ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

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DEPARTMENT OF SOCIAL WORK

THE SOCIAL AND HEALTH PROBLEMS OF RIVERSIDE SLUM AREA DWELLERS: THE CASE OF ADDIS KETEMA SUBCITY, WOREDA 11,''LOMI MEDA SEFER'' AREA

BY

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MAY, 2022

ADDIS ABABA, EHIOPIA

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A RESEARCH THESIS SUBMITTED TO SAINT MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES, INSTITUTE OF AGRICULTURE AND DEVELOPMENT STUDIES, IN PARTIAL FULFILMENT OF THE REQUIRMENT FOR THE AWARD OF MASTERS DEGEE IN SOCIAL WORK.

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DECLARATION

I Esmael Mohammed Endire declare that the paper on "The social and health problems of river side slum area dwellers: The case of Addis Ketema Sub city, Wereda 11,''Lomi Meda Sefer'' area" is an original work and as far as my knowledge is concerned it has not been submitted as a degree or masters paper at any time in higher learning institutes for the purpose of earning any degree. All the works of other authors or researchers used in the working of the paper are properly cited.

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ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

_____ _____

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Acronyms

UN: United Nations

UNCHS: United Nations Commission on Human Settlements (habitat)

SDGs: Sustainable Development Goals

NGOs: Non-Governmental Organizations

WHO: World Health Organization

SPSS: Statistical Package for the Social Sciences

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Abstract

The overall objective of this study is to identify the social and health problems of river side slum area dwellers. For this study both qualitative and quantitative research approach were used by the researcher. Sample for the study were drawn using probability and non-probability sampling to determine the size of study participants. For the probability sampling, simple random sampling techniques were applied; and for non probability sampling, purposive sampling techniques were used. Accordingly, a total of 186 household members for survey sample were drawn from 347 houses and 9 key informants for interview data were drawn from health extension workers, government officials and village's known persons. Simple descriptive statistical tools, such as frequency and percentage were employed to analyse the quantitative data generated through household survey. Qualitative data such as key informant interview and observation were drawn and analysed through transcribing recorded audios from Ahmaric language to English which used to support and substantiate quantitative data. The qualitative data was analyzed by collecting same information together, gathering researcher's notes and putting key informant interview data directly word by word. The finding of the study indicated that, riverside slum area dwellers face many socio-economic problems ranging from unable to afford good living standard to medical expense coverage. The finding of the study further shows, in the study area social problems such as flood, clean water shortage, narrow lanes, septic tank problem, sewerage system problems and shanty houses are affecting riverside slum area dwellers' life. Additionally, the finding of the study indicated, the study area residents are vulnerable to different diseases such as, diarrhoea, allergic and respiratory organ related problems. Also air and water pollution are indirectly affecting dwellers' health. The study result further revealed that, residents of the study area got to some extent different supports from government. The researcher recommended that governmental institutes (Woreda's sanitation office, land management office and health office) need to give special attention for different socio-economic and health related problems faced by river side slum area dwellers of the study area.

Key terms: Riverside dwellers, Slum area, Income, Social problems, Exposure

Chapter One

1. Introduction

This study was intended to find out the social and health problems of riverside slum area dwellers in Addis Ketema Sub City, Woreda 11, ‘’Lomi Meda Sefer’’. It was planned to come across what kind of social and health problems are exist in the study area and the finding enabled us to know the level of the problems and its consequences. The researcher was used mixed research approach like survey, key informant interview, and observation to gather information. The researcher applied the above data collection methods to get relevant information from the study area. This study’s sample unit was households for survey data collection and the other qualitative data was got from key informants who are Wereda’s health extension workers, village’s known persons and other government officials.

The thesis comprised five chapters. Chapter one sets out the study's background, statement of the problem, objectives of the study, research questions, and scope of the study, significance of the study, limitation of the study, research site selection and thesis structure. The second chapter presents a related literature review; while the third chapter discusses research methodology. The fourth chapter presented and analysed results and discussion. The final chapter dealt with conclusion and recommendations.

1.1. Background of the study

In human being history informal settlement and slum areas have been in existence for a long time. It started as far back in history; chronologies have left evidences in graphic description of such areas as in ancient Roma, medieval Cairo and Ottoman Istanbul. Mekonnen (as cited in UNCHS, 1987). By the end of the 19th century, it had started to imply ‘a street, alley, and court’, situated in an overcrowded district and inhabited by lower class or poor people.

> The word ‘slum’ first came into use in the 1820s. It was used to denote certain locations across London which was known for having the poorest quality housing and the most unhygienic conditions. These locations were reputed for being the breeding grounds for marginal activities including many criminal activities and drug abuse. By the end of the 19th century, the word slum had started to imply ‘a street, alley, and court’, situated in an overcrowded district and inhabited by lower class or poor people. In 1880s, there was the

> Housing Reform movement in England, which then introduced the idea of 'slums' as meaning a house that is "materially unfit for human habitation". This led to the delimitation of 'slums' on city maps for planning, so the idea of marking out pockets of poverty by highlighting low-quality housing areas became widely accepted. Moreover, the legislation from the 1890s to the 1930s authorised the removal of the slums and imposed technical, legal definitions and standards for the operating process. Today, the word 'slum' is broadly used to describe poverty housing arrangements all over the world. In developing countries in particular, the term 'slum' has come to mean informal housing (Habitat for Humanity, 2017).

The UN has defined characteristics that are usually attributed to slums, including insecure residential status, poor structural quality of housing, overcrowding, and inadequate access to safe water, sanitation, and other infrastructure. However, not all slum dwellers are extremely poor; some can make 'reasonable' income just slightly above poverty level (UN-Habitat, 2016).

Many reasons have been given to explain why slums form, persist, and grow including national economic stagnation, failure of redistribution, market distortion in favour of extractive elites, colonial legacies, and lack of planning, corruption, vote buying, and anti-urban biases by national governments and international agencies (Ezeh A., et al., 2016).

Population living in slums simultaneously faces the increased risk of non-communicable and communicable diseases. Risk factors like tobacco use, low physical activity, obesity, and unhealthy diets are commonly found among slum dwellers which lead to cardiovascular disease, diabetes, cancer, and other chronic diseases. Environmental risk factors like poor sanitation, indoor and outdoor air pollution, overcrowding, and inadequate access to water supply enable the transmission of communicable disease like diarrhoea, TB, and malaria. (Sparkman, 2018)

Among different things done towards slum problems, the sustainable development goals (SDGs), agreed, and acknowledge the urgency of the urbanisation challenge, most clearly reflected in the inclusion of an urban-specific goal. Goal 11th aims to make cities and human settlements inclusive, safe, resilient, and sustainable, with its first target seeking to ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums (UN SDGs, 2015).

Different organizations and NGOs are actively working to help housing poverty in sub-Saharan African slums. Habitat for Humanity completed a six-year program in 2018 called "Building Assets, Unlocking Access." This program worked in Uganda and Kenya to offer technical help and "develop housing microfinance products and services." Habitat for Humanity's approach allowed Africans to progressively build their own housing, access small-scale loans and set up small payments. Based on the above interventions a report from the project found that recipients also upgraded their housing with improved roofing, walls, sanitation and electricity (Ganz, 2020).

According to Atlaw (2012) more than two-third of Addis Ababa's people resides in slum areas. Various efforts have been made by different actors to redevelop slum areas. In Addis Ababa, one of the predominantly implemented redevelopment approaches is relocation. This study also indicated that relocation has its own positive and negative impacts on the society. It creates a better living scenario for relocates quality housing with adequate water supply, sanitation, toilet, kitchen, good sewerage system, low risk factors for disease etc. It also erodes communities' access to all elements needed for their well-being especially, economic activity, social ties and urban services. Failing to involve local people in overall redevelopment process, neglecting dwellers' economic activity and lack of cooperation between various public sectors were also the other factors that contribute to unsustainable redevelopment.

The above studies shown that there are different social, economic, environmental and health problems in slum area. By considering the above researches the researcher focused to investigate river side slum area dweller's social and health problems in Addis Ketema Sub city Woreda 11, ''Lomi Meda Sefer'' area.

1.2.Statement of the problem

As study conducted in Kaula Bandar in 2013 at Mumbai, indicated approximately 10,000 people live in and located on a wharf in Mumbai's eastern waterfront and water quality, quantity and reliability. So the findings reveal severe deficiencies in water-related health and social equity indicators. Findings of this study area shows individuals spent high cost for water, the dwellers do not meet the WHO recommendation that all human beings use a minimum of 50 litres per capita per day (Howard, 2003), most individuals do not use any methods of water purification,

there is also flooding problems on individuals who live close to the ocean, and most dwellers identify complications with land ownership and the slum's unauthorized status as the main reasons for lack of formal water access (Subbaraman et al., 2013).

Study done by Elsey et al., (2016) focused on addressing public health risks facing slum dwellers in Kathmandu, Nepal. Since women are predominantly responsible for the domestic sphere in Nepal. The study depicted that, the most commonly identified health complaint by the women was respiratory ill-health, particularly asthma, cough and tuberculosis. This was closely followed by complaints of gastro-intestinal disease. Many women also identified heart disease and stress as important health concerns. The women mentioned, although to a lesser extent, burn injuries, skin and eye irritation and headaches. Subsequent the study highlighted female headed-households and those with disabilities had to contend with greater risks to health.

Another study by Murage, and Ngindu, (2017), conducted in Kenya about sanitary practices of residents of a Kenyan urban slum and fecal contamination of their domestic water sources. The study indicated that most people (91%) in Kenya the Langas slum used wells as the main source of domestic water, whereas the rest used tap water. Most people used pit latrines for excreta disposal, a substantial percentage (30%) of children excreted in the open field. The estimated distance between the pit latrines and the wells was generally short with about 40% of the pit latrines being less than 15 m from the wells. The main domestic water sources were found to be highly contaminated with fecal matter.

Study by Erulkar A.S., Mekbib T., Simie N., and Gulema T., (2004) highlighted the vulnerability of adolescents living in slum areas of Addis Ababa specifically age 10-19.This study focus on the adolescents vulnerability to different social problems. The study sought to gain the widest view of adolescent life possible, such as parental presence, migration, education and livelihoods, and social networks and well-being. Adolescent's migration from rural to urban slum area affects especially women's lives that are getting themselves in sex work to get revenue. By doing so, some women are exposed to sexual transmitted diseases. Girls were more likely to have migrated to slum area than boys. Girls - especially those who had migrated - were more likely to live without their parents and were considerably poorer than others; and many girls were in lowly paid exploitive jobs, especially domestic work.

Sahiledengle B., Alemseged F., and Belachew T., (2018) studied about the sanitation practice and associated factors among slum dwellers residing in urban slums of Addis Ababa, Ethiopia. Poor sanitation practices and unhygienic sanitation facilities were widely reported by slum dwellers and acute in the urban slum of Addis Ababa.

Mekonnen, (2007) studied about the upper, middle and lower Akaki river bank to understand the magnitude of informal settlement and the level of environmental degradation at every locality. He found in his study that how informal settlement is affecting the environment like the water, river side farm lands, cutting of river side trees for farm and for constructing the informal settlements, for charcoal and economic use etc. are the major environmental degradation causes or characteristics the researcher founded.

Because of informal settlements in riverside, it is affecting the environment, the dwellers' health, the country's economy and politics. In Ethiopia, specifically in Addis Ababa, people who settle informally in slum area are exposed to different social and health problems. Since they are constructing homes informally in riverside the government would not supply basic infrastructures in these areas. So if there is no enough tap water, sewerage system, garbage cans, straight light, footpaths, roads, public toilet etc. there will be full of social problems. Because of the above and unlisted problems the dwellers will encounter with different social and health problems like waterborne disease, asthma, flood, toxic waste, unavailability of road, etc. Especially in these kinds of area the most vulnerable groups are women and children Mekonnen, (2007).

Mekonnen, (2007) if the government tries to resettle or to reconstruct the area, there will be a need of big capital. If the government would not give a solution or attention for these areas there will be political unrest between the dwellers and the government side. In these kinds of area people are not full time worker and they are not well educated, unemployment and crime are common. Thus at the beginning the government needs to develop control method regarding river side slum area expansion otherwise it leads the society to different social and health problems.

The aforementioned studies mainly focused on issues like, how slum area sanitation problems is look like and their factors, vulnerability of slum area dwellers adolescents for different social problems, health related problems of women living in river side slum area, informal settlement

on riverside areas and its factor for environmental degradation of water and river related contamination. Despite the above studies which mostly focused on inner city's slum area, this study tried to add some knowledge on social and health related problems that faced by riverside slum area dwellers focusing on specific study site of Addis Ketema Sub-city, Woreda 11,''Lomi Meda Sefer'' areas.

