# MIDLANDS STATE UNIVERSITY



# **FACULTY OF ARTS**

# DEPARTMENT OF DEVELOPMENT STUDIES

The impact of water scarcity on child rights in Zimbabwe: The case of Unit D area in Chitungwiza.

A Dissertation Submitted By

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This Dissertation is submitted to the Department of Development Studies in partial fulfilment of the requirements of the Bachelor of Arts Honours Degree in Development Studies

Supervised by

Mr C.D Hahlani.

DEPARTMENT OF DEVELOPMENT STUDIES

**June 2020** 

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# **DEDICATION**

I dedicate this research to my late father Bennymore Magarira who always saw an academic gift in me to excel, my late mother Faith Anna Chidamoyo who worked tirelessly to keep me in school, my younger brother Brian Magarira, my elder sister Beauty Magarira and to all young people in Zimbabwe who have suffered as a result of water scarcity. To them, I say there is hope for a change.

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### **ABSTRACT**

The study serves to unpack the impact of water scarcity on child rights in Zimbabwe using a case study of Unit D area in Chitungwiza. The study gave focus to three objectives looking at the extent of water scarcity, the direct and secondary impact of water scarcity on child rights. The research offers a scrutiny of water scarcity impact in relation to children linking the different impacts to child rights as stipulated in Zimbabwe's 2013 constitution, ACRWC and UNCRC. The researcher utilized qualitative research using focus group discussions, unstructured interviews, transect walks and document review to obtain data. The findings showed that the community has come up with different copying mechanisms to water scarcity which vary with one's financial status. The research findings further showed that water scarcity is a force that impedes on fulfillment of different child rights despite their age or gender. Findings showed that children without doubt, play a critical role in the water paucity struggles resulting in their rights being violated on a day to day occurrence both directly and indirectly. The research concluded that water scarcity is one of the major causes of child rights violations.

# **ACRONYMS**

ACRWC African Charter on the Rights and Welfare of the Child

CBO Community Based Organization

FAO Food and Agricultural Organization

FGD Focus Group Discussion

HIV Human Immunodeficiency Virus

SGBV Sexual Gender Based Violence

SRHR Sexual Reproductive Health and Rights

STIs Sexually Transmitted Infections

UN United Nations

UNCRC United Nations Convention on the Rights of the Child

UNICEF United Nations Children's Education Fund

UNEP United Nations Environment Program

WHO World Health Organization

ZPP Zimbabwe Peace Project

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### **CHAPTER 1**

#### THE PROBLEM AND ITS SETTING

### 1.0 Introduction

The world is on the threshold of a crisis, as the combination of water stress and climate change is creating a deadly outlook for children. As water stress increases, the effects of climate change threaten to destroy, contaminate or dry up the water that remains. According to UNICEF (2017) by 2040, almost 600 million children are projected to be living in areas of extremely high water stress. If no action is taken to plan for water stress, and to safeguard access to safe water, many of these children will face dire consequences.

The study was confined to Unit D area in Chitungwiza, Ward 15. The research examined the impact of increased water scarcity on child rights. The researcher analyzed the extent of water scarcity which has affected Unit D area and critically interrogated the impacts of the water scarcity on child rights. Water poverty has affected Chitungwiza and less attention has been given to the impacts this has on children both academically, health-wise, emotionally, socially among others. This dilemma that has befallen Chitungwiza affects different groups of people in society in different ways, and the researcher specifically looked at impacts on children which is a marginalized group especially when it comes to the talk, debate and strategies on water related issues despite them being also affected both directly and indirectly.

The research was carried out using qualitative methods, namely FGDs, unstructured interviews, transect walks and document review to obtain qualitative data in an effort to unearth the impact of water scarcity on children. The research was conducted using a sample of 35 key informants

and 5 children. Different challenges were faced by the research during the research which include obtaining data from key informants in different sectors which was time consuming.

Efforts were made to come up with recommendations of developmental strategies to curtail the impacts of water scarcity on children based on critical analysis of the findings from the research. The research has been logically arranged, starting with the problem and its setting, literature review, research methodology then data analysis, presentation and discussion and finally conclusions and recommendations.

### 1.1 Background to the study

According to UNEP (2002), less than 2.5 percent of the world's water supply can be classified as freshwater. Of this percentage, more than two thirds is trapped in glaciers and ice, leaving a very small fraction available to meet the water, sanitation and hygiene needs of the world's population. This therefore means there is already limited global water for human use and this has been affected by climate change which has resulted in droughts and reduced rainfall intensity seeing some water sources for human water supply dry up such as Lake Kariba. This beyond a shadow of doubt has seen severe water scarcity affecting many populations in the world, in Africa and in Zimbabwe in particular.

According to the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (2015), about 663 million people did not have access to improved water sources in 2015. It is estimated that by 2030 up to 250 million people in Africa will be living in areas of high water stress, which is likely to displace up to 700 million people as conditions become increasingly unlivable (FAO, 2013). WHO and UNICEF further postulate that in parts of sub-Saharan Africa

which is one of the regions expected to suffer most from the effects of climate change – access
 to improved water sources is very low, and many people rely on unsafe surface water sources.

According to the ZPP (2019) water scarcity in Zimbabwe has intensified especially during the year 2019. They further state how people have to purchase water which in priced per bucket and the council citing lack of foreign currency as one of the factors for failing to provide water for residence. Water shortages have been reported even when normal to above normal rainy seasons would have been experienced, (Makwara and Tavuyanago, 2012). Severe water shortages continue to hunt most urban cities in Zimbabwe. This has not spared Chitungwiza, resulting in a tragic water crisis which has witnessed many struggle to meet basic household water requirements .According to ZPP (2019) Chitungwiza residents are in deep water poverty, and have no option but to purchase water for day to day household use.

