Municipality are small scale and are categorized into agro processing, wood, textile, metal, glass, leather and hide, clay/sand/stone, art and craft. Majority of the enterprises in the Municipality are owned and operated by sole proprietors Raqeeb (2015). This confines the capacity and aptitude of enterprises to secure the necessary funds for growth and expansion.

An estimated number of 15 financial institutions (banking and non-banking) are in Wa Municipal (Raqeeb, 2015). Nonetheless, due to poor financial record maintenance and inadequate collateral, it is not easy for businesses to secure loans from these financial institutions. Personal savings, relatives/friends and cash lenders are mostly the source of working capital for these small businesses. This seriously endangers the growth of businesses and other industries (ibid).

About 60% of the slum inhabitants of the Municipality are engaged in trading activities as their main occupation (WMA, 2012). These urban poor are however restrained in their trading activities because they cannot afford to rent shops within the market, hence are forced to trade within small spaces in the market and along the major roads within the municipality (Raqeeb, 2015). The inhabitants of the slums settlements of the municipality have most of their livelihood activities within the informal sector because majority of them have low levels of education and are not able to find jobs within the formal sector. They therefore engage themselves in the informal sector in order to cope with urban life (MOFA, 2017). About 15% of the slum inhabitants within the municipality are engaged in the industrial sector in which they take part in wood, textile, metal, leather processing etc. These people have been able to process durable products from these items and therefore earn some income that they depend on for survival (Raqeeb, 2015). Slum dwellers of the municipality are low-income earners hence have inadequate collaterals in order to secure loans from the financial institutions in order to improve upon their businesses, since the various financial institutions require huge collaterals in order to give a loan. Hence, business activities of the urban poor usually come to a standstill and eventually collapse as they are not able to sustain these business activities.

CHAPTER FOUR

DATA PRESENTATION, ANALYSES AND DISCUSSION

4.0 Introduction

This chapter of the study deals with the presentation of findings from data collected on the challenges facing slum inhabitants of the Wa Municipality. The chapter specifically presents and discusses the analysis of the data on the challenges facing slum dwellers in the Wa Municipality based on Turner's theory (1976) of slums. This chapter has six (6) sections. The next section after introduction deals with the socio-demographic characteristics of participants such as gender, age, marital status, religious affiliation, daily income and employment status of the respondents. The second section looks at the type of housing, where the nature of housing of the slum inhabitants was considered. Third section also talks about the most dominant factors driving the growth of slums in the Wa Municipality from the perspective of inhabitants. Section four is also about the living conditions of slum dwellers in the Wa Municipality. The final section deals with coping strategies adopted by slum inhabitants in the Wa municipality.

4.1 Socio-Demographic Characteristics of Respondents

As part of the survey, data was collected on the demographic characteristics of participants in the study area. Key aspects of the demographic characteristics considered for this study include, sex, age, marital status, household size, religious affiliation, employment status and educational level of the participants.

Table 4.1: Socio-Demographic Characteristics

Socio-Demographic Characteristics	Frequency	Percentage
Sex		
Male	259	67.1
Female	127	32.9
Age group		
Below 18 years	44	11.4
18-35 years	262	67.9
36-60 years	69	17.9
Above 60 years	11	2.8
Marital Status		
Single	193	50.0
Married	159	41.2
Divorced	28	7.3
Widowed	6	1.6
Religious Affiliation		
Islam	319	82.6
Christianity	54	14.0
Traditionalist	13	3.4
Daily Income of Respondents		
Less than Ghc12	201	52.1
Ghc12-Ghc50	118	30.6
Ghc51-Ghc100	28	7.3
Above Ghc100	29	10.1
Employment Status of Respondents		
Unemployed	159	41.19
Casual/Daily wage labour	61	15.80
Regular wage labour	39	10.10
Self-employed	118	30.57
Unpaid helper in household enterprise	9	2.33

Source: Field data, 2022

Table 4.1 shows the socio-demographic characteristics of respondents of the study. Data on six issues have been presented on the table. These are; sex, age, marital status, religious affiliation, income and employment. Some pertinent issues arising from the table are discussed below.

First, Table 4.1 reveals the sex distribution of respondents as aligning generally with the literature with respect to sex distribution of household heads. For instance, Aseidu and Agyei-Mensah (2016), posits that males have been generally identified as the main actors that are involved in the creation of unauthorized structures. The high percentage of male respondents in the study (67.1%), is due to the cultural system of ethnic groups in Ghana, where males are considered as the heads of household and are expected to cater for their various families in terms of provision of shelter. This skewedness towards the male gender was expected as the study focused mainly on household heads. Data collected is however holistic as it covers perspectives from both females and males and this makes the findings of the study reliable.

Secondly, another characteristic considered was age, the ages of these respondents were grouped in ranges and the results are shown in Table 4.1. Age is a vital variable that must be taken into consideration when dealing with inhabitants of informal settlements. This is especially important because a study by the UN HABITAT (2018) found out that the majority of people living in informal settlements are young adults who are in their active working age. From Table 4.1, it can be inferred that most of the participants are mature enough to provide the needed information for this study. This is because majority of the respondents in this study (88.6%), are above 18 years. To add to the debate are researchers such as Kubra *et al.* (2015), who indicated in their study findings that the youth groups or age category in most slums becomes

majority. This agrees with this study's findings that most people in the slum communities are young adults and hence such slums stand the chance of continuity since they will stay in those slum areas.

Furthermore, marital status of respondents was also considered. From Table 4.1 it is clearly seen that majority of respondents in the study area are single (50%), and those who are widowed are the least (1.6%). Again, among those who are married, (40%) are males and (60%) been females. The study findings disagree with studies of Afeadie (2018), who indicates in his study that it is common to find majority of men in slum areas being married.

In addition, data in Table 4.1 further shows that majority (82.6%) of the participants of the study are Muslim. This means that Muslims dominate in the study area. This is because in the municipality and the northern part of the country is predominantly occupied by Muslims, this is agreed by Rakeeb (2015), that the Wa municipality is dominated by the Islamic religion and also supported by Aseidu (2016), who discovered that slums in Kumasi Metropolis are dominated by Muslims. However, there is a good number of Christians and people of other religions in the study and the data collected on these other religious affiliates helps to validate the findings of the study.

Notwithstanding the above findings, ascertaining the educational level of respondents is important, as that determines the level of understanding of educational issues as well as the efficiency with which they will respond to questions. It could be realized from Table 4.1 that majority of the respondents have formal level of education and can provide the required answers to the questionnaire for reliable result. About 58% of respondents have formal education thus from senior high school to tertiary level

which should earn them meaningful employment in the formal sector. This is agreed by Turkstra and Raithelhuber (2016), who indicated that education gives individuals huge prospects and earns them formal employment. Caldwell (2017), asserts that education offers individuals with great prospects and contributes to participation in formal employment but further argues that most slum dwellers do not have formal education. Thus, educational level has an important influence on the quality of households' human capital to present the likelihood of undertaking livelihood strategies.

The result from Table 4.1 shows that majority of the slum inhabitants (52.1%), earn below GH¢12 a day. This means that most of the slum dwellers hardly meet their daily basic needs since they cannot afford them. It is argued by Afrane (2018), that most slum dwellers do earn very little income. Extreme poverty defined by World Bank (2021) as getting on an income less than GH¢26.7 per day, means that households cannot meet basic needs for survival.