1.3. Research Questions

Thus, the study will attempt to answer the following general questions relating to the problems:

- What are the social problems that faced by river side slum area dwellers?
- What are the health problems that faced by river side slum area dwellers?
- What are the socio-economic characteristics of the river side slum area dwellers?
- What activities are applied to mitigate social and health related problems by concerned bodies to river side slum area dwellers?

1.4. Objectives of the Study

1.4.1. General Objective

The general objective of this study was to investigate the social and health problems of river side slum area dwellers' at Addis Ketema Sub city, Woreda 11, ''Lomi Meda Sefer'' areas.

1.4.2. Specific Objectives

The specific objectives of this research include:

- To investigate the social problems that faced by river side slum area dwellers.
- To investigate health problems that faced by river side slum area dwellers.
- To identify socio-economic characteristics of river side slum area dwellers in the study area.
- To investigate activities performed by concerned bodies to mitigate social and health related problems.

1.5. Scope of the study

The purpose of this study was to reveal the social and health problems of river side slum area dwellers of Addis Ketema Sub city, Woreda 11, ‘’Lomi Meda Sefer’’. Not the whole ‘’Lomi Meda Sefer’’ dwellers were included in the study, but specifically blocks which are near to the river side. The researcher disclosed the socio economic characteristic, the social problems, health problems and activities performed by concerned body to prevent or solve those problems. For this study household member was considered as unit of analysis.

1.6. Significance of the study

Social and health factors that are affecting river side slum area dwellers are one of the serious issues of most developing countries. Since research is one way of solving and identifying a certain problems, the researcher believes that the social and health problems of riverside slum area dwellers’ case should be supported by a research. So, it is believed that the study will serve as an input for Woreda’s administration institutes which works on riverside slum area dwellers’ different problems. Secondly, the findings of the research can also serve as valuable input for the country’s land policy, and finally, since there are only few studies conducted on riverside slum areas in Ethiopia, the study will contribute to fill the knowledge gap in the area. It can also serve as a basic reference for other researchers who want to conduct a study on the issue in our country.

1.7. Limitation of the Study

Despite all the effort made to accomplish this study, some practical limitations had been encounter the study. The first limitation was that there was no previous study on the specific title which affected the study’s literature. The second limitation was that the researcher was challenged by key informant interview implementation because of limited previous experience. Finally the research sample does not fully represent all river side slum area dwellers people in Ethiopia since it is done in urban (specifically capital city of the country) setting. Even if longitudinal research’s result is more reliable than cross sectional method to compare some cause and effect relationships, the researcher used cross-sectional research due to time and budget constraints.

1.8. Thesis Structure

For the purpose of convenience as well as logical presentation of the study, this paper organized in to five chapters. Chapter one deals with background of the study, statement of the problem, objective of the study, scope of the study, significance of the study, limitation of the study, and research site selection. In the second chapter, review of related literature presented. The third chapter presented research methodology and description of the study area. The core of this research paper is embodied in chapter four, attempts made to present the data and discuss the result. Finally, under chapter five the research dealt with brief conclusion and recommendation based on the finding of the study.

1.9. Conceptual definition

Slum: In this research the word slum mean, "one or a group of individuals living under the same roof in an urban area, lacking in one or more of the following five amenities":

1. Durable housing of a permanent nature that protects against extreme climate conditions.
2. Sufficient living space which means not more than three people sharing the same room.
3. Easy access to safe water in sufficient amounts at an affordable price.
4. Access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of people.
5. Security of tenure that prevents forced evictions (UN-Habitat, 2006/07).

Slum area: It express the study area and the word mean a highly populated urban residential area consisting mostly of closely packed, decrepit housing units in a situation of deteriorated or incomplete infrastructure, inhabited primarily by impoverished persons (Slum, 2022).

River side: Means that, the land along the edges of a river (Cambridge dictionaries online, n.d.).

Dwellers: It means the society members who are living in the study area. But Cambridge dictionary defined it as a person who lives in a city, town, cave etc. (Cambridge dictionaries online, n.d.).

Social problem: Any condition or behaviour that has negative consequences for large numbers of people and that is generally recognized as a condition or behaviour that needs to be addressed (M Libraries, n.d).

Health: WHO, (1948) defined health as being "**a state of complete physical, mental, and social well-being** and not merely the absence of disease or infirmity".

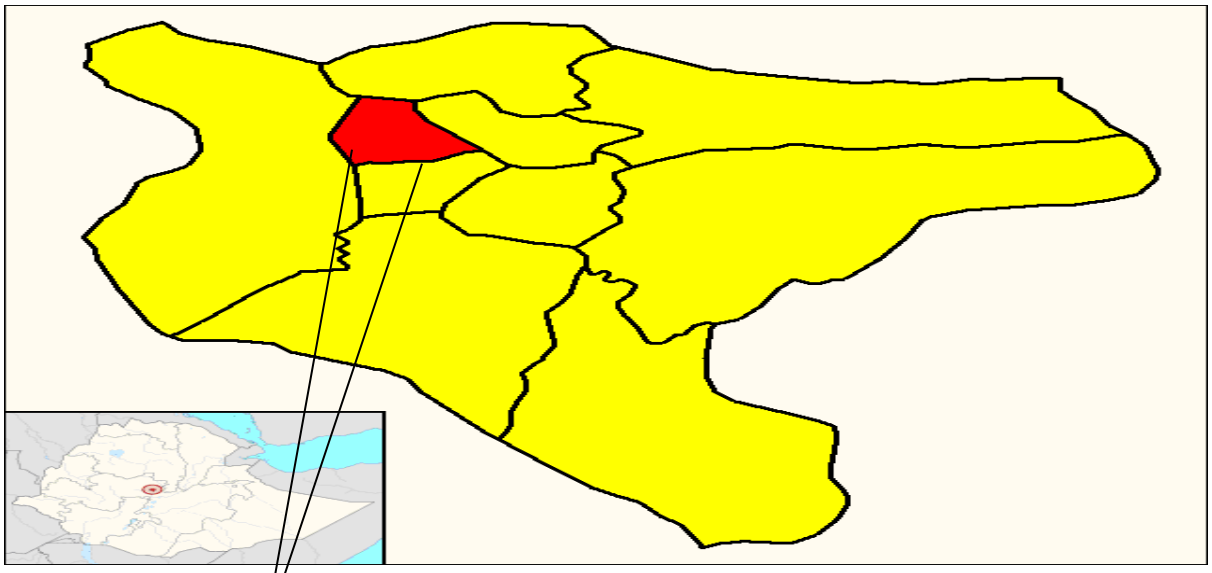
Health Problem: A problems that affects someone's health (Collins dictionaries, n.d).

Chapter Two

2. Review of Related Literature

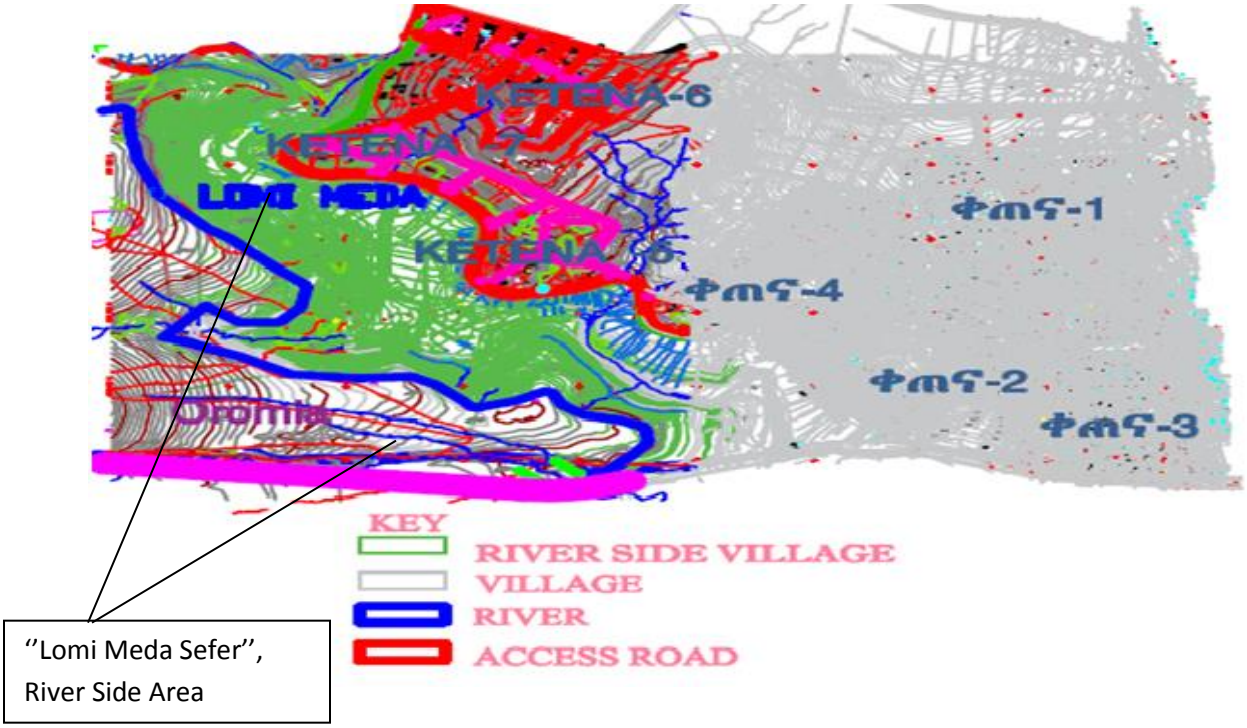
2.1. Description of Study Area

Addis Ketema Subcity is one of the 11 Sub cities of Addis Ababa, Ethiopia. The sub city is located in the North Western area of the city, not far from its centre. It borders with the sub cities of Gullele in the North, Arada in the East, Lideta and Kolfe Keraniyo in the South and Oromia region in the West. Addis Ketema Sub city has 14 Woredas. Among them Woreda 11 is a selected area for this specific research study. This area shares border with Addis Ketema Wereda 13 in the North part, with Addis Ketema Wereda 14 and Oromia region in the West part, with Addis Ketema Wereda 12 in the East part and with Kolfe Keraniyo Wereda 10 in the South part. The data got from Woreda's Administration shows that the total population of Woreda 11 is around 32,007 with female population 16,056 and male population 15,951. Specifically the river side slum area dwellers of the study area household heads population size is 347. There are three government's elementary schools, one high school, one health centre, and one industry village in this Woreda.In this Woreda dominant ethnic groups are ''Silte'', ''Dorze'' and ''Gurage'' nations. Weaving and small scale businesses are the main means of securing their necessities of live. Most women are unemployed and they wait their husbands hand for economy source (Woreda's Administration Office, 2022). This unemployment rate lets the dwellers to live low status living condition.



Source: https://en.wikipedia.org/wiki/File:Addis_Ketema_ (Addis_Ababa_Map).png

Figure 1: Map of Addis Ababa's Sub cities.



Source: Addis Ketema Sub city, Woreda 11 Land Development Management Office.

Figure 2: Map of Addis Ketema Sub city, Woreda 11.

2.2. Empirical literature

The literature part is the major part which gives a clue to understand the current practice of riverside slum area settlements at the international and local level.

2.2.1. Social problems that faced by river side slum area dwellers

Slums have become a usual social phenomenon since the time of industrial revolution in Western Europe, particularly in Great Britain, where the bulk of rural population came in search of employment and moved into the new industrial centres. An area with poor amenities inhabited by a low-income population and insecure family life is turned a slum. Rapid urbanization has brought alarming unmanageable, inevitable and persistent problems of slums in almost every city of the world. Slum life has not only affected developing countries but also the developed ones (Srivastava, 1996).

Slum settlement is a complex social issue that affects different groups of people across the region. Many slum dwellers face various social problems such as unemployment, and lack of access to basic services. One of the most common problems faced by slum dwellers are lack of access to basic services such as schools, water and sanitation (Tsenkove, 2008).

According to Owa (2017) slums have the most intolerable of urban housing conditions, which frequently include: insecurity of tenure; lack of basic services, especially water and sanitation; inadequate and sometimes unsafe building structures; overcrowding; and location on hazardous land. In addition, slum areas have high concentration of social and economic deprivation, which may include broken families, unemployment and economic issues. Slum dwellers have limited access to credit and formal job markets due to stigmatization, discrimination and geographic isolation. Slums are often recipients of the city's nuisances, including industrial effluent and noxious waste, and the only land accessible to slum dwellers is often fragile, dangerous or polluted land that no one else wants.