According to UNICEF (2017) by 2040, nearly 600 million children are estimated to be living in areas of extremely high water stress, representing an increase of approximately 20 percent from 2010. The ZPP (2019) cites how children in Chitungwiza have been affected by water scarcity in different ways. According to Convention on the Rights of the child (1989) "children have the right to good quality health care, to safe drinking water, nutritious food, a clean and safe environment, and information to help them stay healthy." UNICEF (2017) further advances that, "if action is not taken to plan for water stress, and to safeguard access to safe water and sanitation, many of these children will face a higher risk of death, disease, and malnutrition."

### **1.2 Problem statement**

The effects of climate change has not spared Zimbabwe, which has resulted in a series of droughts causing acute water shortage and triggering major sources of municipality water to dry

up. Literature on the impacts of water scarcity focusing specifically on children in Zimbabwe is limited, much research has taken a holistic approach of looking at the impacts of water scarcity in general, and where impact on children have been interrogated, it has not taken a comprehensive approach that links with different child rights. In essence, water shortages can now be termed the prominent obstacle to child rights realization both directly and indirectly. The situation of water shortages has been worsened by lack of foreign currency to purchase supplies for treating water, lack of political will, corruption, and mismanagement of resources, aging infrastructure and high water pollution levels among other factors.

According to UNICEF (2017), growing water crisis is putting the lives of millions of children at risk. Failure to address water challenges has put a strain on children as one cannot separate water availability from the fulfilment of child rights. This study unearth the impact that water shortages has on children in Unit D area located in Chitungwiza, focusing on 2019 water crisis thus placing children at the core of the developmental problem of water scarcity.

# 1.3 Study aim

The study seeks to interrogate the impact of increased water scarcity in Chitungwiza on child rights in an effort to find strategies to address the problem.

# 1.4 Study objectives

- 1. To establish the extent of water scarcity in Unit D.
- 2. To interrogate the direct impact of water scarcity in Unit D on child rights.
- 3. To cross-examine the secondary impact of water scarcity in Unit D on child rights.

# 1.5 Research questions

1. To what extent is water supply accessible to households in Unit D?

- 2. How is the water scarcity situation in Unit D area impacting directly on child rights?
- 3. What are some of the secondary effects of water scarcity in Unit D area on child rights?

### 1.6 Significance of the study

Water is essential to sustaining life, vital to economic growth, social development as well as environmental sustainability, (The Water Wheel, 2009). Therefore, the problem of water scarcity is not only a local, provincial, or national phenomenon but a global issue that affects different groups of people in society such as women, men, business people, the disabled, children, industries as well as the economies at large. Hence, this study is significant as it pursued to address the impact of water scarcity on children in Unit D area in Chitungwiza. The findings are useful to the larger Chitungwiza council and community in making informed decisions in relation to water supply considering the impacts on children. The study also bring a child-centered developmental discourse in relation to issues of water paucity which ensures that strategies and programs that will be implemented in future to address water scarcity will fully take into cognizance the rights and needs of children as a marginalized group which is largely affected by water scarcity. The study may also help to contribute to the already existing body of knowledge on impact of water scarcity on children as well as help to inform policy makers in government.

Additionally, the research benefits the Unit D area residents through developmental strategies that will be recommended to curb water problems. These recommendations also benefit other councils and community leaders in their efforts to address water scarcity through provision of the extent of water scarcity and other related data which allow them to come up with data driven solutions and strategies. By and large, the research benefits children as they are be placed at the center of water discussion, have their grievances related to water scarcity aired out and from the

proposed strategies to alleviate their predicament. A child rights based argument of water scarcity reshapes the debate of water scarcity and brings into light the effects on children who have been marginalized with regards to water scarcity discussion.

### 1.7 Delimitation of the study

The study took place in Chitungwiza Ward 15 (Unit D located in Chitungwiza in Harare metropolitan province. According to City Population (2017). Unit D area, which is Ward 15 constitutes a population of 13781 as at 2012 which is 3.86% of the total population in Chitungwiza. The age zero to nineteen makes up 169033 (City Population, 2017) showing that children make up the largest percentage of the population of Chitungwiza which is why the researcher chose to look at the impact of water scarcity on children. This means that of the 13781 population of Ward 15 in Chitungwiza, 6527 are aged 0 to 19. Conceptually the research focused on exploring the extent of water scarcity in Unit D area and the impact it has on child rights. The research largely made use of key informants working or residing in Unit D area with children to obtain data qualitative data which was used as it would be unethical to directly source data from children as they are minors and without right to consent.

### 1.8 Structure of the research

The research consists of five chapters. Chapter 1, The Problem and its Setting, introduces the research and provides the background to the study. The chapter consists of problem statement, study aim, study objectives, research questions, significance of the study, delimitation of the study and structure of the research. Finally, the chapter defines key concepts. Chapter 2 offers a scrutiny of the literature review and empirical studies related to the study. In so doing the chapter analyzes the literature looking at the gaps and explain how the research fill in those gaps in existing literature. As a final point, the chapter explains the conceptual framework and

theoretical framework guiding the research. Chapter 3 interrogates research design and methodology looking at research design, data sources, study population, sample size, sampling procedure, data collection instruments, data collection procedure, data analysis, ethical considerations, and research limitations. The forth chapter focuses on data analysis, presentation and discussion. Last chapter offers a summary, draws conclusions based on the findings and offer recommendations on ways to reduce the impact of water scarcity on children.

# 1.9 Definition of key terms

# **1.9.1 Impact**

In the Oxford Advanced leaner's dictionary, (2005) the word impact is defined as the effect something has on somebody or something. This word was used quite often in this research referring to how water shortage affect the community. Therefore impact can be simply be understood as the effect that something has, or a strong influence of something has on a certain people or something. In terms of this research, impact of water scarcity can be understood as the effect of water scarcity on children.