Again, data in Table 4.1 shows that majority of slum inhabitants in Wa municipality are unemployed. However, a significant number 61 representing (15.8%) of the people contacted are casually employed and are on daily wage or what is popularly known as "job insecure". Closely related to unemployment is poverty. According to Ghana Living Standard Survey 7, poverty has many dimensions and is characterized by low income, malnutrition, ill-health, illiteracy, and insecurity, among others. The impact of the different factors could combine to keep households, and sometimes whole communities, in abject poverty. As income being one of the indicators of measuring poverty, earning low income can put one in the poverty bracket (GSS, 2022). According to the World Bank (2021), earning between GH¢800 to GH¢3500

in a month make you poor and earning between GH¢0 to GH¢800 per month makes you extremely poor. The data in Table 4.1 shows that majority of the respondents makes below GH¢12 a day which when multiplied by 30 days makes the people extremely poor according to the World Bank classification. Also, according to the Ghana poverty mapping report, the map shows that the then three northern regions still remain the poorest in the country. Where the map adds value is how it reveals the heterogeneity in standard of living across districts within regions. For instance, according to the map, Upper West as a whole has a poverty rate of 70.7%. However, within the region, there is a wide variation in the headcount rate across districts. It goes from a low of about 36% in Wa Municipality to approximately 84% in Wa East and more than 90% in Wa West. It is evident that poverty is rampant in the municipality and the region as a whole. These evidences show that majority of the people living in the study area are poor and which might contribute to slum development in the municipality.

4.2 Type of Housing in the Slum Communities of Wa Municipal

The study also found out the various types of housing that are dominant in the slum communities of the Wa municipality. Table 4.2 presents the type of housing inhabited by respondents of the study. From the discussion in section ten of Chapter Two, Turner (1976) describes two ways to define housing, housing as a noun and housing as a verb. Housing as a noun refers to the physical structures, the house as a product or commodity. Housing as a verb focuses on the universal activity of housing. Turner (1976), stresses on the adverse effects side of housing rather than on the material side. This study considered the housing type based on materials which Turner refers to as housing as a noun.

Table 4.2: Type of housing inhabited by respondents of the study

Housing Type	Frequency	Percentage (%)
Mud house	232	60.1
Sand Crete block house	101	26.1
Wood structure	32	8.3
Uncompleted buildings	21	5.4
Total	386	100.0

Source: Field Data, 2022

Table 4.2 presents the type of housing inhabited by the respondents of the study in the Wa municipality. The data shows that majority of the slum inhabitants live in mud houses. That is to say that even though there are slum communities in the Wa municipality none of the households lives in kiosk and metal containers as purported by Frowd (2018), that most slums have kiosk and metal containers as their housing structures. This finding from Table 4.2 is similar to the latest Population and Housing Census (PHC). Data from the 2021 Population and Housing Census (PHC) indicate that about 5.6% of urban housing units comprise metal containers, kiosks, wooden structures, uncompleted buildings, living quarters attached to offices/shops among others (GSS, 2022). In the case of the inhabitants of the slum communities in the Wa municipality contacted, no household lives in metal containers and kiosk as given by the latest Population and Housing Census (PHC). It can be inferred from the Table 4.1 that about 26% of the slum inhabitants live in standard houses and more than 70% of the households“ lives in sub-standard houses. Although most of the inhabitants live in mud houses, a significant number of the inhabitants live in sand Crete block houses.



Figure 4.1: Dilapidated Housing Structure in Dondoli Community of Wa

Municipality

Source: Field data (2022)

4.3 The Relative Importance of Factors Driving the Growth of Slums in the Wa Municipality

This section discusses the factors driving the growth of slums in the Wa municipality from the perspective of dwellers. Relative importance index was used by the study to ascertain the most important factors driving the growth of slums in the study area.

The respondents were introduced to factors and they rated how these factors influenced their decisions to live in the slum areas. As earlier mentioned, these factors are rated using relative importance index to ascertain the major factors driving the growth of slums in the study area. Table 4.3 shows the most important factors in a ranked form.

Table 3.3: Relative Importance of Factors driving the growth of slums in the Wa municipality

Factors	FREQUENCY	RII	Rank
Low rents	97	0.8139	1
Free accommodation	81	0.6944	2
Family ties	43	0.6476	3
Marriage	40	0.6278	4
Employment opportunities	37	0.4858	5
Religious reasons	30	0.4796	6
Social amenities	21	0.4613	7
Nearness to workplace	15	0.4211	8
Poor enforcement of the building regulations	13	0.4032	9
Security	09	0.3831	10

Source: Field data, 2022

Table 4.3 shows the result of the factors driving the growth of slums in the Wa municipality. The relative importance index was used to ascertain the level of importance the respondents attached to each of the factors driving the growth of slums in the study area. The result shows that the most important factor among the ten (10) factors identified is low rent. Respondents identified low rent (RII=0.8139) as the number one factor driving the growth of slums in the Municipality. The relatively high importance of low rent as a driving force leading to the growth of slums was confirmed with the interview extract as seen below.

Most of these people moved in here because they usually find cheaper accommodation. Low cost of living in these areas attracts a lot of poor people into these areas. I must also say that most of these people are happy living in these areas (Assembly Member A, Wa municipality, 15th May, 2022).

The lure of low rent especially for migrants was further confirmed as can be seen from the interview extract below.

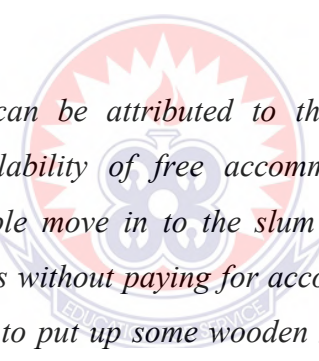
Accommodation is cheaper in this area and most foreigners from Burkina Faso and Cote d'Ivoire are usually found in this area. Because most of these foreigners don't have families in town and they are usually not well to do people, they usually settle in these slum areas to make a living. (Assembly Member B, 15th May, 2022)

It is evident that low accommodation cost pulls people into the slum areas in the Wa municipality as said by the assembly members confirming the data in Table 4.3. The quotes from the assembly member suggest that, accommodation cost or rent in other parts of the community is relatively higher. An example is the cost of rent for a single room at SSNIT flat, a middle-class residential area is two Thousand-Five Hundred Ghana Cedis (GH¢2,500) as compare to rent in Dondoli a slum area where the same single room cost eight hundred Ghana Cedis (GH¢800) per year. Due to the relatively cheaper accommodation prices in the slum areas, more people move in to enjoy these cheaper rents. This might also be linked to economic status of these people. This is because people with higher economic status will be able to afford accommodation in other parts of the municipality. The average income of respondents in the slum communities is GH¢500 per month which makes it difficult to afford better accommodation outside the slum areas.

This earning is in line with the World Bank 2021 classification of extremely poverty, where they argued that earning between GH¢0 to GH¢800 per month makes you extremely poor as in the case of slum inhabitants in the Wa municipality. People who move to the slum areas in search for lower accommodation cost are going to be faced with lack of employment opportunities. Due to the low employment opportunities in the slum areas, people who move in to stay with families and friends will become a burden on their relatives and friends. Moving into the slum areas due to low rent will

be coupled with low employment avenues and the purpose of coming into the community due to low rent will be in vain. This is because the slum areas do provide little employment opportunities and with little employment means, no income. One will end up being unable to provide for him or herself.