Slum settlement along with planning and management deficiencies affects the cities livability and environmental quality. For example urban runoff, downstream, pollution from garbage and sewer discharges directly in rivers creates serious environmental threats. In general slum settlement expansion contributes to environmental degradation at many levels and creates

environmental hazards through development in natural reserves and protected areas (Dinsa, 2012).

The study reveals that the household sanitation practice of slum dwellers was very low and unhygienic sanitation facilities are acute in the urban slum of Addis Ababa. Having improved sanitation facility having pour-flush type of latrine, the presence of the solid waste collection container inside the house compound and good hygiene knowledge were factors associated with good sanitation practice. Hence, escalating household improved sanitation facilities along with strong health promotion program on sanitation practice is strongly recommended (Sahiledengle et al., 2018).

2.2.2. Health problems that faced by river side slum area dwellers

As Akbar F., (2016) states the central role in triggering health concerns for slum area populations is posed by malnutrition in children, reduced breastfeeding, respiratory problems as a result of exposure to toxic fumed emitted by burning fuels for cooking and heating purposes, insufficient water availability, sanitation, draining and rubbishing dumping issues. Furthermore, the population's ignorance of getting rid of infection breeding reservoirs, high crime rates, fire injuries and extreme weather conditions are also significant contributing factors to increasing the health problems. Collectively, these factors account for the spread of many communicable and non-communicable diseases which include a vast list of health conditions and diseases such as diarrhea, hookworm, cholera, typhoid, leishmaniosis, leptospirosis, dengue, pneumonia, malaria and tuberculosis. Their misery doesn't end here as it continues to put them at risk of mental health problems because of the stressors inflicted upon them by their low socioeconomic status.

After all, the quality of housing has a major impact on health Mekonnen (as cited in Acheson, 1991). Mueller, (2007) described that public health researchers have documented many connections between conditions in low socio-economic status neighbourhoods and various health concerns. According to Mekonnen (as cited in Easterlow, 2000), people who occupy the cheapest housing usually live in the poorer parts of the housing stock in the worst environmental conditions. The poor housing is widely associated with poor health. By all means, the differences in the quality, character and accessibility of the housing stock have a direct and

indirect effect on the health of households, which in turn has a bearing on the position of households in the wider social structure Mekonnen (as cited in Easterlow, 2000).

Indeed, evidence from various studies of residents of dilapidated public housing supports the importance of both housing and neighbourhood conditions for residents' health as well as many city problems, not only from aesthetical aspect but also from environmental aspect. A particularly significant factor in housing-related stress is overcrowding. When families do not have sufficient space, activities in the home become significantly constrained. As a result it is found that crowding has significant psychological impacts, especially on families with children (Mueller, 2007).

All the problems above are caused by the lack of health infrastructures and sanitation system. The term sanitation means provision of accessible safe drinking water, water for washing and bathing and toilet accommodation Mekonnen (as cited in Acheson, 1991).

As Wulandari A.P., (2009) state that when there is excessive pressure on the existing sanitary facilities, many people dispose their solid waste and wastewater from kitchen as well as faecal directly to the river or stream. Hence, childhood diarrhoea and other infectious diseases are common. Further it will cause river water quality degradation. Moreover, another impact of the slums density is air quality degradation. It is caused by the temporary construction and buildings density as well as bad ventilation which lead to scarcity of healthy air for its inhabitants.

Habitat for Humanity, (2017) states those residents of the Addis Abba slums have faced problems with toilets and sanitation their whole lives. As a result, many have been inflicted with disease and illness, such as cholera. But in Addis Ababa, where more than 80% of the city's 2.74 million residents live in slum areas, this is normality. In these areas, large communities share make-shift kitchens and toilets, which are extremely unhygienic and dangerous to be around. Already structurally unsafe and made worse by daily use, these communal facilities contribute to the spread of diseases and other health problems.

2.2.3. Socio-economic characteristics of river side slum area dwellers

Shah, (2012) States that rapid urbanization as one of the greatest socio-economic changes during the last five decades or so, has caused the burgeoning of new kinds of slums, the growth of

squatter and informal housing all around the rapidly expanding cities of the developing world. Urban populations have increased explosively in the past 50 years, and will continue to do so for at least the next 30 years as the number of people born in cities increase and as people continue to be displaced from rural areas that are almost at capacity. The rate of creation of formal sector urban jobs is well below the expected growth rate of the urban labour force, so in all probability the majority of these new residents will eke out an informal living and will live in slums.

A study analysed the correlations between socio-economic attributes of households and various slum-like dwelling characteristics using data from a sample of Indonesian households. Various regression specifications were used to understand these correlations at different levels of analysis. The hedonic regressions found that better quality dwellings, both in terms of structure and utility services, enjoy higher rents. The probit regressions relating dwelling characteristics to household characteristics indicate income, education and family size raise the probability of households' living in better quality dwellings. The willingness-to-pay analysis points toward income and education-based differences, with rich and educated households willing to pay more for better dwelling characteristics. Thus, the results from these varied approaches are in line with each other. Lastly, regressions of health indicators show dwelling characteristics (after controlling for socio-economic household attributes) are significant determinants of physical and mental health (Shah, 2012).

As a study done in slum and shanty areas of Lagos State, Nigeria shows that majority of the dwellers are male age 30-39. The result here simply shows that most of the respondents in the study area were married. Also the result of the study here clearly shows that relatively a large number of the respondents were involved in petty trading which has direct effect on their daily income and standard of living. This further explains the level of poverty in this area. Based on rooms, study revealed that the highest percentage of respondents was living in single room 5-7 person (Lukeman Y., Bako I., Omole K., Nwokoro C., & Akinbogun O., 2014).

According to Issa, (2021) the study conduct in slum area of Addis Ababa reveals that dweller of the area pay extra costs to afford bottled water due to the constant fluctuation of access to clean water. Also the study indicated that when dwellers make some money they start to leave the place. Dependability of the dwellers' of the study area on electric power has been challenging

those whose livelihood activity relies on electric power to make some businesses and to cook their meals.

2.2.4. Activities performed by concerned bodies to mitigate social and health related problems

UN-Habitat, (2003) slum policies should be integrated with, or should be seen as part of, broader, people-focused urban poverty reduction policies that address the various dimensions of poverty, including employment and incomes, food, health and education, shelter and access to basic urban infrastructure and services. It should be recognized, however, that improving incomes and jobs for slum dwellers requires robust growth of the national economy, which is it dependent upon effective and equitable national and international economic policies, including trade.

As a study shows that (UN-Habitat, 2003), there is great potential for enhancing the effectiveness of slum policies by fully involving the urban poor and those traditionally responsible for investment in housing development. This requires urban policies to be more inclusive and the public sector to be much more accountable to all citizens. For slum policies to be successful, the kind of apathy and lack of political will that has characterized both national and local levels of government in many developing countries in recent decades needs to be reversed. To improve urban inclusiveness, urban policies should increasingly aim at creating safer cities. This could be achieved through better housing policies for the urban low-income population (including slum dwellers), effective urban employment generation policies, more effective formal policing and public justice institutions, as well as strong community-based mechanisms for dealing with urban crime. Investment in city-wide infrastructure is a precondition for successful and affordable slum upgrading, as the lack of it is one strong mechanism by which the urban poor are excluded, and also by which improved slum housing remains unaffordable for them.

Here (UN-Habitat, 2003) up-scaling and replication of slum upgrading is among the most important of the strategies that have received greater emphasis in recent years, though it should be recognized that slum upgrading is only one solution among several others. The failure of past slum upgrading and low-income housing development has, to a large extent, been a result of inadequate allocation of resources, accompanied by ineffective cost-recovery strategies. Future

slum upgrading should be based on sustained commitment of resources sufficient to address the existing slum problem in each city and country. Proper attention should also be paid to the maintenance and management of the existing housing stock, both of which require the consistent allocation of adequate resources. Slum upgrading should be scaled up to cover the whole city, and replicated to cover all cities. Up-scaling and replication should therefore become driving principles of slum upgrading, in particular, and of urban low-income housing policies in general. Some countries have made significant strides by consistently allocating modest percentages of their national annual budgets to low income housing development, for example Singapore, China and, more recently, South Africa.

According to (UN-Habitat, 2003) to attain the goal of cities without slums, developing country cities should vigorously implement urban planning and management policies designed to prevent the emergence of slums, alongside slum upgrading and within the strategic context of poverty reduction.

Arif A., (2021) states that the Indian government often comes up with policies to ensure the welfare of the most marginalized groups, Slum redevelopment policies are an example of such policies. The Delhi government is not the first state government to take such a step. In Mumbai, the Slum Redevelopment Schemes (SRS) were implemented as early as 1991 involving private developers in construction while the role of the government was only restricted to that of regulation. Although the policy is good on paper, the implementation of it has been fairly poor with no completed projects in the last five years since its introduction.

An Egypt government made a strategy and effort to deal with the country's slum areas. Developing new cities on desert land is considered an alternative for the growth of informal settlements on agricultural land. In addition, the local government's approach towards slums continued to be demolition and relocation. In 1993, a national program was launched for redeveloping 20 slum areas. In its second phase, this national program conducted a survey for identifying the informal areas which require upgrading and those requiring complete demolishing. Moreover, it was announced in many cases that there was a necessity for tearing down slums which required forcibly removing residents to remote new cities lacking essential services. In such cases, residents were forced to make a new life other than their normal sources lives. Therefore, residents of such areas have always resisted these plans. There was two

approaches as the writer explains, which are preventive and interventionist approaches. Efforts by the government over the past several decades concentrated more on trying to eradicate existing slums by removing them rather than dealing with the original reasons of urban poverty and addressing the socio economic drives that led to the growth of informal areas. 80% of the government's interventions are basically relocation, without involving the community in the decision making processes of the resettlement which ultimately results in failure, and 20% of the interventions are redevelopment, which is also proved to be unsuccessful in terms of sustainability. The adopted practices should actually be the opposite, i.e. 80% redevelopment of slum areas to be applied in a participatory manner guaranteeing sustainability and 20% only for relocation, when it is inevitable (Maher, 2017).

According to Atlaw, (2012) study shows that, more than two-third of Addis Ababa's people reside in slum areas. Various efforts have been made by different actors to redevelop slum areas. In Addis Ababa, one of the predominantly implemented redevelopment approaches is relocation. Relocation erodes communities' access to all elements needed for their well-being-economic activity, social ties and urban services. There are also evidences that reveal the desirable impacts of relocation on relocated people. It also creates a better living scenario for relocates quality housing with adequate water supply, sanitation, toilet, kitchen, low risk factors for disease and manage burden of water collection borne by women, specifically girls.