### 1.9.2 Water scarcity

Water scarcity as defined by Stratfor Global Intelligence (2015) is water less than 500 cubic meters of water per person per year (500 m3/capita/year). 'Water scarcity' is the lack of sufficient water, or not having access to safe water supplies (Paulson, 2015). Therefore, 'water crisis' is a situation of water scarcity that leads to, or is expected to lead to, a dangerous situation affecting a community or the society as a whole in a certain region or country, (Pradeep 2016). Water scarcity is about both quantity which is enough water and quality which speaks to safe

water. This relates to this study as the study unpacks the impact of water scarcity on children and also makes an effort to show the extent of the phenomenon in Unit D area.

# 1.9.3 Child rights

Children's rights are the human rights of children with particular attention to the rights of special protection and care afforded to minors. The 1989 UNCRC and Article 2 of the ACRWC defines a child as any human being below the age of eighteen years. Thus children's rights are any entitlement accorded to any individual under the age of 18 by their countries constitution or any international charter such as the UNCRC and. Child right broadly fall into three categories, which are provision, protection and participation. This is pivotal to the study as the research particularly focused on the impact of water scarcity on children hence the need to clearly define children.

### 1.10 Conclusion

The first chapter outlined the problem and its setting in depth and provided a background to the research. The chapter proceeded to look at problem statement, study aim, study objectives, research questions, significance of the study, and delimitation of the study. The chapter defines key concepts. Finally the structure and focus of the subsequent chapters were also outlined.

### **CHAPTER 2**

#### LITERATURE REVIEW

### 2.0 Introduction

This chapter provides a review of the literature and empirical studies related to the study. The discussion starts by looking at the global perspective of water scarcity, then proceeds to look at the African position of water scarcity, the Zimbabwean water scarcity situation and finally the Chitungwiza state of water scarcity. The researcher proceeds to look at the impact of water scarcity on children. In so doing the chapter will analyze the literature looking at the gaps and explain how the research will fill in those gaps in existing literature. As a final point, the chapter explains the theoretical framework and the conceptual framework guiding the research.

# 2.1 Global stand point of water scarcity

According to Reid (2020),

"From Cape Town to Flint, Michigan, and from rural, sub-Saharan Africa to Asia's teeming megacities, there's a global water crisis. People are struggling to access the quantity and quality of water they need for drinking, cooking, bathing, handwashing, and growing their food. Globally, 844 million people lack access to clean water. Without clean, easily accessible water, families and communities are locked in poverty for generations. Children drop out of school and parents struggle to make a living."

The above clearly shows that water crisis is not a myth, but a reality, thus making this research a necessity in an effort to interrogate impact on children so as to come up with development oriented recommendations to alleviate the impact on children. Reid (2020) mentions the impact of water scarcity in passing and give estimates of people affected by water scarcity. This research

further examines the extent of water scarcity looking at the situation on the ground, what is transpiring, without necessarily focusing on figures thus allowing one to have a clear picture of the magnitude of the situation.

Reid (2020) goes on to argue that women and children are worst affected — children because they are more vulnerable to diseases of dirty water and women and girls because they often bear the burden of carrying water for their families for an estimated 200 million hours each day. Reid (2020) mentions children as the worst affected citing only vulnerability to disease and burden of carrying water without fully interrogating the impact of water scarcity on children. This research focuses primarily on impact on children unraveling different impacts of water scarcity on children.

# 2.2 African perspective of water scarcity

According to Bendix (2019),

"African cities are experiencing devastating water shortages as their populations continue to grow. These water shortages have led to sanitation problems, which can contribute to the incidence of diseases like cholera and typhoid fever. One of every three people in Africa is affected by water scarcity — the circumstance in which a region's available water supply isn't enough to meet demand."

The Last Well (2019) further concur with Bendix (2019) stating that water scarcity affects 1 in 3 people in the African region. The project goes on to say that more than 40% of the global water stressed population lives in Sub-Saharan Africa which is supported by WHO (2015). This research brings in a paradigm shift in the water crisis discussion in Africa by bringing in a child centered scrutiny of the subject with a specific case study.

### 2.3 Zimbabwean water scarcity situation

Bandix (2019) argues that in Zimbabwe, water shortages can raise people's risk of getting sick, since when water is in short supply, households often hoard the precious resource indoors, creating a breeding ground for disease-carrying mosquitoes. According to We Build Value Digital Magazine (2019) in Harare, the capital of Zimbabwe, over 2 million people there are suffering from acute water shortage at home, after the main water works was shut down on September 24 2019. The article dwells much on the causes of water scarcity and goes further to look at other problems facing the nation hence fails to look at the impact of water scarcity and to make mention of children. The article tries to kill many birds with one stone, hence this research will analyze the extent and impact of water scarcity specifically on children linking to different child rights as outlined in the ACRWC, UNCRC and Zimbabwe's 2013 Constitution which is a component lacking in current literature reviewed.

# 2.4 Chitungwiza state of water scarcity

According to ZPP (2019) in Chitungwiza the water scarcity situation has intensified to the extent that people are now purchasing water. The report goes on to state that school children spend long hours in water queues resulting in them getting to school tired as they at times queue up to the early hours of the morning. The report does not offer justice in analyzing both the extent of water scarcity in Chitungwiza and the impact on child rights. The report only mentions impact on children in passing without linking it to different child rights which can cause one to fail to fully see the intensity of the situation.

An article by Muronzi (2020) on Aljazeera examines the water scarcity situation in Zimbabwe using a case study of Chitungwiza. The article brings out the real scenario of water scarcity, however fails to interrogate the impacts in general, even on children thus this research offers a

scrutiny of the impact of water scarcity on child rights. The article also explains the extent of water scarcity in Chitungwiza, but fails to do much justice as it tries to give an overview of the whole country thereby failing to do justice to extent of water scarcity in Chitungwiza. This study therefore focus only on Unit D area in Chitungwiza as a case study so as to bring out comprehensive data on water scarcity extent in the area and impact on child rights.