Second to low accommodation cost is free accommodation (RII=0.6944). It can be deduced that majority of these inhabitants move into these slum areas to live with friends and families who are already staying there without paying for accommodation causing more congestion in these areas. Danso-Wiredu (2017), found similar result of low accommodation cost and poverty driving the growth of slums in Greater Accra in Ghana. The finding above is supported by the assertion of a staff from the Municipal Planning Office who said



A lot of factors can be attributed to the slum causation in this municipality. Availability of free accommodation is a key factor because most people move in to the slum communities to stay with friends and families without paying for accommodation. Some of them even move in here to put up some wooden structures and be sleeping under it which doesn't come at a cost of paying for rent (Staff from planning office Wa, 15th May, 2022).

This assertion is in line with the views from the previous assembly members. The quote from the staff from the municipal planning office just affirms that previous statement. As accommodation cost is low in the slum areas, it is sometimes virtually free. Comparatively, when one chooses to stay in areas where accommodation is relatively expensive, one could be exposed to high employment opportunities where one could get a lucrative job in which he/she will be paid well in order to be able to cater for the relatively expensive rent and also feed him or herself all other things been equal. This means that as reduced accommodation costs drive people into the

slum areas, low employment opportunities in the slum areas could also prevent people from moving into the slum areas. As access to accommodation with low rent and free accommodation are very much related, they can be captured together and rendered as easy access to accommodation. Hence, easy access to accommodation is the relatively most important factor driving the growth of slums in the Wa municipality.

Furthermore, family ties (RII=0.6276) and marriage (RII=0.5978) are the third and fourth important factors driving the growth of slums in the Wa municipality respectively. That is to say, family ties or social ties and social networks are the next contributing factors driving the growth of slums in the Wa municipality. Social bonds also contribute to slum development. This could be a delicate issue to handle due to the difficulty in handling social ties. Assembly member E, is of the view that, the community he represents is a slum and has this to say about the driving factors,

In my opinion, the major cause of slum in this area can be attributed to marriage issues because as we all know when you marry as a woman you move into stay with your husband and this makes the place congested since their husbands live with their parents (Assembly member E Wa, 17th May, 2022).

The quotation affirms the data that social ties and family bonds contribute greatly to slum development in the municipality. This is strongly supported by Frowd (2018), who finds similar results that, in Sub-Saharan Africa most slums are caused as a result of individuals not wanting to break family ties. As social ties and family bonds are closely related, they can be put together and termed as social network. Hence social network is an important driving factor causing the growth of slums in the Wa municipality.

The rest of the factors driving the growth of slums in the municipality includes, employment opportunities, religious reasons, social amenities, nearness to workplace, poor enforcement of the building regulations and security. It can be seen that employment opportunities are a relatively less important driving force. This may be due to low employment opportunities in the slum areas even though most of the slum communities are close to the Central Business District (CBD).

4.4 Living Conditions of Slum Inhabitants in the Wa Municipality

This section discusses the living conditions of slum inhabitants in the Wa municipality. The researcher believed that the respondents had a good understanding of how they live and their responses would reveal the true reflection of their living conditions. Turner (1976) stresses on the adverse effects of housing rather than on the material side. Turner observes that a squatter settlement can be considered as housing not in terms of what it is but in terms of what the effects it has on inhabitants. Turner (1976) indicates that the important thing about housing is not “what it is but what it does in people’s lives and advocates that the value of slums be measured not in terms of how well it conforms to the image of the inhabitant’s standards of living. For example, poor or good sanitary conditions, overcrowding leading to disease contamination, pollution of water bodies, flooding, just to mention but a few. To achieve the goal of this research objective, items were crafted base on living conditions of slum inhabitants for respondents to respond to. The study also employed relative importance index to examine the living conditions of inhabitants in the slum communities in Wa municipality. Table 4.4 displays the living conditions of inhabitants in slum areas in the study area.

Table 4.4: Living conditions of slum inhabitants in the Wa Municipality

Living Conditions	FREQUENCY	RII	Rank
Sanitation	63	0.7837	1
Recreational Facilities	55	0.7701	2
Drainage and sewerage	51	0.7597	3
Incidence of fire outbreaks	43	0.7422	4
Security	42	0.7286	5
Employment	37	0.7228	6
Threat of eviction	32	0.7150	7
Security of tenure	20	0.6956	8
Access roads	16	0.5894	9
Access to primary health care	10	0.5725	10
Access to primary education	07	0.5654	11
Access to water supply	06	0.5440	12
Access to electricity	04	0.4715	13

Source: Field data, 2022

Table 4.4 shows living conditions of slum inhabitants in Wa municipality. The living conditions are rated based on the relative importance, and those with the highest index values have the most severe effects on the inhabitants in these slum communities. The results in Table 4.4 show that the most important problem facing the slum inhabitants in Wa municipality is sanitation (RII=0.7837). That is to say the inhabitants have placed much importance on sanitation as the major problem affecting them. This is also greatly supported by the interview extract below where Assembly member D says,

Inhabitants of the slum communities live in a very bad condition. They do not take their sanitation seriously and they dump refuse indiscriminately. Some of them also do open defecation (Assembly member D Wa, 19th May, 2022).

This result agrees with the findings of Fekade (2020). Who found that most slum inhabitants are usually faced with the challenges of sanitation. It was observed that, some slum households dispose of their refuse into containers provided by the Municipal Assembly and Zoom Lion Company Ltd. Most households dispose of their waste in the open space which leads to choked gutters and littered environments. This is illustrated in figure 4.3



Figure 4.2: A refuse dump in Dondoli a slum community of Wa Municipal

Source: Field data (2022)

As a characteristic of almost every slum area, sanitation problem is also a challenge facing slum inhabitants of the Wa municipality. As indicated by the assembly member D, the people living in the slum communities dispose their refuse indiscriminately, doing open defecation which expose them to all manner of diseases such as cholera, diarrhea, and malaria among others. These dwellers usually fall sick and are not able

to go to hospital for proper treatment due to financial constraints and they usually resort to self-medication which has the tendency to lead to other complications. Biniyam, Fessahaye & Tefera (2018), in analyzing sanitation practice and associated factors among slum inhabitants residing in urban slums of Ethiopia revealed that, poor sanitation practices and unhygienic sanitation facilities were widely reported by slum inhabitants in the urban slums of Addis Ababa. Rokanuzzaman *et al.* (2017), were of the view that diseases such as cholera, dysentery, diarrhea and malaria occur in slum areas as a result of poor sanitation and the presence of breeding areas for flies and mosquitoes.

Secondly, Lack of recreational facilities (RII=0.7701) in the Wa municipality in general as a problem cannot be over looked. Most of these slum areas do not have recreational facilities such as playground among others. This finding is in line with the National Development Planning Commission. N D P C cited in Mohammed (2018), which states that about 8.8 million Ghanaians live in slums. The report states that such inhabitants suffer one or more household deprivations such as lack of access to improved water sources, improved sanitation facilities, sufficient living areas, housing durability and recreational facilities. The case of the slum communities in the Wa municipality is not an exception. As indicated by the respondents in Table 4.4 that the lack of recreational facilities is one of the worst forms of conditions faced in the slum areas. The assertion above is backed by Assembly member B when he says

Inhabitants of the slum communities in this municipality hardly enjoy recreational facilities. For one to enjoy these facilities he or she has to move out of the community (Assembly member B Wa, 19th May, 2022).

Furthermore, the third worst living condition that affect the slum inhabitants and connected to sanitation is drainage and sewage (RII=0.7597) system in the slum communities of the Wa municipality. All the slum communities lack proper drainage and sewerage system and this adversely affect their living conditions. The study observed that sewage and drains were not connected to the main drainage and sewage systems within the municipality leading to pungent smells all around the environment and also serve as breeding places for mosquitoes and reptiles. This is illustrated in Figure 4.2.