2.4.Conceptual Framework

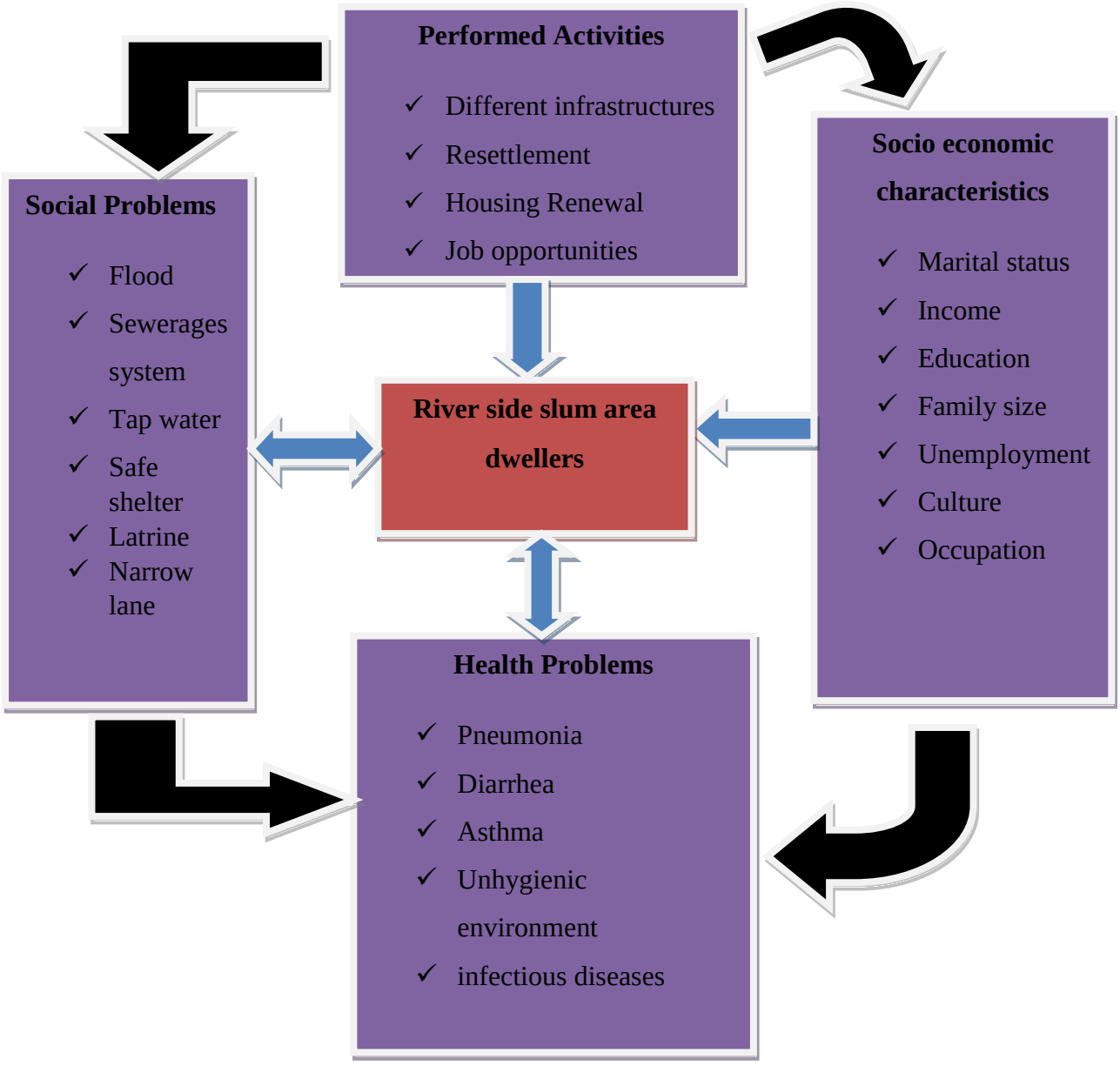


Figure 3: Conceptual framework of social and health problems of riverside slum area dwellers

Source: My own statement on 2022

The above diagram shows that how the dwellers are affected by social and health problems and their low socio-economic characteristics also have a challenge on their life. The effect for this crisis from social problem side the area is contaminated because of shanty houses, sewerage system and sanitation problems. The area characterized by narrow lane, flood problem and no enough access to clean water. These and other social problems are affecting health problems of

the dwellers. For this case constructing different infrastructures and creating job opportunities by the government for the dwellers will minimize the social problems. From economic side most of the people who live in the area are unemployed or informal job employed and most adults are not well educated. Activities from government side on building school and other infrastructure will affect the dwellers' life positively. When low economy and big family size level increases, the dwellers' health will be affected negatively. Mostly people who live in such areas are vulnerable to different health problems. The riverside slum area is characterized by health problems like respiratory related, diarrhoea, infectious disease and pneumonia. This shows that how their living situation is poor. The government and different NGOs which work on slum area need to find different solutions to alleviate these problems by constructing infrastructures, resettlement program, creating job opportunity... etc.

Chapter Three

3. Research Methodology

3.1. Research Design

According to Creswell (2009), a research design means a plan of regarding time, methods and statistical tools that will be used to undertake research paper. It is a blue print of the whole study method.

Kendra, (2019) unlike longitudinal studies which look at a group of people over an extended period, cross-sectional studies are used to describe what is happening at the present moment. This type of research is frequently used to determine the prevailing characteristics in a population at a certain point in time. For example, a cross-sectional study might be used to determine if exposure to specific risk factors might correlate with particular outcomes. .

In this regard, this study used different research design to conduct the study. In terms of time dimension, this study employed cross-sectional research design, to obtain that data at one point in time from sample respondents. The researcher preferred to use cross sectional study because it allows getting information about the current situation and it is cheap from coast and time angle. Several secondary data written documents including journals, articles, books and other online documents which focus on river side slum area dwellers had been reviewed by the researcher.

3.2. Research Site Selection

The study area is one of river side slum area in Addis Ababa. Before 5 years ago the researcher was assigned as a data collector of ‘’city’s sustainable job outreach’’ by Central Statistics Agency on ‘’Lomi Meda Sefer’’. At that time the researcher observed that the area is how difficult for living and got interest to study the area. Now when the time comes the researcher decided to study the social and health problems of the study area.

3.3. Research Approach

For this study methodological triangulation that consist both qualitative and quantitative research approach used to address the all objectives of the study and to substantiate quantitative data with

that of qualitative one. Quantitative research enables us to address large number of respondents and generalize the result from the target group that samples are going to be drawn, whereas qualitative approach help us to address more detail and complex issue like values, behaviours, opinions and other different social contexts through interviewing target group under investigation. Creswell (2009) indicated that when the results of qualitative study are combined with quantitative techniques it helps to interpret and better understand the complex reality of any given situation, along with the implications of quantitative data. Using mixed methods of research, researchers have the advantage of using numbers to add accuracy to words, pictures, and narratives. Mixed method of research is more expensive, difficult to handle by single researcher and it is time consuming. Therefore, since this river side slum area study needs to include dwellers and other participants, in order to get valid information and result, the researcher preferred to use both approach as a triangulation ways.

3.4. Research Methods

Research method is a strategy or technique that used in a collection of data/evidence for analysis in order to uncover new information or create better understanding of a topic. There are three types of research methods; quantitative, qualitative and mixed research. The first two research types use different data collection tools, but mixed type research uses qualitative and quantitative data collection tools together. Interview, focus group discussion (FGD) and observation are data collection tools of qualitative research. Questionnaires/surveys and experiments are for quantitative research method (SAGE, 2022).For this study mixed research was applied.

3.4.1. Qualitative Research Method Data Collection Tools

3.4.1.1. Interview

Study's area known persons, government officials and health extension workers were key informants for this study. Key informants interview helped the researcher to identify in detail what crises are going on the area by using semi structured interview method. Three (3) respondents who are government officials, three (3) respondents who are health extension workers and three (3) known persons in the area specifically block coordinators had been selected from local community purposively by the researcher. The information was gathered

using pre designed checklists and interview guides. Key informants were interviewed using open ended questions.

3.4.1.2. Observation

In this research the method had been used to get first and fresh information at one point in time regarding the issue under investigation. Thus the researcher observed the area by directly watching what the living condition of the dwellers look like and what kinds of social and health problems are there. For doing this observation the researcher used written checklists.

3.4.2. Quantitative Research Methods Data Collection Tool

Household Survey

Survey has different strengths like with survey software; advanced statistical techniques can be utilized to analyse survey data to determine validity, reliability, and statistical significance, including the ability to analyse multiple variables. Also numerous questions can be asked about a subject, giving extensive flexibility in data analysis. The weaknesses of survey data will be like respondents may not feel encouraged to provide accurate, honest answers. Surveys with closed-ended questions may have a lower validity rate than other question types. Mostly, data errors due to question non-responses may exist (DeFranzo, 2022).

Household survey had been used to obtain information about the issue pertaining to the slum area dwellers of the study area. Pre-coded questionnaire had been prepared and directly administered by the researcher and enumerator (who are psychology, statistics and biology degree holders) through using local language (Ahmaric). Accordingly, sample household member of the study had been selected using sample size determination formula to participate in the study to answer survey questions.

3.5. Sampling Procedure

To draw valid conclusions from a study results, the researcher have to carefully decide how to select a sample that is representative of the group as a whole. The researcher should clearly explain how he/she selected the sample in the methodology section of paper. Probability

sampling allow the researcher to make strong statistical inferences about the whole group and non-probability sampling which involves non-random selection based on convenience or other criteria allow the researcher to collect data easily (McCombes,2022).

For this study both probability and non-probability sampling techniques have been used to draw the required number of sample units. The rationale behind employing non-probability sampling and probability sampling design is the fact that it allows the researchers to select cases that will be the representative of the general population from which they will be drawn. Hence, in this study the researcher had been used purposive sampling to select known persons of the area, government officials and health extension workers purposively for key informant interview. For the above interviewees groups there had been three (3) respondents for each which believed by the researcher the number is enough for key informant interview data gathering.

For quantitative data collection, simple random sampling had been applied and by using sample size determination formula. Among 347 houses which are exist in river side slum area of ‘’Lomi Meda Sefer’’, 186 household members one from each 186 houses who are above the age of 18 has been participated for survey study. Finally, observation had been applied.

From the total number of households in the target population, the researcher used the following formula designed by Yamane (1967) to determine the sample size of survey respondents from the total population.

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

$$\mathrm{n} = \frac{347}{1+347(0.05)^2}$$

$$\mathrm{n} = \frac{347}{1+347(0.0025)}$$

$$\mathrm{n} = \frac{347}{1+0.8675}$$

$$\mathrm{n} = \frac{347}{1.8675}$$

$$n = \frac{347}{1.8675}$$

n=186

Where,

N= Population size

n= Sample size required

e= Margin of error (5%)

Therefore sample size of 186 riverside slum area dwellers were selected for survey.

Based on the above sample size determination calculation result, out of the total houses which exist in river side slum area, 54% (186 respondents) sample had been drawn by the researcher for survey respondents.

3.6. Population

This study had been conduct in Addis Ketema Sub-city, Woreda11, specifically in ‘’Lomi Meda Sefer’’ area on issue regarding the health and social problem faced by river side slum area dwellers. The data got from Woreda’s Administration in 2022 shows that the total population of Woreda 11 is around 32,007 with female population 16,056 and male population 15,951. Specifically the river side slum area dwellers of ‘’Lomi Meda Sefer’’ household heads’ population size is 347. For this study household members are unit of analysis.

3.7. Data Analysis

During in quantitative data analysis, SPSS software had been applied to interpret and analyse frequency and percentage of survey result. While for qualitative data particular study, thematic framework was employed to analyse the data. The researcher examines and brings together the data that are common topics, ideas and patterns of meaning that come up repeatedly and

analyzed it accordingly. For proper management and analysis of the data, coherent flow of ideas of the interview had been recorded by tape based on consent of the respondents and the researcher took field notes in time of observation. With regard to the structure of data analysis, the data collected from the interviews and observation was categorized thematically and narrated. During the research analysis, all of the major themes were discussed in detail in line with each objective of the study.

3.8. Ethical Consideration

The researcher was made every effort to carry out the empirical investigation consistent with ethical guidelines. In this study all participants were aware of in advance for the purpose and objective of the study. The respondents informed that the research was undertake for educational purpose and therefore does not involve any payment for being part of it as research participant. All research participants were asked in the first place their willingness to participate in the research; including the possible use of tape recorder while in the process of administering the interview. The researcher assured respondents about the confidentiality of information given for this particular study and strictly refrain from unnecessarily soliciting research participants (for example, offering money) to obtain information. In general, respondents only asked to give their oral consent, for the research does not include any potential harm to anyone involved in the research. Although the different assumptions and theories that are utilized from other books, journals and researches had been properly cited and acknowledged.

Chapter Four

4. Result and Discussion

In this part, the findings of the study are presented and interpreted. The analysis has five parts, the first section deals with the socio-demographic characteristics of participants. The second part comprises information that the socio-economic characteristics of river side slum area dwellers. The third section includes the social problems of the dwellers. The fourth part focuses on the health problems of the study area. The final section deals with any activities performed by concerned bodies to mitigate the social and health related problems of the study area. In the following section the researcher tried to summarize the whole Socio-demographic data the study participants.

4.1. The Socio-Demographic and Economic Characteristics of the Sample Households

As the data indicated among the total respondents covered in this study, 41.9% were males and 58.1% is females. Thus, more than half of the sampled respondents were females.

Regarding the age category of the study participants out of the total 186 sampled household members (any one of specific household member who are above the age of 18), 55.9% of them are found at the age interval between 18-30 which is the highest young group who were followed by 28.5% whose age group is 31-40.On the other hand, 8.6 % of the research respondents were found at the age of 41-50. The number of respondents found at the age of 51-60 was 4.8% and finally the age of above >60 are 2.2% of the total respondents respectively.

With regards to the marital status of the respondents, 11.3% of them are unmarried and 86.6% of respondents have reported they are married. Divorced and widowed respondents are comprises 1.1% each respectively. There were no results for separation. Regarding their educational status, from the overall respondents, 37.6% of them are non-educated. But the majority of the respondents 44.1% are reported as primary level educated. The other group of education, which is certificate and diploma holder's respondents, are 3.8% respectively. Finally degree and above holder is only an individual (0.5%).

Information regarding the family size of respondents, the sample survey result depicted, majority of the respondents 55.4% has family size in between 3-5. Whereas, Out of the total sample size households whose family members 6-8 are 31.7%. The remaining 12.9% respondents have got <3 family members.