# 2.5 Impact of water scarcity on children

UNICEF (2017) report, "Thirsting for a future- Water and children in a changing climate" makes an attempt to interrogate the impacts of water scarcity on children. The opening executive summary largely talks about the evidence of climate change. Chapter 1 stresses the importance of water for life making mention of fueling bodies, irrigating crops, driving industry, generating energy, and cleaning purposes. The second chapter talks about the risk of growing water crisis mentioning different causes of water crisis including deforestation, agricultural purposes, industrial purposes and urbanization. The third chapter interrogates the effects of climate change which include changes in water cycle, rising sea levels, drought, increased precipitation, flooding and extreme weather. The last chapter offers recommendations to the water crisis. This therefore shows how the report takes an all-inclusive approach, thereby leaving little room to fully interrogate the impact of water scarcity on children. The effects on children mentioned are not fully interrogated and they are also mostly health and sanitation related. This research therefore specifically and deeply interrogate the impact of water scarcity on children.

UNICEF (2017), "Climate change will infringe on children's right to safe water. Action and coherent policy to address the risks of climate change will be needed to safeguard children's right to safe water." The use of "will" poses the problem as a future threat, something that is not yet affecting, hence this study uncovers that the threat is already eminent, unearthing that the

infringement on children's rights is already a reality. The research as one of its objectives, establishes the extent of water scarcity in Unit D area thus showing the reality of the problem and its depth. The research makes it eminent that action, urgent action, is needed without further delay if the future and safety of children is to be ensured.

The report goes on to cite water as a child right basing on the convention on the rights of the child;

"Children have the right to good quality health care – to safe drinking water, nutritious food, a clean and safe environment, and information to help them stay healthy. Rich countries should help poorer countries achieve this."

However in explaining implications of water scarcity on children the report fails to further link the different impacts on child rights which is what this research does. Impacts of water scarcity on children are mentioned without being linked to different child rights so as to bring out which child rights are being infringed upon to make a compelling argument.

According to the report, "some 4 billion people currently experience water shortages for at least one month of the year." This generalizes, and the case in Zimbabwe has been different. The research offers a more specific study, which excavates the extent of water scarcity in Chitungwiza using a case study of Unit D area. The report offers case studies from the Middle East and the Americas, and there is no case study specific to Africa, let alone Zimbabwe, thus the research brings in an African case study from Zimbabwe.

Adding on, research and debate on water scarcity in Zimbabwe has been taking a general approach that is looking at the dilemma as a catastrophe affecting all people equally. There has been very little attempts to fully scrutinize the impacts of water scarcity on children, and where

such attempts have been made, it has only been in passing for example by the Zimbabwe Peace Project (2019) in The Water Crisis Fact Sheet No. 2. This research therefore unambiguously interrogate the impacts of water scarcity on children in relation to their rights.

### 2.6 Theoretical framework / Conceptual framework

This research was largely informed by the environmental and reform environmentalism discourse theory and the children wellbeing and vulnerability theory. Brulle (2015) came up with distinct environmental discourses as they relate well to global water crisis relates. The conservation discourse asserts that natural resources should be specifically managed from a functional standpoint; this discourse in particular mirrors on the actions taken by governments and the global population in the twenty first century, as the understanding and certainty of the water crisis has become more clear and regarding the process as conserving water has become more predominant and encouraged. In this study the factors contributing to water scarcity vary and are mainly economic in nature and require the government to improve water management and maintain adequate clean water supply to the citizens. Reform environmentalism discourse theory, according to Hannigan (1995) when one considers water an important resource and thus needs to be protected, preserved and conserved to prevent it from being infected or polluted and thus becoming a health threat to the society. This relates to this study as the study unearth the importance of water as a resource through showing the impact of its scarcity.

In Zimbabwe, Harare in particular most communities do not have access to fresh drinking water or their source of water has been infected due to pollution and mismanagement, (Manzungu, 2010). This is supported by the environmental justice discourse. The environmental justice discourse states that ecological problems are a product of essential social inequalities, (Hannigan, 1995). In a society if subjected to provision of poor quality water because of contaminated

water sources or polluted water and lack of overhaul or obsolete infrastructure it results in various water problems and thus causing disparity in the demand for water, (Mangizvo and Kapungu 2010). This is what has been witnessed in Unit D area in Chitungwiza, Ward 15, where the demand for water has risen due to water scarcity and water problems have emerged which this study interrogates particularly focusing on impact related to children

An increase in urbanization due to population growth and industry, has resulted in increased pollution, construction in wetlands, has contributed to general environmental imbalance contributing to water scarcity, (Nhapi, 2009). This theory which comes under environmental justice is particularly relevant to the research study when considering the water crisis experienced globally and in particular the area of study Chitungwiza where water scarcity in being experienced and this research evaluates the impact of water scarcity on children.

Moving on to the children wellbeing and vulnerability theory, according to Begattini (2019), childhood is arguably the most vulnerable period of human life. Children are highly dependent on others to satisfy their basic needs, and this makes them particularly vulnerable. Children are dependent on decisions that others make for them right from the start. This seems to be the most salient source of children's vulnerability. But even this allegedly uncontroversial position is not undisputable. Some critics point out that depicting a whole group of people as vulnerable has always the air of stigmatization. A more influential line of criticism holds that generally considering children as vulnerable is too vague to account for more specific aspects of children's vulnerability. The debate on vulnerability is very much coined by the idea that there are situational vulnerabilities, vulnerabilities that are brought about by specific contextual features,

(Goodin 1986). This study uncovers the impact of water scarcity on children as they are a vulnerable group and with particular focus on situational vulnerabilities related to water scarcity.

# 2.7 Conclusion

In this chapter the researcher chronologically reviewed literature on water scarcity starting with global state, moving to African then Zimbabwean and finally Chitungwiza state of water scarcity. The researcher presented results of previous researches related to the topic and offered a detailed review of impact of water scarcity on children. In so doing the researcher was critiquing the literature looking at existing gaps and how the research will cover those gaps. Lastly the chapter looked and the theoretical and conceptual framework informing the study.