Figure 4.3: Drains and sewages in Tagrayiri community of Wa municipal

Source: Field data (2022)

The fourth worst living condition affecting the slum inhabitants is fire out breaks. The data from Table 4.4 shows that one of the major challenges facing slum inhabitants in the Wa municipality is incidence of fire outbreaks (RII=0.7422). Due to improper disposal of waste materials such as plastic rubbers, clothes coupled with exposed

electricity live wires, these slum areas are prone to fire outbreaks. These areas experience frequent fire outbreaks leading to lose of properties and bringing more hardship to these slum inhabitants. This finding is in line with that of Otto (2018), when it found out that mostly slum areas are prone to fire out breaks. Otto attributed the rampant fire out breaks to improper electricity connections and indiscriminate burning. A key informant from the municipal planning office of the municipality also shared similar sentiment, when he said:

Due to the overcrowded nature of these slum areas, they are always, anytime expose to the danger of fire outbreak. The effect of these fire outbreaks is devastating. Most of them lose their hard-earned properties and they have to start building life from the start (Staff from Planning Office Wa, 19th May, 2022).

In addition, the fifth challenge is the issue of security (RII =0.7286) facing slum inhabitants in the study area. Most of these inhabitants in the slum communities face security challenges on daily basis from unscrupulous individuals mostly in the night. The victims are mostly women and children. This finding deviates from the findings of Fekade (2020), where it was found out that slum inhabitants are security to one another properties in their dwelling areas.

Another problem confronting the slum inhabitants in the Wa municipality is employment issue (RII =0.7228) and it is ranked number 6. With unemployment, most of these slum inhabitants do not engage in any productive activities despite the fact that most of the slum communities are close to the Central Business District (CBD). This is as a result of lack of capital. Assembly member E supported this idea by saying that:

Most people who live in the slum community are having hard times in terms of what to eat. These people usually have large family size with no permanent job or employment and things are really hard for them. Few of them who engage in some meaningful work have to feed large family sizes with their meager income (Assembly member E Wa, 19th May, 2022).

This is to say that lack of employment opportunities is a major challenge facing slum inhabitants in the municipality. As a confirmation to the earlier findings in the previous sections, a low employment opportunity characterizes slum areas. The slum inhabitants usually move into the slum areas in a quest for cheaper accommodation and later are faced with low employment avenues.

Moreover, another challenge facing the slum inhabitants is threat of eviction (RII=0.7150) and it was ranked seventh. Individuals are been threatened with eviction from their homes either due to lack of permission to build from government authorities. Many respondents confirm that threat of eviction is a major challenge facing them in the slum areas. The Jangbayiri community is a squatter settlement, the inhabitants of these slum areas always face threat of eviction from the municipal assembly because the lands they occupy belongs to government. These slum areas are mostly government lands that are reserved for developmental projects in the near future. This assertion is supported by Danso-Wiradu (2017), where he asserted that most slums in urban areas are governmental lands reserved for future developmental projects which the urban poor decides to occupy, and hence, face eviction when the land is needed.

On the positive side, the data shows that electricity (RII =0.4715) is not a serious challenge facing slum inhabitants in Wa municipality as the data confirmed that access to electricity in the slum areas is good. The conclusion above is heavily supported by Assembly member G where he stated that:

The electoral area am representing is well connected with electricity. Almost every household is well connected (Assembly member G Wa, 19th May, 2022).

This is due to the fact that, most of the slum communities are located close to the Central Business District (CBD) in the municipality and government over the years have made efforts to supply electricity to all parts of the country even to the most remote areas in the country. The findings above deviate from the assertion of (Mathenge, 2017). It was argued that most slums were cut off from the national grid in terms of electricity. The conclusion made by Mathenge was in respect to Kenya. In the case of the slums in the Wa municipality, most households do not have electricity as a problem.

Again, water supply (RII=0.5440) as indicated by majority of the inhabitants is good. It is not a major challenge facing slum inhabitants in their communities. It was also observed that most of the houses in the slum areas are connected with pipe borne water and this finding deviates from that of Debnath *et al*, (2019), who argues that most slum communities lack pipe-borne water, and access to portable water is a challenge. The interview extract below also confirms that water supply and access to good roads were not major problems. Assembly member C says

Toilet facility is a major challenge facing us as a community, but in terms of pipe water and access to roads we have no major problems (Assembly member C Wa, 19th May, 2022).

Connected to the quotation above is the fact that, access to good roads (RII=0.5894) is not a major challenge facing slum inhabitants in the municipality as many respondents confirmed that road conditions in the area is good. This again will be due to the fact that most of the slum communities are located in the Central Business District (CBD) as most road network in the municipality is in good shape.

Similarly, the data shows that access to primary health care is not a major concern of the slum Inhabitants in the municipality. This is because many of the respondents are of the view that the health care system is good in the communities. It was also observed during a transect walk in the municipality that health facilities are available. This assertion deviates with the findings of Ahmed *et al.* (2017), where it was found out that health facility is not easily accessible in existing slums.

Moreover, another living condition that is not a major problem in the slums is access to basic education. The data shows that primary education is easily accessible. It was also observed during a transect walk in the slum communities that almost all the communities have basic schools even some named after the communities. An Assembly member also commented on access to primary education in slums in the Wa Municipality and he says this:

Even though we have numerous problems, but with basic schools we are not lacking, our children can school up to junior high level in this community without moving out of the community (Assembly member F Wa, 19th May, 2022).

A similar finding was made by Majale (2014), where he agreed that many slum settlements may have a lot of challenges but basic education is not a major problem to most slum communities.

4.5 Strategies Adopted by Inhabitants to Cope with the Challenges Faced in the Slums in the Wa Municipality

The section discusses the strategies adopted by the inhabitants of the slum communities to cope with the challenges they face. Relative importance index analysis has been used to access the most important strategies adopted by the inhabitants of the slum communities. The result is presented in table 4.5

Table 4.5: Coping and Survival strategies adopted by the slum dwellers in Wa Municipality

Strategies	FREQUENCY	RII	Rank
Credit purchases	89	0.6954	1
Loans	73	0.6932	2
Unauthorized pipe connection	69	0.6885	3
Inclusion of children in income generation	55	0.6859	4
Begging	39	0.6813	5
Withdrawal of children from school	25	0.6663	6
Unauthorized building construction	17	0.6496	7
Sale of belongings	11	0.6405	8
Multiple jobs	08	0.6328	9

Source: Field data, 2022

Table 4.5 present results of coping and survival strategies adopted by slum inhabitants in the Wa municipality to combat the challenges they face for living in the slum communities. The result shows that, Credit purchase (RII=0.6954) is rated the highest among other coping strategies, which means that majority of these slum inhabitants buy food on credit to survive the challenges of low income. An assembly member that responded to the interview asserts that:

Many inhabitants of this community find it difficult to make ends meet; as a result of that they resort to purchasing items on credit for their livelihood (Assembly member B Wa, 19th May, 2022).

Credit purchases as a strategy for coping in slums is strongly agreed by the findings of Raqeeb *et al*, (2015). In their findings, they agreed that majority of slum inhabitants“ resort to credit purchases to supplement their meager incomes for survival.

The interview response from the assembly member supports that of the results in table 4.5 that purchasing items on credit is a chief coping strategy in the slum communities of the Wa municipal. Research study by Amendah, Buigut and Mohamed (2014), on coping strategies among urban poor based on, evidence from Nairobi in Kenya revealed that the most frequently used strategy is related to reduction in food consumption, followed by the use of credit purchases, with 69% and 52% of households reporting using these strategies respectively. This confirms the use of credit buying as the most dominant coping strategy adopted by slum inhabitants to curb the effects of challenges facing them as slum inhabitants.