With regard to religion affiliation majority of them which account 70.9% of the total respondents are Islam religion followers. Orthodox and Protestant religion followers account 25% and 3.8% of the total sample respondents respectively.

The finding further indicated that, respondents of this research have different sources of income. Accordingly, out of 186 household members, government employees are the least one, which comprises 1.1% of the total respondents. Respondents who answered working in private sectors consist is 31.7%. The largest number of respondent's responded they are running their own private business which consist 47.3%. This shows that most of slum area dwellers are participating on their own self-employment activities. Individuals who get their income from house rent comprise 2.2% of the total respondents. On the other hands, 16.1% respondents are receiving urban safety net program from city administration and the remaining 1.6% of respondents are getting their income from remittance.

Regarding the sum of household members' monthly income, majority of respondents of this study are getting monthly from 1001-3000 birr are 69.9%. The second largest tally of respondents 22.6% are getting <1000 birr per month. Although 7.5% respondents reported that they are getting 3001-5000 birr per month, there is no individual who can get >5000 birr per month in the study area. Therefore, it is fair to say that the study area dwellers are living in economically in a very poor condition.

4.1. The Social Problems That Faced by River Side Slum Area Dwellers

Slum settlement is a complex social issue that affects different groups of people across the region. Many slum dwellers face various social problems such as unemployment, social exclusion, and lack of access to basic services. One of the most common problems faced by slum dwellers are lack of access to basic services such as schools, water and sanitation (Tsenkove, 2008).

In the study area there are a numbers of social factors that reflected the riverside slum area dwellers. In the following sub section the researcher try to uncover some social problem that detriment the life style of slum area dwellers and expose them to different risks.

In this regard respondents were asked whether they have different infrastructural activities in their residential area or not and their answer is summarized as follow

Table 1: Frequency and Percentage Distribution of Household Access to Different Infrastructures

	Variables	**Frequency**	**Percentage (%)**
How do you best describe the area in which you live?	Safe	3	1.6
	Somehow safe	32	17.2
	Not safe	142	76.3
	Deteriorate	9	4.8
	Total	**186**	**100**
Do you have access to clean water near to your residential area?	Yes	157	84.4
	No	29	15.6
	Total	**186**	**100**
If yes for the above question, from the following which type is the access?	Tap water	45	24.2
	Stand posts	112	60.2
	Hand pumps	0	0
	Wells	0	0
	Total	**157**	**84.4**
Do you have access to waste disposal sewerage system in your residential area?	Yes	123	66.1
	No	63	33.9
	Total	**186**	**100**
Do you have access to public	Yes	157	84.4

sanitation program in your residential area?	No	29	15.6
	Total	186	100
Do you have access to electricity in your residential area?	Yes	186	100
	No	0	0
	Total	**186**	**100**

Source: Field survey, April 2022

As the finding of the study indicated majority of the respondents 76.3% describe their residential area as not safe place to live. The other sample respondents which account 17% stated that their residential area is somehow safe. The remaining 4.8% and 1.6 of respondents on the other hands describe their residential area as deteriorated and safe respectively. Thus, the data revealed that the area is not safe for living.

Respondents of this study asked to answer their access to ‘’clean water’’ near to their residential area. Accordingly, majority of them which accounts 84.4% agreed that they are getting clean water near to their area. While, 15.6% of participants answered that they do not get clean water near to their residential area. Among those who have access to clean water service, 24.2% of them replied that they are getting the access from tap water. But most of the dwellers which account 60.2% of respondents get clean water from stand posts. As the researcher observed, in the study area there are no constructed hand pumps and wells to access clean water.

The above data reveals that accessing ‘’clean water’’ is somehow not the main problem of the study area population as they have safe access to water for living. As key informants revealed, *‘’there are water access in the study area but it is only once in a week and even some times they do not get the water for two weeks. They further indicated, since most of riverside slum area dwellers have no legal residential houses certification, they can’t able to access basic infrastructural facilities in their living areas.’’*

Regarding access to waste disposal (sewerage system) in this study area, 66.1% of respondents answered that they are getting the access. But 33.9% of households replied that they do not have access for it. In line with the above case, 84.4% of respondents are getting access to public sanitation program (mostly from safety net beneficiaries).Though, 15.6% of participants

answered that they do not have access to public sanitation program. Moreover, regarding access to electricity the entire survey respondent responded that they have no problem of access to electricity and in the area it is not taken as a serious problem. This data shows that most people agreed that they do have access to sewerage system. In this case the researcher observed that the waste disposal system is very poor in their quality. The other data shows that the majority of respondents do have access to public sanitation.

Respondents were asked to answer the reason behind lacking the above services was summarized as follow.

Table 2: Frequency and Percentage Distribution of Household Members on the Reason of Lacking those Infrastructures Listed in Table 1

If your answer is no for table 1 questions on accessing those infrastructure, what do you think the reason behind of lacking those services?	Neglected by government	11	5.9
	Unsuitability of residential area	22	11.8
	Lack of capacity to afford	55	29.6
	Total	**88**	**47.3**

Source: Field survey, April 2022

To know the main reason why peoples in the riverside slum area dwellers are not getting basic infrastructural service respondents were asked which factors hinder them to get access to it. Accordingly, majority of the respondents 29.6% said lack of capacity to afford basic infrastructural facilities. Whereas, 11.8% of respondents give reason that unsuitability of the residential area is a reason for not getting basic service in their area. Only, 5.9% of respondents said they are neglected by government to get access to basic infrastructural services. Accordingly this figure shows that the reason behind not accessing basic infrastructures is because of low capacity to afford the service and unsuitability of the living area.

Having improved sanitation facility, having pour-flush type of latrine, the presence of the solid waste collection container inside the house compound and good hygiene knowledge were factors associated with good sanitation practice (Sahiledengle et al., 2018). As the finding of the study

indicated, in the study area the reason for lack of accessing good sanitation services are mostly associated with dwellers' poor economic condition and unsuitability of the dwelling area.

Respondents were asked regarding the overall sanitation problem of the study and their answer summarized as follow.

Table 3: Frequency and Percentage Distribution of overall Sanitation Problems

	Variables	**Frequency**	**Percentage (%)**
How do you describe the housing quality of river side slum area dwellers?	Good	0	0
	Not bad	26	14
	Poor	125	67.2
	Very bad	35	18.8
	Total	**186**	**100**
What kinds of toilet you use in your house?	Private	69	37.1
	Communal latrine	117	62.9
	Other	0	0
	Total	**186**	**100**
Do you think that river side slum area dwellers in your area are vulnerable to flood problems?	Yes	173	93
	No	13	7
	Total	**186**	**100**
Is your village's lanes are safe for ambulance and other car movement?	Yes	33	17.7
	No	153	82.3
	Total	**186**	**100**

Source: Field survey, April 2022

From sample household report on the housing quality of river side slum area, 67.2% responded their housing quality is poor. The second largest number 18.8% of respondents replied as the living area's housing conditions are very bad. The remaining 14% of the dwellers answered that their quality of house is not bad.

Regarding the access to toilet, 37.1% of respondents have their private toilet. The others 62.9% of participants use communal latrine. In relation to toilet usage, most respondent replied that, they use communal latrines that build by house owners.

The above figure showed that the study area's most housing qualities are poor. Also regarding toilet, most of the respondents use communal latrine because of they do not live in their own house and their low economic condition.

Regarding vulnerability to flood problems, 93% of the respondents said that at rainy season they always fear the hazard of flood. In this case only 7% of respondents replied that they do not have fear for flood problems. In support of this idea respondents indicated that, their residential area encounters frequent flood problems in recent years. Furthermore, the above survey result depicted, significant number of respondents indicated which accounts 17.7% of total respondents their residential area lane is safe for any car movement. Whereas, 82.3% of respondents believed that village's lanes are not safe for any car movement. The above data reveals that the study area's lanes are not safe for ambulance and car movement. During observation, the researcher came to know that ''Lomi Meda Sefer'' riverside slum area dwellers are highly vulnerable to flood problems. Since the study area's land is sloppy, village lanes are very narrow and not safe for ambulance and car movement.

As the researcher got information from land management office key informant,

"As per the rule people do not allow to make settle in 50m from river side. Fifty meter from the river is only allowed to green area. But illegally people build their houses in the restricted margin and when the rain season comes the dwellers got high fear for flood problems." (Field interview, April 2022)

This interview result reveals that, every slum area of ''Lomi Meda Sefer'' owned illegally. Living especially in river side slum area is risky for environmental and other social and health problems.

The data got from observation shows that, the village's lanes are clean but very narrow and sloppy. Also there are waste disposal systems in most parts of the village, but it is not that much satisfactory. The researcher observed that the sewerage system emits bad smell in most parts of

the village. Most of the dwellers live with rental houses and their toilet are communal and not clean.

4.2. The Health Problems That Faced by River Side Slum Area Dwellers

As Akbar F., (2016) states the central role in triggering health concerns for slum area populations is posed by respiratory and other health problems as a result of exposure to toxic fumed emitted by burning fuels for cooking and heating purposes, insufficient water availability, sanitation, draining and rubbishing dumping issues.

Here the researcher tried to show findings related to the overall health problems of riverside slum area.

Table 4: Frequency and Percentage Distribution of Health Related Problems of the Study Area

	Variables	**Frequency**	**Percentage (%)**
How likely do you think living in river side slum area exposed people to respiratory problem?	Most likely	96	51.6
	Likely	59	31.7
	I don't know	25	13.4
	Not likely	0	0
	Not very likely	6	3.2
	Total	**186**	**100**
How likely do you think that people in your residential area exposed to diarrhoea disease due to dwelling in the riverside slum area?	Most likely	67	36
	Likely	63	33.9
	I don't know	17	9.1
	Not likely	16	8.6
	Not very likely	23	12.4
	Total	**186**	**100**
How likely do you think dwelling in river side slum area exposed people to typhoid	Most likely	42	22.6
	Likely	68	36.6

related health risks?	I don't know	36	19.4
	Not likely	16	8.6
	Not very likely	24	12.9
	Total	**186**	**100**
How likely do you think living in river side slum area exposed people to pneumonia problem?	Most likely	30	16.1
	Likely	79	42.5
	I don't know	42	22.6
	Not likely	13	7
	Not very likely	22	11.8
	Total	**186**	**100**
How likely do you think living in river side slum area exposed people to infectious disease?	Most likely	79	42.5
	Likely	69	37.1
	I don't know	5	2.7
	Not likely	14	7.5
	Not very likely	19	10.2
	Total	**186**	**100**

Source: Field survey, April 2022

As indicated in the above table respondents were asked how likely living in riverside slum area exposed dwellers to respiratory problem, 51.6% of them replied they most likely exposed to such problem. Whereas 31.7% of the dwellers are responded that they are exposing to respiratory problems are likely. The remaining 13.4% and 3.2% respondents answered I do not know and not very likely to respiratory related health risks respectively. Thus, this figure shows that living in this specific area expose residents to respiratory related health problems. Since the smell which emit from the river is very harmful, dwellers' breathing related organs would be challenged.

In order to know the risk factors in the study area respondents were asked whether they are exposed to diarrhoea related health problems and accordingly, 36% of respondents believed that

they are most likely exposed to diarrhoea related health problems. On the other hand, 33.9% of households answered their exposure to the diarrhoea related health problems is likely. Again, 9.1% of respondents answered that I do not know and the remaining 8.6% responded not likely exposed to diarrhoea related health problems. Therefore the above data shows that how the river side slum area dwellers are vulnerable to diarrhoea health problem. Key informant interview result also shows that the riverside slum area dwellers of ‘’Lomi Meda Sefer’’is more exposed to diarrhoea related health problems.

Regarding this issue Female key informant health extension workers, stated that,

‘’the river is very close to villages, so this could detriment their health condition. Especially, children are vulnerable for diarrhoea, allergic, bacteria, asthma etc.’’ (Field interview, April, 2022)

As we can understand from the above interview, the contaminated riverside water and air is not suitable for the well-being of residents in the area.

Regarding exposure to typhoid, 36.6% of sample respondents said they are likely exposed to the disease. While, the second largest group of respondents 22.6% answered that most likely they exposed to typhoid. In this case 19.4% of participants answered I do not know. The remaining 12.9% and 8.6% sample respondent answered less likely and not very likely exposed to typhoid. The above data shows that the case of typhoid health problem exists in the area.

As the study result further shows, dwellers are exposed to pneumonia problems based on the result taken from respondents, 16.1% most likely, 42.5% likely, 22.6% I don’t know, 8.6% not likely, and 12.9% replied as not very likely. According to this figure, since pneumonia is one of respiratory health problem, the study area’s contaminated air will bring this health problem to dwellers.