### **CHAPTER 3**

#### RESEARCH DESIGN AND METHODOLOGY

### 3.0 Introduction

This chapter summarizes how the data was collected or produced from key informants and children and how it was analyzed. The methodology used for the research was qualitative, using focus group discussions, unstructured interviews, transect walks and document review to obtain data. This chapter will look at research design, data sources, study population, sample size, sampling procedure, data collection instruments, data collection procedure, data analysis, ethical considerations, and research limitations.

### 3.1 Research design

The researcher used qualitative research, and Verma (1992) notes that a qualitative research is explanatory, flexible thereby providing room for further researchers to pursue a new path of discovery. More so, qualitative enables the researcher to understand issues from the perceptions of the group under study thereby avoiding conclusions based on the researcher's point of view. According to Frankfort and Nachimias (2007), qualitative methodology tries to describe and interpret people's feelings and experiences in human terms rather than through quantification and measurement. This allows the researcher to deeply understand the impact of water scarcity on children thereby coming up with authentic information to answer outlined questions and enable a justified conclusion.

### 3.2 Data sources

The researcher made use of both primary and secondary data. Key informants, namely Ward Councilor, Junior Councilors, local organizations, parents or guardians with children aged 0 to

18 from Unit D area, teachers from the schools located within the community, volunteers operating in the area, people involved in selling water business and a surgery operating and based in Unit D area were the sources of primary data. The primary data was obtained through unstructured interviews, focus group discussions and transect walks. Secondary data sources were online journals, textbooks, newspaper articles and various internet sources.

# 3.3 Study population

According to UNdata (2014), as of 2012, the population of Chitungwiza was 356840. Of the total population, 168600 are males and 188240 females. Chitungwiza is the largest high density dormitory town in Zimbabwe located approximately 30 kilometers south-east of the Harare city center. According to City Population (2017), Unit D area, which is Ward 15 constitutes a population of 13781 as at 2012) which is 3.86% of the total population in Chitungwiza. This means that of the 13781 population of Ward 15 in Chitungwiza, 6527 are aged 0 to 19. According to City Population (2017), the age distribution of Chitungwiza as at 2012 was:

| Age Distribution (C 2012) |        |  |
|---------------------------|--------|--|
| 0-9 years                 | 91,554 |  |
| 10-19 years               | 77,479 |  |
| 20-29 years               | 82,069 |  |
| 30-39 years               | 57,090 |  |
| 40-49 years               | 24,181 |  |
| 50-59 years               | 13,089 |  |
| 60-69 years               | 6,557  |  |
| 70+ years                 | 3,986  |  |

The target population is the Ward Councilor, Junior Councilors, local community organizations, parents or guardians with children, teachers, volunteers working directly with children, water merchants, children and a surgery in Unit D area.

### 3.4 Sample size

The research used a sample size of 35 key informants residing or working in Unit D area. The researcher worked with the Ward Councilor, 5 Junior Councilors, 5 local organizations, 4 parents or guardians with children aged 0 to 18 from Unit D area, 2 teachers from the schools located within the community, 15 volunteers operating in the area, 2 people involved in selling water business and a surgery operating and based in Unit D area. Adding on, the researcher closely observed 5 children residing in the area. The researcher used convenience sampling in selecting parents or guardians, teachers from the schools located within the community, people involved in selling water business, children to observe and a surgery operating and based in Unit D area to participate in the research. For selection of local organizations, junior councilors and volunteers operating in Unit D area the researcher used self-selection sampling method.

# 3.5 Sampling procedure

The researcher made use of non-probability sampling methods namely convenience sampling and self-selection sampling. Non-probability sampling focuses on sampling techniques that are based on the judgement of the researcher. The most common reason for using non probability sampling procedure is that it is less expensive than probability sampling procedure and can often be implemented more quickly, (Michael, 2011).

### 3.5.1 Convenience sampling procedure

The researcher used convenience sampling in getting parents or guardians, teachers from the schools located within the community, people involved in selling water business and a surgery operating and based in Unit D area to participate in the research. The researcher obtained the sample from that part of the population which was close to hand, readily available and convenient. During field work in collecting data, the researcher selected those who were easy to reach from where the researcher was staying and networks the researcher had already. The researcher thus made use of those contacts who were easy to contact and reach. In obtaining data from water merchants, the research made use of the merchants first spotted in the area. In obtaining data from teachers located within the community, the researcher approached colleges as they have less bureaucracy thus easier to work with and less time consuming. The researcher made use of parents and guardians already in contact with and utilized a surgery that was the closest to where the researcher was staying.

# 3.5.2 Self-selection sampling

In utilizing self-selection sampling, the researcher first publicized the need for research participants on social media platforms. This was done targeting local organizations, junior councilors and volunteers operating in Unit D area. The researcher highlighted in the publication requirements for both local organizations and volunteers working with children in Unit D area and the criteria that applicants must adhere to. The researcher after receiving responds from those willing to take part in the research checked the relevance of the respondents to invite and those to reject. This reduced the amount of time in searching for participants, ensures the most relevant are reached and increased chances of getting committed people since the participants

volunteered to take part in the research on their own without being approach by the researcher directly.

### 3.6 Data collection instruments and procedures

Different data collection instruments were used in this research to obtain qualitative data. The researcher made use of FGDs, unstructured interviews, transect walks and document review to obtain qualitative data. The researcher due to time constraints conducted some of the unstructured interviews and FGDs online using WhatsApp, Facebook and Skype. This saved the researcher time and money and ensured that the researcher reach many people and get people together to discuss without having to deal with bureaucracy issues of gathering people.

### 3.6.1 Transect walks

Transect walks were defined by Frankfort and Nachimias (2007) as observation and spatial datagathering tools taken around a community to observe people, surroundings, resources, housing conditions, soil type, crops grown in fields, among others. For this study transect were used to gather information on the number of community boreholes in the area, number water supply places, events transpiring at water source places particularly observing children there and other water related issues in the area. These helped in better understanding the community, identifying water problems and possible alternatives pursued by different groups of the population. This also enabled the researcher to specifically observe 5 children, 3 females and 2 males, in the community in an effort to get more insight on the impact of water scarcity on their rights.