Loans (RII=0.6932) is rated the second most important coping strategy which means that in order for the inhabitants to survive the challenges, they resort to loan acquisition from other well to do friends from other communities. Most of them live on loans with the plan of paying back in the future and this also put pressure on future income as well. Research study by Amendah, Buigut & Mohamed (2014), on coping strategies among urban poor based on, evidence from Nairobi in Kenya again reported that, another most important coping strategy used by slum inhabitants is to go for loans. Gupta *et al*. (2016), had similar result in India. Respondents intimated those

loans from Village Savings and Loans Association (VSLA) also known as “Dagbile” helps a lot in keeping the households going. This is illustrated in Figure 4.4.



Figure 4.4: Women sharing proceeds from Savings and Loans (dagbile) in Nayiri
Source: Field data (2022)

In addition, the inhabitants in the slum communities rely on unauthorized pipe connection (RII=0.6885) in order to have access to water supply due to the inability to pay for proper water connections and water bills. It was observed during a transect walk in the study area that most households are connected with pipe water illegally. These illegal connections of water confirm the idea from inhabitants that, they do not have much problem with pipe water connections. Which means that unauthorized pipe connection is the third most important survival strategy adopted by inhabitants in the slum communities in the Wa municipality. However, this survival strategy comes with its own consequences as this unauthorized pipe connection is an illegal activity.

One can be prosecuted for engaging in such activity which would bring further hardship to the individuals. Studies of Brookins & Ali (2017), confirm this finding where they found out that most slums in Pakistan connects pipe water illegally due to lack of proper checks by authorities.

Furthermore, the fourth most important survival strategy adopted by the inhabitants in the slum communities is inclusion of children in income generation (RII=0.6858). As a way to survive, most of the inhabitants in the slum communities involve their children in money making activities to generate some income for the family. This activity also has its consequences as this would be tantamount to child labour on which the laws of Ghana frown upon. Assembly member G confirms this assertion by saying that:

Due to lack of resources, most people in the community include children to raise some income to support the family. To the extreme those that cannot bear the challenges also withdraw children from schools (Assembly member G Wa, 19th May, 2022).

This assertion can be linked to child labour which is a regular practice by household heads with teenage children (Mathenge, 2017). These children hawk with diverse goods and products within the town normally after school and on weekends, and portions of the income they make are spent on their immediate needs to encourage them.

A study by Amendah, Buigut & Mohamed (2014), revealed that a substantial proportion of household's report removing children from school to manage spending and to boost income generation. The study shows that a larger number of children under 15 years are involved in income generation. The findings of this study confirm the findings by Amendah, Buigut & Mohamed (2014), in that the slum inhabitants

remove their children from school as a coping strategy in order to engage them in money earning activities to survive. Some of these students sometimes find themselves in some economic activities which the laws of the country do not permit them to engage in, amounting to child labour. Raqeeb *et al*, (2015), were of the view that many inhabitants resort to autonomous “supplementary occupations” to cope with the challenges of urbanization. These supplementary occupations might involve removing their wards from school to engage in economic activities in order to keep the family going.



Figure 4.5: A child engaged in income generation

Source: Field data (2022)

Moreover, begging (RII=0.6813) is the fifth most important survival strategy adopted by the inhabitants in the slum communities. The slum inhabitants sometimes resort to begging for alms in order to survive. Some of them beg for food to eat and sometimes beg for money. These inhabitants at times send their children onto the street to beg for money to feed the family. This is supported by the interview extract below:

Many inhabitants in this community do not have lucrative jobs to do, due to that they resort to begging for alms for survival (Assembly member E Wa, 18th May, 2022).

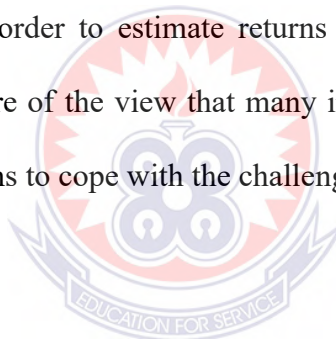
Mathenge (2017), finds similar results in Kosovo in Nairobi where he concluded that alms begging is one of the important coping strategies in slum areas.

Withdrawal of children from school (RII=0.6663) is another survival mechanism adopted by inhabitants in the slum communities and it was ranked sixth. Despite for the fact that both basic school and senior high school are free in the country, some parent withdraw their wards from school simply because they cannot afford to keep them in schools due to unemployment. These children are rather mostly sent to farms to help their parents. Some withdraw their children to involve them in money making activities to feed the family. The study by Benard (2019), has been confirmed by these findings when he also argued that many parents in the slum communities of the Upper West Region prefer to keep their children in the farms.

The eighth most important coping strategy is Sale of belongings (RII=0.6405) of these slum inhabitants. Significant number of household heads resort to the sale of properties including land to cope with the challenges faced. Women also sell jewelry and cloths to also cope with the challenges. Raqeeb *et al.*, (2015), found similar result in the Wa municipality when they found out that most inhabitants especially household heads that are unemployed resort to selling of the family land. Consequently, most women that face hardship also sell their belongings as a way to survive with the hardship in the slums. This assertion is supported by assembly member F when he said

Most inhabitants of this community find it difficult to make ends meet; as result of this they sell their personal belongings and also include their children to generate income to keep the families running (Assembly member F Wa, 17thMay, 2022).

Engaging in multiple menial jobs (RII=0.6328) is also a coping mechanism in the slum areas and it is the ninth. It is important to note that almost all supplementary occupations engaged in by the slum inhabitants included some form of trading activities. These household heads explained that they choose to do additional trading since it is a convenient way of ensuring that they always had some cash in hand, no matter the amount to complement their main source of income generation. Some of the factor's households' heads consider when choosing a supplementary job is the demand for products in order to estimate returns and the essential need to invest. Raqeeb *et al.* (2015), were of the view that many inhabitants' resorts to autonomous supplementary occupations to cope with the challenges of urbanization.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the research findings, conclusions of the study, recommendations and suggestions for further studies on slums.

5.1 Summary of Key Findings

This study has been on the challenges facing slum inhabitants in the Wa municipality. The study adopted a theoretical framework based on Turner's (1976) theory of slums using a mixed methods approach. This was done based on the perspectives of the inhabitants themselves as well as some other key actors in the municipality. The findings of this study are based on the objectives set for the study. Namely the factors driving the growth of slums, living conditions of slum inhabitants and the strategies used by inhabitants to cope with the challenges faced in the slums. The key findings are as follows:

- i. As much as 73.8% of the slum households in the Wa municipality live in sub-standard housing consisting of Mud houses, wooden structures and uncompleted buildings.
- ii. The relatively most important factors driving the growth of slums in the Wa municipality are easy access to accommodation (low rent and free accommodation) and social networks (family ties and marriage).
- iii. The relatively most severe factors affecting the living conditions of slum inhabitants of Wa municipality are poor sanitation, lack of recreational facilities, poor drainage and sewerage, incidence of fire outbreaks and security.

- iv. Social amenities (access to good roads, access to primary health care, access to primary education, access to water supply and access to electricity) are the least of the challenges facing slum inhabitants in the Wa municipality as they are adequately available in the municipality.
- v. The principal coping mechanisms adopted by slum inhabitants in the Wa municipality are credit purchases and loans.
- vi. Engaging in multiple livelihood activities was the relatively least important coping strategies adopted by slum inhabitants in the Wa municipality.