Infectious diseases are caused by viruses, bacteria, and parasites. Regarding exposure to infectious diseases like influenza, giardiasis, common cold, HIV, etc 42.5% of respondents answered most likely, 37.1% answered likely, 2.7% answered I do not know, 7.5% answered not likely and 10.2% of them answered not very likely. This finding shows that living in river side slum area expose dwellers for different infectious diseases. In support of this idea, Wulandari

A.P. (2009), stated that, when there is excessive pressure on the existing sanitary facilities, many people dispose their solid waste and wastewater from kitchen as well as faecal directly to the river or stream. Hence, childhood diarrhoea and other infectious diseases are common.

One of key informant health extension worker expressed regarding on what health issues are affecting the study area as,

''The main health related problems are: asthma, allergic, water born disease, influenza and infectious diseases.'' (Field interview, April, 2022)

Respondents were asked regarding the pollution problem of the study area and their answers summarized as follow.

Table 5: Frequency and Percentage Distribution of Health Related Problems of the Study Area

	Variables	**Frequency**	**Percentage (%)**
Do you think that river side slum area dwellers in your area are vulnerable to pollution that could detriment their well-being?	Yes	178	95.7
	No	8	4.3
	Total	**186**	**100**
If yes to the above question, from the following, which pollution most likely affects people in the area?	Toxic waste	0	0
	Industrial effluent	105	56.5
	Toilet drain	73	39.2
	Total	**178**	**95.7**

Source: Field survey, April 2022

Overall vulnerability to of riverside slum area dwellers to pollution related problem is not uncommon. In this regard respondents were asked to answer whether vulnerable to pollution or not, accordingly, 95.7% of respondents answered that they are vulnerable to pollution related health problems. Whereas 4.3% of participants answered they are not vulnerable to pollution related health problems. As health extension key informant depicted, ''*the study area is more vulnerable to pollution which affects the health of majority of the dwellers, especially those who*

lives proximity to the riverside area.'' Based on the first question, respondents were asked to answer which types of pollutions are more affecting their residential area. Accordingly, 56.5% sample respondent were answered industrial effluent is more frequent types of pollution in their residential area. The second significant amount of respondents which accounts 39.2% respondents answered toilet drain is the other types of pollution which affects the study area dwellers. Generally the above data shows that the study area is most polluted and the main reasons for pollution are properly uncontrolled toilet drain and industrial effluent.

Regarding this issue female key informant from sanitation management office said,

''Generally the riverside slum area is not comfortable place to live and preserve sanitation. Also the dwellers have problem with pollution and access to clean water on time. The lanes and the area are not suitable for even controlling fire risks.''(Field interview, April, 2022)

Also the researcher observed that the river is contaminated with different wastes which are another reason for air pollution of the study area.

4.3. The Socio-Economic Status of River Side Slum Area Dwellers

Rapid urbanization is one of the greatest socio-economic changes during the last five decades in Indonesia or so, has caused the increasing of new kinds of slums, the growth of squatter and informal housing all around the rapidly expanding cities of the developing world exists (Shah, 2012).

This study focuses on those peoples who live in riverside slum area dwellers to uncover their socio-economic and health related problem they are facing to these days. The following section try to cover the socio-economic factors that affect slum area dwellers and pinpoint the most significant social-economic factors that expose them to higher risks. In this regard, respondents were asked to explain about their own work, their income sufficiency to basic needs, how much the rent they pay for house and their source of income for health expenditure.

As a study done in slum and shanty areas of Lagos State, Nigeria shows that relatively a large number of the respondents were involved in petty trading which has direct effect on their daily income and standard of living (Lukeman et al., 2014). According to Issa, (2021) the study conduct in slum area of Addis Ababa reveals that dweller of the area pay extra costs to afford

bottled water due to the constant fluctuation of access to clean water. Also the study showed that when dwellers get some enough money they start to leave the place. This shows that people who live in slum area are because of their bad economic conditions.

Respondents were asked to explain whether they have their own work to support their family member or not and the following table summarize it as follow.

Table 6: Frequency and Percentage Distribution of Household Members Income to Support their Family and the Income Sufficiency to Basic Needs

	Variables	**Frequency**	**Percentage (%)**
Do you have your own work to support your family members?	Yes	121	65.1
	No	65	34.9
	Total	**186**	**100**
If yes for the above question, is the income you gain from your work is sufficient to secure basic family needs?	Yes	19	10.2
	No	102	54.8
	Total	**121**	**65.1**

Source: Field survey, April 2022

The above survey result indicated that in ‘’Lomi Meda Sefer’’ riverside slum area dwellers, 65.1% of respondents have their own works to support their family members on the other hands, 34.9% of respondents answered as they do not have their own work to support their families. Additionally, respondents were asked to answer if the income they gain from their work is sufficient to secure basic family needs. In this regard 54.8% of respondents responded as their income is not enough to support their family’s basic need and only 10.2% of individuals agreed as the income they get from their work is sufficient to secure their families basic needs. The above data implies that even if the house hold members got works, it is not enough to secure their family needs. The qualitative result also supports this argument as their monthly income is lower for family consumption support. As one key informant interview respondent said, *‘’we do not have permanent job to support our family, this in turn affect us to fulfil the interest of our family members’ need.’’*

Furthermore, respondents also asked whether family level of income is the reason why you are living in the slum area or not and their answer is summarized as follow.

Table 7: Frequency and Percentage Distribution of Household Level of Income is the Reason to Live in Slum Area

	Variables	**Frequency**	**Percentage (%)**
If you say no to question number one of table 6, do you think your family level of income is the reason why you are living in the slum area?	Yes	55	29.6
	No	10	5.4
	Total	**65**	**34.9**

Source: Field survey, April 2022

As the above table depicted, majority of respondents which accounts 29.6% of answered their family's level of income is the reason why they are living in slum area. But 5.4% of households do not believe that living in slum area is associated with their family income level. This shows that most people prefer to live in slum area because of their low level of income.

In this regard one of key informant interview respondent said that,

''In this area most dwellers do not have permanent job. This made all of us to live here in the riverside slum area which is not preferred by most peoples. In this area rental house is cheap; so this pulling factors made most of us to live here by taking different risks'' (field interview, April 2022)

According to the above interview data, the dwellers are economically very destitute and that is the reason why they prefer to live in this area.

The researcher observed that the river side slum area dwellers are dominated by low income living condition. Shanty houses and the environment are not suitable to live safely in the area.

Again respondents were asked to answer if they are living in a rental house, how much they are paying for house rent was summarized as follow.

Table 8: Frequency and Percentage Distribution of Household for Rental House Expenditure in Birr

	Variables	Frequency	Percentage (%)
If you are living in a rental house, how much you are paying?	<1000	22	11.8
	1001-1500	56	30.1
	1501-2000	38	20.4
	>2000	3	1.6
	Total	**119**	**64**

Source: Field survey, April 2022

From the whole sample of respondents, 64% of households live in a rental house. In this case 11.8% of respondents monthly pay <1000 birr for their house rent. While the large number of respondents, 30.1% pay 1001-1500 birr. Whereas 20.4% of respondents pay for the house they live in, 1501-2000 birr. Only 1.6% households pay > 2000 birr for house rent. As it is known that Addis Ababa's city house rent payment is very expensive comparing to other towns of the country, this figure shows that how the living area's housing conditions are low by their quality. And most of respondents have less potential to pay for quality houses which are found out of slum areas and they prefer to live in such areas which are cheap rental house payment rather than living in safe place because of their low economy.

Regarding the affordability of medical expense respondents also asked who mostly pay for household health and the answer is summarized as follow.

Table 9: Frequency and Percentage Distribution of Household Health Expense Coverage

	Variables	Frequency	Percentage (%)
Who mostly pay for your health expense in your household?	My self	68	36.6
	My spouse	44	23.7
	My parent	7	3.8
	My relatives (other than parents)	7	3.8
	Health insurance	60	32.3
	Total	**186**	**100**

Source: Field survey, April 2022

As the above table shown, regarding who is responsible for paying health expenditure in the household; 36.6% of respondents reported that they pay for themselves. Whereas, the second largest amount of respondents 32.3% said they get health expenditure from health insurance. Following the large number of respondents, participants who get health expenditure payment from their spouse are 23.7%. Each parents and relatives to pay for their health issues respectively consists 3.8% of respondents.

This shows that since most of river side slum area dwellers are under poverty line, the government needs to help those individuals who pay health expenditures by themselves. Generally this category of economic characteristics shows that most poor households are paying for health by their own. One survey respondent told me that, *''most of the study area dwellers do not have potential to afford their health expense even to renew the ID card by year based.''* Depending on the above results, we can conclude that the river side slum area dwellers are living in very poor economic conditions.

Again respondents were asked to answer if they are living in a rental house, how much they are paying for house rent was summarized as follow.

4.4. Activities Performed by Concerned Bodies to Mitigate Social and Health Related Problems

According to (UN-Habitat, 2003) to attain the goal of cities without slums, developing country cities should vigorously implement urban planning and management policies designed to prevent the emergence of slums, alongside slum upgrading and within the strategic context of poverty reduction.

In this part the researcher tried to show different activities that performed by government institutes and other NGOs bodies in order to mitigate the fundamental socio-economic and environmental problems of riverside slum area dwellers of the study area.

The following table summarized respondent's response on overall activities that they are accessing from government and other institutes in their residential area.

Table 10: Frequency and Percentage Distribution of Activities Performed by Concerned

	Variables	**Frequency**	**Percentage (%)**
Did you get any support from concerned body to live safely in this area?	Yes	41	22
	No	145	78
	Total	186	100
If yes for the above question, from the following which types of support you get?	Employment opportunity	12	6.5
	Slum redevelopment	0	0
	Clean water	13	7
	Health service	16	8.6
	Total	41	22
Are you satisfied with the support you get from concerned body?	Yes	17	9.1
	No	24	12.9
	Total	41	22

Source: Field survey, April 2022

The above result showed that from the total sample respondent majority of them78% answered as they do not get support from concerned body to live in the area safely. However, only few which account 22% of respondents answered as they are getting different supports from concerned body. Furthermore, the researcher asked what kinds of supports they are getting from government and 6.5% said that they got employment opportunity support, 7% of respondents said they are getting clean water and 22% of participants replied that they are getting health services. But from the above respondents only 9.1% of them are satisfied by what concerned body supported them. Whereas 12.9% of participants do not satisfied by the support they got. Thus, this all findings shows that citizens who live in river side slum area at ''Lomi Meda Sefer'' are not getting what they deserve from concerned body to live safely in the area. Even most respondents do not feel satisfied by the supports they got.

One of key informant said that,

''Most of houses are do not have legal documents. In order to give what they deserve first the documentation case regarding house rebuilding needs to solve. The area is with full of flood, toilet drain, again shortage of clean water problems. Also their question is more than our potential''

According to this key informant, the question raised from the dwellers is not simply answered because of illegality issues. Regarding getting supports from government this river side slum area dwellers have different problems, among them flood, toilet drain, industrial effluent and shortage of clean water are the main ones. The researcher observed that there are public schools and health centres near to the study area.

Chapter Five

5. Conclusion and Recommendation

5.1. Conclusion

This study was conducted on ‘’the river side slum area dwellers social and health problems: the case of Addis Ketema Sub-city, Woreda 11, and ’’Lomi Meda Sefer’’ area. The main objectives of this study were to identify the social and health problems of the study area. Data related to this study were collected from 186 respondents through questionnaire and observation was applied. From 9 key informants interview data had been collected. The study had applied simple random sampling and purposive sampling to collect valid data. Data had been analysed through SPSS and presented through tables and described by words.

The finding of the study indicated that most in the specific study area have their own job despite various in its types. Most dwellers’ current income is not sufficient to secure their basic needs for survival and to fulfil all desire of the resident in the study area. As the finding further indicated, majority of the respondent said they live in the riverside slum area due to their low level of income. The result further depicted that, some of the study area residents are can’t able to afford their medical expense by the time they feel not well. In this regard, majority of the respondent get medical expense support from their family members, relatives and government health insurance. In sum, in the study area albeit, most of the riverside slum area dwellers have income to sustain their life; it is subsistence and not sufficient to cover their routine desire for living.

The finding of the study also indicated, there are different social problems are affecting the riverside slum area dwellers in the study area. Among these, lack of accessing different types of infrastructure ranging from access to clean water to public latrine and sanitation problem in the study area. In terms of infrastructure, the finding of the study reveals that there is no much problem of access to water (the quality of water is questionable) and electricity for the residents, but there are serious problem of waste disposal sewerage system and access to public latrine for all residents. Moreover, regarding the sanitation issue the finding of the study indicated that, there are poor latrine qualities, industrial effluent, and connected toilet drain to river, waste disposal to river. Other social problems are unsuitability of lanes for cars and vulnerability to residents to flood problems.