### 3.6.2 Unstructured interviews

Unstructured interviews were carried out with the Ward Councilor, 5 Junior Councilors, 5 local organizations, 4 parents or guardians, 2 teachers from the schools located within the community,

3 volunteers operating in the area, 2 people involved in selling water business and a surgery operating and based in Unit D area. This enabled the researcher to fully engage a wide range of key informants in the community. Unstructured interview focused on the extent of water scarcity in the area and the impact of water scarcity on children they have witnessed as they are the ones who are custodians of children. The researcher continued to further emphasize confidentiality and privacy of respondents in each technique used.

### 3.6.3 Focus group discussions

Two online FGDs were held with local volunteers from different organizations in the community who work directly with children in the area with questions predetermined which guided the discussion. The researcher got the participants to volunteer using self-selection method and convinced participants to volunteer through highlighting facts on water scarcity and impact on child rights in the publication. The researcher in an effort to get people to volunteer, outlined the various benefits of the research and how it could be used by policy makers to reduce the negative impact of water scarcity on child rights. The researcher got many responses and had to select the ones to work with. Each online FGD comprised of 6 participants, 3 males and 3 females. Room was given to the focus group participants at the end of the focus group discussions to air out any other issues in relation to water scarcity problems affecting children in the community which might have been missed by the set guiding questions. An effort was made to strike a gender balance among the participants and flexibility to use a language they understand best and feel comfortable with. Efforts were made to ensure the participants are distributed to people working in different parts of the area to ensure different dimensions of how water scarcity is affecting children is clearly brought to light.

### 3.6.4 Document review

Document review is another data collection method which the researcher used in gathering secondary data. Various data sources including online journals, newspaper articles and various internet sources were reviewed. The researcher looked at documents already written by other scholars concerning the extent of water scarcity in Unit D area in Chitungwiza and the impact on child rights. The researcher analyzed various data sources to give credibility to the findings obtained. The researcher also utilized existing information from different data sources which include newspaper articles and online journals to address the research objectives and questions. This method allowed the researcher to give voice and meaning around the topic, (Bowen, 2009.)

### 3.7 Data analysis

The researcher made use of narrative data analysis strategy. According to Sandelowski (1994), narrative analysis is a strategy that recognizes the extent to which the stories we tell provide insights about our lived experiences. Narrative data analysis was used with focus on using collected data from key informants to answer research questions and aligning to research objectives.

### 3.8 Ethical Considerations

Confidentiality and privacy were be at the core of the research thus participant's real names are not used. Where there was need to bring out a personal story, pseudo names were adopted to protect the privacy of the participant. Confidentiality and privacy are key research ethics which were fully respected and followed.

The researcher made sure to obtain informed consent and voluntary participation of all participants involved in the research. This means that the researcher before engaging a

participant fully explained what the research is about in a language the participant understood, how it will be used and its purpose so that the participant can make an informed decision either to participate or not.

Considering that some community volunteers, community leaders and parents or guardians might not be well versed in English language, the researcher used both local language (Shona) and English together to ensure valuable and accurate information from participants.

### 3.9 Research limitations

The major limitation was working only with key informants in obtaining data. Children being minors, and under parental or guardian control requiring their consent in any action, it was not ethical to interview them directly but obtaining data from key informants which made the process longer. This made the data collection process more time consuming as the process became long, and even posed a challenge in obtaining factual information of water scarcity impact on children thus the need to collect data from several informants. The community appeared in some instances to be deliberately withholding information, especially parents or guardians in fear of legal action for illegal actions occurring and violations of child rights. Working with a wide range of key informants in an effort to obtain data from different sources to ensure accuracy was time consuming.

# 3.10 Conclusion

The chapter discussed research methodology explaining the procedures used to obtain and analyze data. The chapter looked at research design, data sources, study population, sample size, sampling procedure, data collection instruments and procedures, data analysis, ethical considerations and research limitations.

#### **CHAPTER 4**

### DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.0 Introduction

The chapter offers a presentation, analysis and discussion of data findings obtained during the research. The data presentation is done in a coherent manner following the research objectives in an effort to answer all research questions. The chapter starts by looking at the extent of water scarcity in Unit D area, proceeds to the direct impact of water scarcity in Unit D on child rights and lastly the secondary impact of water scarcity in Unit D on child rights. An effort is made by the researcher to look at the impact of water scarcity on different groups of children.

### 4.1 The extent of water scarcity in Unit D area

### 4.1.1 Accessibility of water in Unit D area

Parents and guardians in Unit D area recorded that tap water comes at least once in every two weeks in most cases but in some cases even take longer. There was a discrepancy on the frequency of tap water supply, with some saying even once in two months, others once in two weeks and others saying it never comes. The researcher observed that all key informants were accurate, the water supply differed according to geographical location. Households located on the lower veld received water more frequent (that is once every two weeks) while those located on higher ground received tap water at maximum once in two months and in some cases never. One key informant in responding to if all houses can access water said, "It depends with the side which households are situated. Tap water only reaches the households at lower levels but it will

not reach households at high level grounds," (Interview, 6 April 2020). Magarira (2016) notes that in Unit D tap water is available once per week but only to few houses located in lower areas. Magarira (2016) in The Sunday Mail, further mentions that "some have gone for months now without tap water and this has given rise to a new job of selling of water."

According to a Chitungwiza Junior Councilor, (Interview, 5 April 2020), because of the pressure of tap water when it comes which is usually very low, "as a result, not all households in Unit D area receive water, and for those who receive tap water, it comes at different times." Some obtain it morning, others in the afternoon and others even late in the night because of low pressure.

All four parents and guardians from Unit D area interviewed emphasized that water meters were stolen in the area at alarming rates hence majority can no longer access water as they do not have meters or even pipes. They further added that for some due to poverty, council water bills continue rising and the council disconnected water supply to these poor households hence they cannot access water and when water comes once in a while they cannot collect from neighbors as it only comes for few hours therefore the owners will be busy filling their containers. (Interviews, 7 April 2020.)