5.2 Conclusion

In a nut shell, slums in other parts of Ghana and Africa at large are faced with pertinent issues, notable among them is the lack of electricity and pipe water connection to these slum areas but the case of the Wa Municipality is different. The study concludes that the factors driving the growth of slums, the challenges that slum inhabitants face and the coping/survival strategies they adopt in the Wa municipality vary in importance from the perspective of the slum inhabitants. Understanding these nuances is key to the conceptualization and operationalization of policy intentions aimed at resolving the challenges associated with slums. Such an approach is needed as slums continue to grow and increase in the fast-urbanizing secondary cities of sub-Saharan Africa.

Again, in addition to knowledge the ranking of these challenges facing slum inhabitants in the Wa Municipality was done from the perspective of the inhabitants themselves which them inhabitants can best solve their own challenges when involved.

5.3 Policy Recommendations

Slums are best described as living places of persons with the lack of basic amenities.

The thesis sort to examine challenges of these slums“ inhabitants in the municipality.

Based on the study findings, the following recommendations are therefore made.

- i. Central government should strive to provide and subsidize affordable housing in the municipality as a measure of curbing development of slums in the municipalities and other parts of the country.
- ii. To improve the slum settlement areas there should be the provision of recreational facilities such as children’s park and cinema centres.
- iii. Government should improve in the income generating activities such as giving loans.
- iv. The Building Inspectorate Unit of the Municipal Assembly should enforce bye laws.
- v. As a long-term strategy for reducing poverty in the slums, there is the need to invest in human capital, precisely education where opportunity will be given to slum inhabitants to further their education to increase the productivity of slum inhabitants.
- vi. Leaders of the slum communities should be supported by the Municipal Assembly to form strong neighborhood volunteer groups to sensitize inhabitants on cleanliness and to educate the inhabitants towards proper disposal of waste in their communities.

5.4 Areas for Further Studies

From the findings of the study, it is suggested that some further studies be done to fully understand the challenges facing slum inhabitants. Further studies should look at why government is unable to provide affordable housing in slum areas. Again, further

studies should be conducted into why slum inhabitants are not engaged in the provision of solutions to their own challenges.



REFERENCES

- Afeadie, K. R. (2018). *Health Seeking Behaviour among Rural-Urban Migrant Slum Dwellers at Madina in the Greater Accra Region* (Doctoral dissertation, University of Ghana).
- Afrane, S. K., (2018). *Slum Development in Ghana*. Earth Scan Publication. London.
- Agouris, P., & Mahabir, R., Crooks, A., Croitoru, A. (2016). The study of slums as social and physical constructs: Challenges and emerging research opportunities.
- Ahmed, N., Brookins, O. T., & Ali, S. (2017). Poverty, corruption and fatalism: A case study of slum areas of Karachi, Pakistan. In *3rd South Asian International Conference*.
- Alliance, C. (2014). About slum upgrading. *Accessed December, 1, 2014*.
- Amendah, D. D., Buigut, S., & Mohamed, S. (2014). Coping strategies among urban poor: Evidence from Nairobi, Kenya. *PloS one*, 9(1), e83428.
- Arimah, B. (2018). *Slums as expressions of social exclusion: Explaining the Prevalence of Slums in African Countries*. Paper presented at the International Conference on Social Cohesion and Development, Paris.
- Asare, D. & Whitehead, M. (2016). Concepts and principles for tackling social inequities in health: Levelling up Part 1. *World Health Organization: Studies on social and economic determinants of population health*, 2, 460-474.
- Asiedu, A. B., & Agyei-Mensah, S. (2016). Traders on the run: Activities of street vendors in the Accra Metropolitan Area, Ghana. *NorskGeografiskTidsskrift-Norwegian Journal of Geography*, 62(3), 191-202.
- Benard A. A. A (2019). *Urban planning capacity development's response to emerging towns: A case study of WA in the Upper West Region of Ghana* Department of Planning, University for Development Wa.
- Biniyam, S., Fessahaye, A., & Tefera, B. (2018). Sanitation practice and associated factors among slum dwellers residing in urban slums of Addis Ababa, Ethiopia: a community based cross-sectional study. *Journal of Public Health and Epidemiology*, 10(10), 370-379.
- Braun, V., & Clarke, V. (2017). Thematic analysis, *The Journal of Positive Psychology*, 12:3, 297-298.

- Brookins, O. T., Brookins, O. T., & Ali, S. (2017). Poverty, corruption and fatalism: A case study of slum areas of Karachi, poverty, corruption and fatalism: A case study of slum areas of Karachi, Pakistan.
- Bryman, A. (2016). *Social research methods* (4 ed.). New York: Oxford University Press Inc.
- Caldwell, J. (2017). *The erosion of the family: A study of the fate of the family in Ghana*. Legon, Accra.
- Chandramouli, I. A. S. (2016, December). Slums in Chennai: A profile. In *Third International Conference on Environment and Health* (pp. 15-17).
- Cohen, A. D. (2014). *Strategies in learning and using a second language*. Routledge.
- Creswell, J. W. (2016) *Research design: Qualitative, Quantitative and Mixed methods approach*. Sage publications
- Crooks, A., & Patel, A., Koizumi, N. (2015). Measuring slum severity in Mumbai and Kolkata: A household-based approach. *Habitat International*, 41, 300–306. <https://doi.org/10.1016/j.habitatint.2013.09.002>.
- Danso-Wiredu, E. Y. (2017). Slum upgrading in developing countries. Lessons from Ghana and Kenya. *Ghana Journal of Geography Vol.9(1)*, 2017 pages 88-108
- Darteh, N. A. (2019). *Challenges in Rental Housing and Coping Strategies among Residents in Madina, Accra, Ghana* (Doctoral dissertation, University of Ghana).
- Davis, M. (2017). *Planet of Slums*. Verso, New York.
- Debnath, R., Bardhan, R., & Jain, R. K. (2019). A data-driven and simulation approach for understanding thermal performance of slum redevelopment in Mumbai, India. In *Proceedings of the 15th IBPSA Conference* (pp. 2745–2752). International Building Performance Simulation Association.
- Desai, V., & Loftus, A. (2018). Speculating on slums: Infrastructural fixes in informal housing in the global South. *Antipode*, 45(4), 789-808
- Engstrom, R., Weeks, J. R., Getis, A., Stow, D. A., Hill, A. G., Rain, D., & Coulter, L. (2017). Connecting the dots between health, poverty and place in Accra, Ghana. *Annals of the Association of American Geographers*, 102(5), 932-941.
- Fekade, W. (2020). Deficits of formal urban land management and informal responses under rapid urban growth, an international perspective. *Habitat International*, 24(2), 127-150.