The study result further depicted that, riverside slum area dwellers in the study area are vulnerable to different health problems. The finding of the study indicated that the degree of exposure to various types of health problems such as, respiratory problems, diarrhoea, allergic, pneumonia and typhoid are high. Moreover, as the finding of the study indicated, most peoples in the study area are vulnerable to pollution that arises from industrial effluent and toilet drain.

To overcome the problem of riverside slum area dwellers in the study area there are scant activities are performed by concerned bodies. As the finding of the study indicated, majority of sample respondent answered that there are only few activities on behalf of concerned bodies are performing in their residential area to overcome the existing problems. Among the major activities: employment opportunities, access to ‘’clean water’’ and basic infrastructural facilities such as public schools and health centres are the major ones.

5.2. Recommendations

Based on the finding of the study the researcher recommends the following points.

Social Work Research

- The focus of this study was mainly on the riverside slum area dwellers of ‘’Lomi Meda Sefer’’. As a result of this, other riverside slum area was not studied in the city. I recommend for further studies to be conducted by other researchers, Governmental and Non Governmental Organizations concerning the problems of riverside slum areas to reveal other unidentified problems which was not undertaken by this study.

Government Institutes

- Since the dwellers live in low income economic conditions, there should be different employment opportunity from the government side for riverside slum area dwellers of the study area.
- Government institutes specifically land management office and law enforcement institutes need to work together to protect citizens from post informal settlement problems. Also prohibiting citizens from informal settlement will help government from unplanned resource spent. The Ethiopian government should have strong laws on informal settlement issues.

- In order to mitigate the infrastructural needs (drain systems, public latrines, lanes etc) of the riverside slum area dwellers, there should be mobilization of resource on behalf of government to those vulnerable segments of the community to address their problems.
- In order to protect dwellers' health, there should attention be given to health problems in the area through the effective follow-up of health extension workers and Woreda's sanitation management office need to work on river contamination problems.

Social Work Practice

- Social workers need to work on social protection issues for slum area dwellers which need to be inclusive for all people. Specifically should be voice for voiceless/advocate and must insure human rights and social justice are properly implemented in slum areas.
- Social work schools needs to study deeply on the whole slum area problems and from social work perspective the discipline should contribute on such issues for policy development.

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Appendix I: Household Survey Guideline

This questionnaire is prepared to collect data on research title "**the social and health problems of river side slum area dwellers: the case of Addis Ketema Sub city,Woreda 11, Lomi meda sefer''**. Your participation is entirely voluntary: you may accept or refuse to participate as you wish. If you volunteer to participate in this study, you will be asked a couple of questions regarding your experience about slum area social and health related problems. Any information you provide will be kept confidential, meaning it will not be tied directly to you. There will be no mentioning of your name in the report.

There are no foreseeable risks for you if you choose to participate in this study. There are no direct benefits to you for participating in this study but the information you provide will be valuable in gaining knowledge about living situation of riverside slum area dwellers. The survey will last approximately 25 minutes. When we present the insights we give, we will not include your personal information, so feel free to give us any opinions you have without fear of being identified.

Do you agree to participate in this study?

Segment 1: Certification (To be filled by enumerator)

Interviewer's Name: _____

Date: _____/_____/_____

Segment 2: Socio-Demographic Characteristics of the Household Member Respondents

[**Note:** Insert the chosen value in the front box.]

1. Gender: (**1**=Male, **2**=Female)..... ☐
2. Age: (**1**=18-29, **2**=30-44, **3**=45-59, **4**=60 and above)……..... ☐
3. Marital status: (**1**=Single, **2**=Married, **3**=Divorced, **4**=Widowed, **5**=Separated)……. ☐
4. Educational Background: (**1**=No formal education, **2**= Grade 1-4, **3**=Grade 5-8, **4**=Grade 9-12, **5**=Certificate and Diploma, **6**=Degree and above)…….. ☐
5. Source of income :(**1**=government employer **2**=private employer **3**=business **4**=house rent **5**=pension **6**=remittance **7**=safety net**8**=other …… ☐

6. Your monthly income: (**1**= less than 1000, **2**= 1001-3000, **3**=3000-5000, **4**=above 5001……..……
7. You family size? (**1**=less than 3, **2**=3-5, **3**=6-8, **4**=more than 9)……
8. Religious affiliation: (**1**=Orthodox, **2**=Islam, **3**=Protestant, **4**=Catholic, **5**=others)……...

Segment 3: The socio-economic characteristics of the study area

9. Do you have your own work to support your family members?? **1**= Yes, **2**= No……
10. If yes, is the income you gain from your work is sufficient to secure basic family needs? **1**=Yes, **2**= No…….....
11. Again! If no for the above question, do you think your family level of income is the reason why you are living in the slum area? **1**= Yes, **2**= No= **3**= if other please specify…..……
12. If you are live in a rental house, how much you are paying? **1**=less than 1000, **2**=1001-1500, **3**=1501-2000, **4**=more than 2000……
13. Who mostly pay for your health expenditures in your household? **1**=Myself, **2**=My spouse, **3**=My parents, **4**=My relatives (other than parents), **5**= I'm under a health insurance where I work, **6**= if others please specify……..

Segment 3: Questions related to social problems of slum area dwellers

14. How would you best describe the area in which you live? **1**= safe, **2**= somehow safe, **3**= not safe, **4**= deteriorate……
15. Do you have access to clean water near to your residential area? **1**= yes, **2**= No…….
16. If yes for the above question, from the following which type is the access? **1**=tap water, **2**= stand posts, **3**= hand pumps, **4**=wells,**5**= others
17. Do you have access to waste disposal sewerage system in your residential area? **1**= yes, **2**= No…….

18. Do you have access to public sanitation program in your residential area? **1**= yes, **2**= No…….

19. Do you have access to electricity in your residential area? **1**= yes, **2**= No…….

20. If no to question number 15, 17, 18 and 19, what do you think the reason behind of lacking those services? **1**= neglected by government**2**= unsuitability of residential area,**3**= lack of capacity to afford, **4**= if other please specify……...

21. How do you describe the housing quality of river side slum area dwellers? **1**=good, **2**= not bad, **3**= poor**4**= very bad……

22. What kind of toilet you use in your house? **1**= private, **2**= communal latrine, **3**= other.....

23. Do you think that river side slum area dwellers in your area are vulnerable to flood problems? **1**=Yes, **2**=No.....

24. Is your village's lanes are safe for ambulance and other car movement? **1**=Yes, **2**=No

Segment 4: Questions related to health problems of slum area dwellers

25. How likely do you think living in slum area exposed people to respiratory problem? **1**=most likely, **2**= likely **3**= I don't know, **4**= not likely, **5**= not very likely…….....

26. How likely do you think that people in your residential area exposed to diarrhea disease due to dwelling in the riverside slum area? **1**=most likely, **2**= likely **3**= I don't know, **4**= not likely, **5**= not very likely……..

27. How likely do you think dwelling in river side slum area exposed people to Typhoid related health risks? **1**=most likely, **2**= likely **3**= I don't know, **4**= not likely, **5**= not very likely…….

28. How likely do you think living in slum area exposed people to pneumonia problem? **1**=most likely, **2**= likely **3**= I don't know, **4**= not likely, **5**= not very likely……...

29. How likely do you think living in river side slum area exposed people to infectious disease? **1**=most likely, **2**= likely **3**= I don't know, **4**= not likely, **5**= not very likely…….

30. Do you think that river side slum area dwellers in your area are vulnerable to pollution that could detriment their well-being? **1**=Yes, **2**=No……

31. If yes to the above question, from the following, which pollution most likely affects people in the area? **1**= Toxic waste, **2**= industrial effluent, **3**= toilet drain**4**= if other please specify…….....

Segment 5: Questions related to Activities performed by concerned bodies to mitigate social and health related problems of riverside slum area dwellers

32. Did you get any support from concerned body to live safely in this area?**1**= Yes, **2**=No……

33. If yes for the above question, from the following which types of support you get? **1**=employment opportunity, **2**= slum redevelopment, **3**= clean water, **4**= health service, **5=** if other please specify……

34. Are you satisfied with the support you get from concerned body?**1**=Yes, **2**= No…

Appendix II: Questions for Key Informants

1. As a government official/health extension worker/riverside slum area dweller, how do you express the social and health problems of river side slum area dwellers?

2. What are the major actions made by the government to solve social and health problems of riverside slum area dwellers?

3. To solve the social and health problems of the riverside slum area dwellers what major works thinking by the government?

4. What are the major challenges that hinder to overcome the problem of riverside slum area dwellers?

5. How do you express river side slum area dwellers' economic condition?

Appendix III: Questions for Observation

1. What kinds of social problems available in the study area?

2. What kinds of health problems available in the area?

3. In what level is the river contaminated?

4. Are the dwellers getting basic infrastructural access?

Appendix IV: Frequency and Percentage Distribution of Socio-demographic and Economic Characteristics of the Respondents

Variables	Frequency	Percentage (%)
Gender		
Male	70	41.9
Female	108	58.1
Total	**186**	**100**
Age		
<18	0	0
18-30	104	55.9
31-40	53	28.5
41-50	16	8.6
51-60	9	4.8
>60	4	2.2
Total	**186**	**100**
Marital status		
Single	25	13.4
Married	156	83.9
Divorced	2	1.1
Widowed	3	1.6
Separated	0	0
Total	**186**	**100**
Family size		
< 3	24	12.9
3-5	103	55.4
6-8	59	31.7

>9	0	0
Total	**186**	**100**
Religion		
Orthodox	47	25.3
Islam	132	70.9
Protestant	7	3.8
Catholic	0	0
Others	0	0
Total	**186**	**100**
Education		
Non-educated	70	37.6
Primary	82	44.1
Secondary	26	14
Certificate and diploma	7	3.8
Degree and above	1	0.5
Total	**186**	**100**
Source of income		
Government employee	2	1.1
Private employee	59	31.7
Business	88	47.3
House rent	4	2.2
Pension	0	0
Remittance	3	1.6
Safety net	30	16.1
Total	**186**	**100**
Sum of monthly income		
<1000	42	22.6
1001-3000	130	69.9
3001-5000	14	7.5
>5000	0	0
Total	**186**	**100**

Source: Field survey, April 2022

Appendix V: Different Photos of the Study Area

Figure 4: ‘’Lomi Meda Sefer’’ river side slum area’s open drain systems

Figure 5: Study area’s lanes

Figure 6: Polluted river of ‘’Lomi Meda Sefer’’

Figure 7: ‘’Lomi Meda Sefer’’ river side slum area villages

አባሪ 1፡ የቤተሰብጥናትመመሪያ

የቅድስት ማርያም ዩኒቨርሲቲ የድህረ ምረቃ ተማሪ ነኝ።ይህ መጠይቅ የተዘጋጀው በምርምር ርዕስ "The social and health problems of river side slum area dwellers: the case of Addis Ketema Sub city, Woreda 11, Lomimedasefer" ጉዳይ ነው።የእርስዎ ተሳትፎ ሙሉ በሙሉ በፈቃደኝነት ነው።በዚህ ጥናት ላይ ለመሳተፍ ፈቃደኛ ከሆኑ የሚያቀርቡት ማንኛውም መረጃ በሚስጥር ይጠበቃል፣ ማለትም በቀጥታ ከእርስዎ ጋር አይያያዝም።በሪፖርቱ ውስጥ የስምዎ መጠቀስ አይኖርም።በዚህ ጥናት ውስጥ ለመሳተፍ ከመረጡ በእርስዎ ላይ ችግር ሊፈጥሩ የሚችሉ አደጋዎች የሉም።በዚህ ጥናት ላይ ለመሳተፍ ምንም አይነት ቀጥተኛ ጥቅማጥቅሞች የሎትም፣ ነገር ግን የሚያቀርቡት መረጃ በወንዝ ዳርቻ ሰፈር የሚኖሩ ነዋሪዎችን የኑሮ ሁኔታ ለማወቅ ጠቃሚ ይሆናል።ጥናቱ በግምት 25 ደቂቃዎች ይቆያል።ስለዚህ ያለዎትን አስተያየት ለመስጠት ነፃነት ይሰማዎ።

በዚህጥናትለመሳተፍተስማምተወል?

ማሳሰቢያ፡የተመረጠውን ቁጥር በፊት ሳጥን ውስጥ ያስገቡ።

ክፍል 1፡የምስክር ወረቀት (በቆጣሪው መሞላት ያለበት)

የመረጃ ሰብሳቢው ስም፡.....