According to the Ward councilor, Unit D area only have one public borehole and this is supposed to cater for a population of 13781 as of 2012 according to City Population (2012). This makes it impossible for the borehole to supply water for the whole community hence only a few benefit and the residents spend long hours queuing for water. The researcher also observed during transect walks that there was only one borehole in the community, (Transect walks, April 2020.) According to Muronzi (2020), in Chitungwiza "people have been known to spend all night waiting their turn," and gives an example of Kaseke who joins the queue at 4am and gets water by 9pm. A Chitungwiza Junior Councilor mentioned that, "some of the Unit D residents

have to go to nearby communities like Unit H and Unit E to queue at the boreholes there for water but it still is a challenge as some of the public boreholes have people who control them and sell the water using political power among others," (Interview, 5 April 2020.) Magarira (2016), notes the challenge of people who move around selling water who are making themselves the owners of public boreholes. ZPP (2019) alludes that "residents are mostly dependent on city or donor drilled boreholes" however "these boreholes have been monopolized by some unscrupulous individuals who are extorting residents in order for them to get water." Muronzi (2020) further notes that water is essential to life, but in Zimbabwe, "access to it has become near-impossible," writing about the water crisis situation in Chitungwiza.

# **4.1.2** Copying mechanisms

The Unit D community has found numerous copying mechanisms to the water scarcity which vary per each household. The researcher observed that some residents have resorted to digging wells within their households. The researcher observed that although most of the wells were protected, a notable number of the wells were unprotected andit wasjust a big pit dug and covered with some rusty metal on top or tree branches (Transect walks, March and April 2020).

A representative from a local organization, Digital Advocate International, pointed out that those with stolen pipes get water from the broken pipes below and this water is not billed by the council due to absence of water meters. The representative further chronicled that, "some residents whose meters were not stolen are now cutting their pipes from below to avoid being billed by the council and to receive the water when it comes as it has low pressure," (Interview, 4 April 2020.)

In addition, the researcher found out that those with financial capability are now drilling private boreholes at their houses and sell the water to residents at a price of \$2 to \$4 bond (equivalent to USD \$0.08 to US\$0.16 basing on Reserve Bank of Zimbabwe exchange rate) per 20liter bucket. This is also supported by Muronzi (2020) who writes that "some of the area's more affluent residents have hired private drilling companies to sink boreholes on their properties to pump and sell water to their less-fortunate neighbors." ZPP (2019) also pointed out that, "some residents have resorted to drilling boreholes to access clean water, however these boreholes require electricity to pump water, something which is a challenge considering the constant power cuts lasting up to 18 hours daily." Those with wells which do not dry up quickly are also selling their water at the same price. Some of the residents hire a push cart which according to key informants is charged per each container you put inside usually at \$1bond (equivalent to US\$0.04) to \$1.50bond (equivalent to US\$0.06) per each, (Interviews with parents or guardians, 7 April 2020). The push cart carries a minimum of ten containers and a maximum of fifteen containers depending with its size according to water merchants interviewed, (Interviews, 9 April 2020).

Adding on, there are also people who were now in water selling business. The researcher observed several males walking around the community with push carts containing water buckets, (Transect walks, March and April 2020). Magarira (2016) writing about water situation in Unit D area notes that "there are people in my area who are moving around selling water in 20-litre containers." The two water merchants interviewed, (Interviews, 9 April 2020), stated that they obtain the water from public boreholes, wells and sometimes buy at a low price at private boreholes and sell. The water merchants interviewed by the researcher sold the water at different prices, one at \$3 bond (equivalent to US\$0.12) and the other \$4 bond (equivalent to US\$0.16). Those with water tanks purchase water from bulk water suppliers at a price of US\$25 per 2000

liters according to 3 local volunteers and 5 local organizations interviewed. According to ZPP (2019) those with water tanks on their properties rely on individuals or privately-owned water companies to pump water into the tanks at considerable cost often pegged in USD. This was also confirmed by a local surgery in the area which purchase water at that price. From the key informant's interviews, a local surgery doctor mentioned that, "there are some people who supply water moving around with lorries," (Interview, 4 April 2020).

According to a community volunteer in Unit D who is also a Case Care Worker, "some residents who stay near schools and churches with water sources are securing water from the churches and schools," (Interview, 6 April 2020). Due to the water scarcity, she further highlighted the long queues that are there too. "Not all schools and churches allow the community to fetch water", she said and cited Dzidzai Primary school and UFIC to be among those who allow the community to fetch water from their premises. "Some even travel long distances to churches in other communities such as Seventh Day Adventist church in Unit J and Apostolic Faith Mission in Unit K," according to one key informant during a FGD, (FDG, 06 April 2020).

Lastly, a key informant from a local CBO, Citizen Child, working in the area of environmental child rights mentioned that some children from their projects in the area confirmed that they obtain water from swamps in a nearby wetlands adjacent to the community. All four parents and guardians interviewed confirmed this saying there is no option for the poor as they cannot afford to buy water for every household need. A local volunteer also bemoaned that water merchants are also digging up wells in wetlands and selling water to residents. Magarira (2016) comments that, "residence have now turned to use of water bodies in wet lands which are unsafe as sewage dominates those areas. The sad part is the catastrophic effects that all this has on children."

# 4.2 Direct impact on child rights

#### 4.2.1 Education

According to ACRWC Article 11 "every child has the right to an education, to develop his or her personality, talents and mental and physical abilities to their fullest potential." UNCRC Article 28 also recognizes the right of the child to education. This is being disturbed by water scarcity in the community. According to UNCRC article 28 subsection (e) state parties should take measures to encourage regular attendance at schools and the reduction of drop-out rates. Zimbabwe's 2013 constitution section 81 (1) (f) clearly states that every child has the right to education and water scarcity in Unit D area is posing a threat to the full realization of this fundamental right.