- Fernandes, B. M. (2017). Questãográria: conflitualidade e desenvolvimento territorial.
- Fox, K. (2017). *Watching the English: the hidden rules of English behavior revised and updated*. Nicholas Brealey. from <https://ghanawaterforum.files.wordpress.com>
- Frowd, P. M. (2018). Developmental borderwork and the International Organization for Migration. *Journal of Ethnic and Migration Studies*, 44(10), 1656-1672.
- Galiani, S., Gertler, P. J., Undurraga, R., Cooper, R., Martínez, S., & Ross, A. (2017). Shelter from the storm: Upgrading housing infrastructure in Latin American slums. *Journal of Urban Economics*, 98, 187–213. <https://doi.org/10.1016/j.jue.2016.11.001>.
- Ghana Statistical Service, (2012). *2010 population and housing census*. Ghana, Accra.
- Ghana Statistical Service, (2022). *Population and Housing Census*. Ghana, Accra.
- Glaeser, E. (2018). *Triumph of the city: How urban spaces make us human*. Pan Macmillan.
- Gruebner, O., Sachs, J., Nockert, A., Frings, M., Khan, M., Hossain, M., et al. (2015). Mapping the slums of Dhaka from 2006 to 2010. *Dataset Papers in Science* 2014.
- Gulbert-Tejada, J. A., & Maksimovic, C. (2018). Frontiers in urban water management: deadlock or hope? Proceedings.
- Gupta, V., Downs, S. M., Ghosh-Jerath, S., Lock, K., & Singh, A. (2016). Unhealthy fat in street and snack foods in low-socioeconomic settings in India: a case study of the food environments of rural villages and an urban slum. *Journal of nutrition education and behavior*, 48(4), 269-279.
- Jaiyebo, O. (2016). Women and Household Sustenance: Changing Livelihoods and Survival Strategies in the Peri-urban Areas of Ibadan. *Environment & Urbanization*, 15(1), 111-120.
- Jha, P. K. (2016). Health and social benefits from improving community hygiene and sanitation: an Indian experience. *International Journal of Environmental Health Research*, 13(sup1), S133-S140.
- Kahn, O. &. (2018). Spin-transition polymers: from molecular materials toward memory devices. *Science*, 44-48.

- Khan, M. A. U., Hossen, M. A., Sharmin, Z., & Kubra, T. J. (2017). Displacement and deplorable living conditions of slum dwellers: with special reference to Sylhet city. *International Letters of Social and Humanistic Sciences*, 46, 51-64.
- Khan, M. M. H., & Kraemer, A. (2014). Are rural–urban migrants living in urban slums more vulnerable in terms of housing, health knowledge, smoking, mental health and general health? *International Journal of Social Welfare*, 23(4), 373-383.
- K.K. Adarkwa, and J. Post, (ed.), *The fate of the tree: planning and managing the development of Kumasi, Accra*, Woeli Publishing Services (2001).
- Kshetrimayum, B., Bardhan, R., & Kubota, T. (2020). Factors affecting residential satisfaction in slum rehabilitation housing in Mumbai. *Sustainability*, 12(6), 2344.
- Kubra, T. J. Khan, M. A. U., Hossen, M. A., & Sharmin, Z. (2015). Displacement and deplorable living conditions of slum dwellers: with special reference to Sylhet city. *International Letters of Social and Humanistic Sciences*, 46, 51-64.
- Mahabir, R., Crooks, A., Croitoru, A., & Agouris, P. (2016). The study of slums as social and physical constructs: Challenges and emerging research opportunities. *Regional Studies, Regional Science*, 3(1), 399–419.
- Mahmud, M. S. & Ishaque, A. (2017). Migration objectives and their fulfillment: A micro study of the rural-urban migrants of the slums of Dhaka city. *Geografia-Malaysian Journal of Society and Space*, 7(4).
- Majale, M. (2014). Employment creation through participatory urban planning and slum upgrading: The case of Kitale, Kenya. *Habitat International*, 32(2), 270-282.
- Mathenge David (2017). *The challenges of infrastructure planning in urban slums case study of Kosovo, Mathare 4b, And Gitathuru Slums In Mathare Valley*. School of Built Environment University of Nairobi.
- McFarlane, C. (2018). Rethinking informality: Politics, crisis, and the city. *Planning Theory & Practice*, 13(1), 89-108.
- Ministry of Food and Agriculture, (2017). Ministry of Food and Agriculture Annual Report. Ghana
- Ministry of Water, Works & Housing (2017). Housing Policy. Government of Ghana, Accra.

- Nsiah-Gyabaah, K., (2009). *The urban housing challenge and prospects for meeting the housing needs of the urban poor in Ghana*. CSIR/GIA (eds.): Proceedings of the 2009 National Housing Conference, Accra, October 7-8.
- Opeyemi, O., & Justice, E. O. (2016). Development of neuro-fuzzy system for early prediction of heart attack. *International Journal of Information Technology and Computer Science*, 4(9), 22-28.
- Otto, G., (2018). Urbanization in Nigeria: Implications for Socio-Economic Development. *Journal of Research in National Development*, 6(2).
- Patel, A. P., Tirosh, I., Trombetta, J. J., Shalek, A. K., Gillespie, S. M., Wakimoto, H., ... & Louis, D. N. (2019). Single-cell RNA-seq highlights intratumoral heterogeneity in primary glioblastoma. *Science*, 344(6190), 1396-1401.
- Prasad, B. V., & Prasad, G. S. (2017). Genetic Variability, Trait Association and Path Analysis of Yield and Yield Components in *Vignaradiata L.* *International journal of Bio-resource and Stress Management*, 4(2), 251-254.
- Raqeeb, A. S., Osmannu, I. K., & Ahmed, A. (2015). Coping with the challenges of urbanization in low-income areas: an analysis of the livelihood systems of slum dwellers of the Wa Municipality, Ghana. *Current Urban Studies*, 3(02), 105.
- Rokanuzzaman, M., Ali, M. A., Hossain, M. N., & Miah, M. A. (2017). Study on livelihood status of slum dwellers in the North Dhaka City corporation. *Journal of Environmental Science and Natural Resources*, 6(2), 89-95.
- Saith, A. (2019). From universal values to millennium development goals: Lost in translation. *Development and Change*, 37(6), 1167-1199.
- Sajjad, H. (2019). Living standards and health problems of lesser fortunate slum dwellers: evidence from an Indian City. *Int. J. Environ. Prot. Policy*, 2, 54.
- Santos, M., Cavalcanti, T., & Da Mata, D. (2019). On the determinants of slum formation. *The Economic Journal*, 129 (621), 1971–1991.
- Selcuk, B. (2018) *A convergent parallel mixed-methods study of controversial issues in social studies classes: A clash of Ideologies* Department of Educational Sciences, Cumhuriyet University.
- Sen, J. (2015). Security and privacy issues in cloud computing. In *Cloud Technology: concepts, methodologies, tools, and applications* (pp. 1585-1630). IGI Global.
- Shalizi, Z., Lall, S. V., & Lundberg, M. K. (2018). Implications of alternate policies on welfare of slum dwellers: evidence from Pune, India. *Journal of urban Economics*, 63(1), 56-73.

- Sietchiping, R. (2016). *A geographic information systems and cellular automata-based model of informal settlement growth* (Doctoral dissertation).
- Simone, A. M. (2020). *For the city yet to come: Changing African life in four cities*. Durham: Duke University Press.
- Singh., A. Dubbale, D., & Tsutsami, J., (2016). Urban environmental challenges in developing cities. *World Academy of Science, Engineering and Technology*, pp. 398-399.
- Souza, M. J. L. (2017). *Mudar a cidade: uma introdução crítica ao planejamento e à gestão urbanos*. Bertrand Brasil.
- Teye, J. K., Awumbila, M., & Owusu, G. (2015). Can rural-urban migration into slums reduce poverty? Evidence from Ghana.
- Tisong D. A., (2018). Slum Improvement in Ghana: the Study of Aboabo and Asawase in Kumasi. Kwame Nkrumah University of Science and Technology, Kumasi
- Tiwari, P., & Rao, J. (2016). Housing markets and housing policies in India. An ADBI Working Paper Series. <https://www.adb.org/sites/default/files/publication/182734/adbi-wp565.pdf>
- Turkstra, J., & Raithelhuber, M. (2016). *Urban slum monitoring*. In 24th Annual ESRI International User Conference, 9th-13th August.
- Turner, J. (1976). *Housing by People: Towards Autonomy in Building environment*. London. Labyrinth Publication Ltd.
- U. N. Habitat, (2016). The challenge of slums: global report on human settlements 2003. London: Earthscan.
- U. N. Habitat, (2018). Urbanization and development: emerging futures. *World cities report*, 3(4), 4-51.
- UN Millennium Project, (2005). *A home in the city. task force on improving the lives of slum dwellers*. London: Earthscan Publications.
- United Nations, (2008). *World Urbanization Prospects: The 2007 Revision*, Population Division, Department of Economics and Social Affairs, New York.
- Vasudevan, A. (2015). The makeshift city: Towards a global geography of squatting. *Progress in Human Geography*, 39(3), 338-359.
- Wa Municipal Assembly, (2010). Municipal Assembly Annual Report 2010-12. Wa, Ghana.