ቀን፡...../...../.....

ክፍል 2፡የመልስ ሰጪዎች ማህበረ-ስነ-ህዝብ ባህሪያት

1. ፆታ (1=ወንድ, 2=ሴት).....
2. እድሜ: (1= ከ18 በታች፣ 2=18-30፣ 3=31-40፣ 4= 41-50፣ 5= 51-60፣ 6= ከ61 በላይ).....
3. የጋብቻ ሁኔታ: (1=ያላገባ/ች፣ 2=ያገባ/ች፣ 3=የተፋታ/ች፣ 4=ባል/ሚስት የሞተ/ች፣ 5=የተለያ/ች)...
4. የትምህርት ሁኔታ: (1=ያልተማረ፣ 2= የመጀመሪያ ደረጃ (1-8) ፣ 3=ሁለተኛደረጃ (9-12) ፣ 4=ሰርተፊኬትናዲፕሎማ፣ 5=ዲግሪና ከዚያ በላይ).....
5. የገቢ ምንጭ :(1=የመንግስት ተቀጣሪ፣ 2=የግለሰብ ተቀጣሪ፣ 3=የግል ስራ፣ 4=የቤት ኪራይ፣ 5=ጡረታ6=ከሀገር ውጭ ከሚኖር ዘመድ፣ 7=ሴፍቲኔት፣ 8=ሌላ.....

6. የወር ገቢ መጠን: (1= ከ1000 ብር በታች፣ 2= 1001-3000 ብር፣ 3=3001-5000 ብር፣ 4= ከ5001 በላይ.....

7. የቤተሰብ አባላት ብዛት፡ (1= ከ 3 በታች፣ 2=3-5፣ 3=6-8፣ 4=ከ9 በላይ.....

8. ሀይማኖት: (1=ኦርቶዶክስ፣ 2=ሙስሊም፣ 3=ፕሮቴስታንት፣ 4=ካቶሊክ፣ 5=ሌላ).....

ክፍል 3፡- የወንዝ ዳርቻ ነዋሪዎች ማህበራዊና ኢኮኖሚያዊ ባህሪያት ጋር የተያያዙ ጥያቄዎች

9. የቤተሰብዎን አባል ለመደገፍ የራስዎ ስራ አለዎት? 1= አዎ፣ 2= አይደለም.....

10. መልሶ አዎከሆነ፣ከስራዎ የሚያገኙት ገቢ መሰረታዊ የቤተሰብ ፍላጎቶችን ለማስጠበቅ በቂ ነው? 1=አዎ፣ 2= የለም.....

11. እንደገና! ለ9ኛ ጥያቄ መልሶ አይደለም ከሆነ፣ በድሆች ሰፈር ለመኖርዎ የቤተሰብዎ የገቢ ደረጃ ነው ብለው ያስባሉ? 1= አዎ፣2= አይ፣ 3= ሌላ ከሆነ እባክዎን ይግለጹ.....

12. በኪራይ ቤት ውስጥ የሚኖሩ ከሆነ ምን ያህል እየከፈሉ ነው? 1=ከ1000 በታች፣ 2=1001-1500፣ 3=1501-2000፣ 4=ከ2000 በላይ.....

13. በቤተሰብዎ ውስጥ ላሉ የጤና ወጪዎችዎ በብዛት የሚከፍለው ማነው? 1=እኔ ራሴ፣ 2=ባለቤቴ፣ 3=ወላጆቼ፣ 4=ዘመዶቼ (ከወላጆችበስተቀር) ፣5= በጤና ኢንሹራንስ፣ 6= ሌሎች ካሉ ይግለጹ..... .....

ክፍል 4፡በወንዝ ዳርቻ ነዋሪዎች ከማህበራዊ ችግሮች ጋር የተያያዙ ጥያቄዎች

14. የሚኖሩበትን ቦታ እንዴት ይገልጹታል? 1= ምቹ፣ 2= በተወሰነ ደረጃ ምቹ፣ 3= ምቹ ያልሆነ፣ 4= የተበላሸ.....

15. በመኖሪያ አቅራቢያዎ የንፁህ ውሃ አቅርቦት አለ? 1=አዎ፣ 2= አይደለም.....

16. ከላይ ላለው ጥያቄ መልሶ አዎ ከሆነ፣ የትኛው አይነት የውሃ አቅርቦት ነው? 1=የቧንቧ፣ 2= የቦኖ፣ 3= በእጅፓምፕ የሚደረግ፣ 4=የጉድጓድ፣ 5= ሌላ.....

17. በመኖሪያ አቅራቢያዎ የቆሻሻ ፍሳሽ ማስወገጃ መስመር አለ? 1= አዎ፣ 2= አይደለም.....

18. በመኖሪያ አቅራቢያዎ የህዝብ ንጽህና/ጽዳት ፕሮግራም አቅርቦት አለ? 1= አዎ፣ 2= አይደለም.....

19. በመኖሪያ አቅራቢያዎ የመብራት አቅርቦት አገልግሎት ያገኛሉ? 1= አዎ, 2= አይደለም...

20. ከጥያቄ ቁጥር 15፣ 17፣ 18 እና 19 ውስጥ አይደለም የሚል መልስ ከሰጡ፣ እነዚያን አገልግሎቶች ያላገኙበት ምክንያት ምን ይመስሎታል? 1= በመንግስት ችላ መባል፣ 2= የቦታው ምቹ ያለመሆን፣ 3= አገልግሎቱን የመግዛት አቅም ማነስ፣ 4= ሌላ ምክንያት ካለ ይግለጹ.....

21. በውንዝ ዳርቻ የሚኖሩ ነዋሪዎች የሚኖሩባቸውን ቤቶች ጥራት ሁኔታ እንዴት ይገልጹታል? 1=ጥሩ፣ 2= መጥፎ አይደለም፣ 3= ዝቅተኛ፣ 4= በጣም መጥፎ.....

22. በቤትዎ ውስጥ ምን ዓይነት መጸዳጃ ቤት ይጠቀማሉ? 1= የግል፣ 2= የጋራ መጸዳጃ ቤት፣ 3= ሌላ.....

23. በወንዝ ዳርቻ ያሉ ነዋሪዎች ለጎርፍ አደጋ የተጋለጡ ይመስሎታል? 1=አዎ 2=አይደለም.....

24. የአካባቢዎ የውስጥ ለውስጥ መንገዶች ለአምቡላንስ እና ለሌሎች መኪና እንቅስቃሴዎች ምቹ ናቸው? 1=አዎ፣ 2=አይደለም.....

ክፍል 5፡- በወንዝ ዳርቻ ነዋሪዎች ከጤና ችግሮች ጋር የተያያዙ ጥያቄዎች

25. በወንዝ ዳር መንደር ውስጥ መኖር ሰዎችን ለመተንፈሻ አካላት ችግር ያጋለጠው ምን ያህል ይመስሎታል? 1= በጣም ሊሆን ይችላል፣ 2= በተወሰነ፣ 3= አላውቅም፣ 4= ምንም ያክል አይደለም፣ 5= ብዙም ሊሆን አይችልም.....

26. በመኖሪያዎ አካባቢ ያሉ ሰዎች በወንዝ ዳር ሰፈር ውስጥ በመኖር ምክንያት ለተቅማጥ በሽታ የተጋለጡ እንደሆኑ ያስባሉ? 1= በጣም ሊሆን ይችላል፣ 2= በተወሰነ፣ 3= አላውቅም፣ 4=ምንም ያክል አይደለም፣ 5= ብዙም ሊሆን አይችልም.....

27. በወንዝ ዳር ሰፈር ውስጥ መኖር ሰዎችን ለታይፎይድ በተዛመደ የጤና አደጋዎች ያጋልጣል ብለው ያስባሉ? 1= በጣም ሊሆን ይችላል፣ 2= በተወሰነ፣ 3= አላውቅም፣ 4= ምንም ያክል አይደለም፣ 5= ብዙም ሊሆን አይችልም.....

28. በወንዝ ዳር መንደር ውስጥ መኖር ሰዎችን ለሳንባ ምች ችግር ያጋለጠው ምን ያህል ይመስሎታል? 1= በጣም ሊሆን ይችላል፣ 2= በተወሰነ፣ 3= አላውቅም፣ 4= ምንም ያክል አይደለም፣ 5= ብዙም ሊሆን አይችልም.....

29. በወንዝ ዳር መንደር ውስጥ መኖር ሰዎችን ለተላላፊ በሽታ የሚያጋልጥ ምን ያህል ይመስሎታል? 1=በጣምሊሆንይችላል፣ 2= በተወሰነ፣ 3= አላውቅም፣ 4= ምንም ያክል አይደለም፣ 5= ብዙም ሊሆን አይችልም.....

30. በወንዝ ዳርቻ ያሉ ሰፈር ነዋሪዎች ደህንነታቸውን ሊጎዳ ለሚችል ብክለት የተጋለጡ ይመስሎታል? 1=አዎ፣ 2=አይደለም.....

31. ከላይ ላለው ጥያቄ አዎ ከሆነ መልስዎ፣ ከሚከተሉት ውስጥ፣ በአካባቢው የሚኖሩ ሰዎችን የሚጎዳው የትኛው ብክለት ነው? 1= መርዛማ ቆሻሻ፣ 2=የኢንዱስትሪ ፍሳሽ፣ 3=የሽንት ቤት ፍሳሽ፣ 4=ሌላ ከሆነ እባክዎን ይግለጹ.....

ክፍል6፡ በወንዝ ዳርቻ የሚኖሩ ነዋሪዎችን ማህበራዊ እና ጤና ነክ ችግሮችን ለመቅረፍ በሚመለከታቸው አካላት የተከናወኑ ተግባራትን የሚመለከቱ ጥያቄዎች

32. በዚህ አካባቢ በምቹ ሁኔታ ለመኖር ከሚመለከተው አካል ድጋፍ አግኝተዋል? 1= አዎ፣ 2=አይደለም.....

33. ከላይ ላለው ጥያቄ አዎ ከሆነ፣ ከሚከተሉት ምን አይነት ድጋፍ አግኝተዋል? 1=የስራእድል፣ 2=የመንደር መልሶ ማልማት፣ 3=ንፁህ ውሃ፣ 4=ጤና አገልግሎት፣ 5=ሌላ ከሆነ እባክዎን ይግለጹ .....

34. ከሚመለከተው አካል በሚያገኙት ድጋፍ ረክተዋል? 1= አዎ፣ 2=አይደለም.....

አባሪ II: ለቁልፍ መረጃ ሰጭዎች የተዘጋጀ

እኔ በቅድስት ማሪያም ዩኒቨርሲቲ የድህረ ምረቃ ክፍል የማህበረሰብ ስራ ተመራቂ ተማሪ ነኝ። በአሁኑ ጊዜ“The social and health problems of river side slum area dwellers: the case of Addis ketema subcity, Woreda 11, Lomi Meda Sefer” በሚል ርዕስ የመመረቂያ ጥናት ጽሁፍ እየሰራው ስለሆነ፣ ፈቃደኛ ከሆኑ ቢበዛ ለ10 ደቂቃ የሚቆይ ቃለ-መጠይቅ አደርግሎታለሁ። ጥናቱ ለትምህርታዊ አላማ ብቻ የሚውል ነው። ለሚሰጡት መልስ ምስጢር የተጠበቀ ነው ።.እንዲሁም ምንም አይነት የስም ማጥፋት ስራ አይሰራም። ስለዚህ የእርሶ ተባባሪነት ለጥናቱ አስፈላጊ ስለሆነ ትክክለኛውን መልስ ብቻ በመስጠት እንዲተባበሩኝ እጠይቃለሁ።

1. የወንዝ ዳርቻ አካባቢ ነዋሪዎችን ማህበራዊ እና የጤና ችግሮች እንዴት ይገልፁታል?

2. በወንዝ ዳርቻ የሚኖሩ ነዋሪዎችን ማህበራዊና የጤና ችግሮችን ለመፍታት በመንግስት የተሠሩ ስራዎችምን ምን ምን ናቸው?

3. በዚህ አካባቢ እንደመኖሮ፣ ለማህበራዊና ጤና ችግሮች ምክንያት የሚሆኑ ነገሮች ምን ይመስሎታል?

4. እንደ የጤና ኤክስቴንሽን ባለሞያ የወንዝ ዳርቻ ነዋሪዎች ዋና ዋና የጤና ችግሮች ምንድን ናቸው?

5. የወንዝ ዳርቻ ነዋሪዎችን የኢኮኖሚ ሁኔታ እንዴት ይገልጹታል?