Wa Municipal Assembly, (2012). *Municipal Assembly Annual Report 2010-12*. Wa, Ghana.

Walker, A. P. P. (2016). Self-help for public housing? Lessons from comanaged slum upgrading via participatory budget. *Habitat International*, 55, 58–66.

World Bank, (2021). *Approaches to urban slums. A Multimedia Sourcebook on Adaptive and Proactive Strategies*. Washington D.C.

World Health Organization. (2017). *Trends in maternal mortality: 1990-2017: estimates from WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division*. World Health Organization.



APPENDICES

APPENDIX A

QUESTIONNAIRE

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF GEOGRAPHY EDUCATION

**RESEARCH TOPIC; CHALLENGES FACING SLUM DWELLERS IN
GHANA A STUDY OF THE WA MUNICIPALITY, UPPER WEST REGION**

The Researcher is a Student Pursuing Mphil in Geography Education, UEW, The Research Seeks to Examine the Challenges Facing Slum Dwellers in The Wa Municipality of The Upper West Region You Are Required to Provide Accurate Answers to The Questions Asked. Your Participation Is Very Crucial and Answers You Provide Will Be Treated Confidentially and Strictly for This Research Purposes.

QUESTION NO.....

NAME OF SLUM.....

SECTION A: BACKGROUND

Please indicate appropriately below:

1. Sex

Male[] Female[]

2. Age

Below 18 years [] 18-35[] 35-60[] Above 60
years[]

3. Marital Status

Single [] Married[] Divorced[] Widowed []

4. Household size

1-3[] 4-6[] 7-9[] 17 and above[]

5. Religious affiliation?

Islam [] Christianity [] Traditionalist [] Others.....

6. Level of education?

None [] Basic [] SHS [] Tertiary [] Never attended School []

7. Main occupation?

Farming [] Trading [] Agro-processing []

8. Employment status?

Unemployed [] Casual/Daily wage labour [] Regular wage labour []

Self-employed [] Unpaid helper in household enterprise []

9. Daily income

Less than GH¢12 [] GH¢12-50 [] GH¢ 51-100 [] Above GH¢100 []

SECTION B: NATURE OF HOUSING

10. How would you describe the nature of the structure you live in?

Permanent [] Non-permanent []

11. What material is the roof made of?

Thatch Metal Plastic Wood Asbestos Clay tiles Others, specify

12. What materials are the walls made of?

Mud Laterite bricks Sandcrete blocks wood paper plastic metal sheets other, specify

13. Is there a toilet facility?

Yes No

14. Is the house connected with electricity?

Yes No

15. Is there piped water supply?

Yes No

16. How did you secure your place of residence?

Self-owned, family-owned, by rent, rent-free, squatting, other, specify

SECTION C: FACTORS DRIVING THE GROWTH OF SLUMS IN WA MUNICIPALITY

17. How long have you stayed in this community?

0-3years [] Between 3-6 years[] Between 6-9 years[] More than 9 years[]

18. Are you an indigene of this community?

Yes No

19. If No to the above, where do you come from?

From within the municipality other parts of the region other parts of the country from outside the country

Please indicate the extent to which the following factors influenced your decision to live in this community.

1=None (N), 2=Low (L), 3= Moderate (M), 4=High (H)

Factors		N	L	M	H
20	Free accommodation				
21	Low rents				
22	Inability to secure better accommodation elsewhere				
23	Poverty				
24	Employment opportunities				
25	Nearness to workplace				
26	Family ties				
27	Marriage				
28	Religious reasons				
29	Poor enforcement of the building regulations				
30	Social amenities				
31	Security				

SECTION D: LIVING CONDITIONS IN SLUMS

Please indicate the nature of these facilities and services in your community.

1= Very Poor (VP), 2=Poor (P), 3= Good (G), 4= Very Good (VG)

Conditions	VP	P	G	VG
32 Sanitation				
33 Drainage and sewerage				
34 Access to electricity				
35 Access to water supply				
36 Access roads				
37 Access to primary health care				
38 Access to primary education				
39 Incidence of fire outbreaks				
40 Security				
41 Employment				
42 Security of tenure				
43 Threat of eviction				
44 Recreational Facilities				

SECTION E: COPING STRATEGIES

Please indicate the extent to which you engage in these coping strategies.

1=None (N), 2=Low (L), 3= Moderate (M), 4=High (H)

Strategies	N	L	M	H
45 Inclusion of children in income generation				
46 Withdrawal of children from school				
47 Loans				
48 Credit purchases				
49 Unauthorized pipe connection				
50 Sale of belongings				
52 Multiple jobs				
55 Begging				
Unauthorized building construction				

APPENDIX B

Interview Guide for Key Informants

RESEARCH TOPIC;

CHALLENGES FACING SLUM DWELLERS IN GHANA A STUDY OF THE WA MUNICIPALITY, UPPER WEST REGION

General Information

NAME OF SLUM.....

LOCATION ADDRESS (GPS).....

1. Date of interview.....

2. Title/position.....

3. Organization.....

4. Department.....

5. How long have you stayed in this community?

.....

6. Do you own or have access to a house in the community?

Yes [] No []

7. If yes, what type of house is it?

Single story traditional compound [] Small self-contain unit [] Large single
family house []

8. Did you think this community is a slum? Yes [] No []

9. In your opinion, what are the causes of slums in your community?

.....

.....

10. Do the dwellers face challenges in this community? Yes [] No []

11. If yes, what are some of the challenges they face.

.....
.....

10. In your opinion, how do the dwellers cope with the challenges they face?

.....

FOR PLANNING OFFICER ONLY

11. What is the name of your institution?

12. What are the roles or responsibilities of your institution in the planning and management of the land in the Wa municipality?

.....
.....

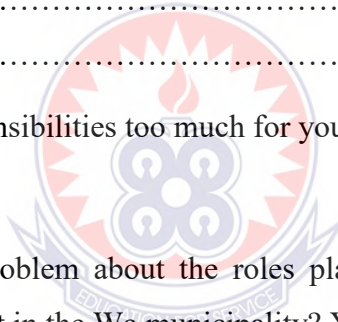
13. What process or procedure does your institution use to execute its roles?

.....
.....

14. Are the roles or responsibilities too much for your institution to bear?

YES [] NO []

15. Do you have any problem about the roles played by your institution on land planning and management in the Wa municipality? Yes [] No []



APPENDIX C

Observation Checklist

Observation checklist for communities, Dec.-Jan., 2022.			
Date	Time	Area	Name of the item observed
			Sanitation
			Electricity
			Health
			Roads
			Sewerage
			Water