The responsibility to queue for long hours for water at public boreholes is given to children. According to all respondents engaged, children spend long hours queuing for water and this consumes their time to study affecting academic performance and results. Muronzi (2020) quotes Anna Mamombe, a 45-year-old homemaker who said, "The kids are not studying at all as they are now spending most of their free time in water queues at the boreholes." The researcher found out that majority of children are usually late for school as they will be in long queues for water so that they can bath and prepare for school. Magarira (2016) brings a child perspective on impact of water scarcity saying that, "Before I go to school I wake up early in the morning to fetch water in nearby wells." All the five children closely observed by the researcher were first fetching water before they go to school. The researcher further observed on different occasions that at the community borehole in Unit D area, there were more children than adults in queue for water. According to two teachers interviewed, students are usually late for school and sometimes even turn absent as a result of water scarcity in the community, (Interviews, 10 April). They

further complained that the children come to school already tired and exhausted as they are given the responsibility to carry the water also. ZPP (2019) sates that, "school children spend long hours in water queues resulting in them getting to school tired as they at times queue up to the early hours of the morning."

In the words of a community volunteer working on education, "the situation has gone worse, children both in primary and secondary school are skipping school because of the water challenge," (FGD, 6 April 2020). A local organization operating in the area working with colleges bemoaned how the learning system is disrupted by lack of water. There are many informal colleges operating in the community from houses, and they have no water for children to use which makes it harder for smooth learning process as the environment is not conducive. Menstrual hygiene becomes a challenge for girls resulting in some girls opting to miss school during their monthly cycle. This was further buttressed by a local organization, Youth Aspire Development Trust, key informant working on Sexual Reproductive Health for adolescent girls and young women citing the research they conducted in Chitungwiza on impact of water scarcity on menstrual health and education for school going girls.

All the 5 Junior Councilors interviewed repeated the impact of water scarcity on education particularly on Agriculture. To them, Agriculture which is a subject in primary and secondary school requires water for student's crops. Water scarcity has resulted in wilting of plants for agricultural projects hence affecting the learning of children and their grades. The Junior Councilors explained how each student for O level examination is required to have a project where they plant crops or vegetables till they are ripe and these are graded. A key informant highlighted that, "primary level children are now tasked to come with 2 to 5 liters of water from

their homes to schools" and this shows how even the minors are being affected by the water scarcity. (Interview, 5 April 2020).

#### **4.2.2** Health

According to ACRWC article 14, "Every child shall have the right to enjoy the best attainable state of physical, mental and spiritual health. This includes the provision of nutritious food and safe drinking water, as well as adequate health care." The right to safe drinking water and the best attainable state of health have been grossly violated by water scarcity in Unit D area. Safe water is a luxury that many cannot afford and it has become history in the community. The health of children has been compromised in many different ways outlined below due to water scarcity. UNCRC article 24 states the right of the child to the enjoyment of the highest attainable standard of health however children in Unit D area are failing to enjoy the highest attainable standard of health due to health problems brought by water scarcity. The Zimbabwe 2013 constitution section 77 (a) states that "every person has the right to- a. safe, clean and potable water," and this includes children. However children in Unit D area still lack access to safe, clean and portable water which is a basic need.

For all respondents engaged, health was their main worry and concern in terms of water paucity crisis. Two parents complained about how their children were catching a cold now and again as they have to wake up early to go and queue for water. All four parents and guardians mentioned that the queue for water starts very early in the morning before the sun rises and even before it gets clear outside. They have no option but to send their children early for queues whilst they do other house chores. Six community volunteers affirmed this in a FGD mentioning that if children wait until it's warm to go and queue for water, they will spend the whole day there yet they need

water in time to go to school, (FGD, 6 April 2020). According to ZPP (2019) sates that, "school children at times queue up to the early hours of the morning for water."

Apart from the above, parents and guardians interviewed continuously cited the diarrhea and stomach problems in babies and toddlers mostly. One parent emotionally lamented that, "The tap water which comes once in a while is not safe. Sometimes it smells like sewage, but we have no option but to drink this water. I cannot afford to buy water guard," (Interview, 7 April 2020). Another parent mentioned that the water that they purchased from water merchants sometimes caused them to have diarrhea and that they had no way to tell where the water merchants obtained the water. One Chitungwiza Junior Councilor who stays in Unit D, (Interview, 5 April 2020), mentioned how council tap water was not safe and was causing stomach problems for children. This was also raised by a doctor at a local surgery who revealed that diarrhea and stomach problems were the most common problems they treated in children from the community, (Interview, 4 April 2020). Magarira (2016) argues that, "the water being used by the residents from wetlands is not clean and safe and children are most affected."

All five Chitungwiza Junior Councilors engaged were concerned about outbreaks of water-borne diseases like cholera and typhoid. To them, water scarcity creates an environment conducive for these diseases and their concern was the vulnerability of children referencing the Chitungwiza 2018 cholera outbreak. ZPP (2019) expresses concern of the September 2018 cholera outbreak which resulted in over 30 deaths. Muronzi (2020) postulates that "in 2008, Chitungwiza was the epicenter of a nationwide cholera epidemic linked to poor water sanitation." A community volunteer interviewed expressed concerned of the water scarcity situation posing a huge threat of cholera outbreak if no urgent action was taken. According to Magarira (2016), a child residing in Unit D area, "This situation is compromising our rights as children. So 1 kindly ask the

responsible authorities to provide clean and safe water before cholera and other water borne diseases break out in Seke area." When questioned what it was like for children to live in Unit D, a community volunteer who majored in social work and was volunteering with SOS Children's Villages Chitungwiza Family Strengthening Program, said it was quite toxic as children are exposed to diseases like cholera. According to ZPP (2019) "the water and sanitation crisis places millions of residents at risk of contracting waterborne diseases. Residents have often resorted to drinking water from shallow, unprotected wells that are contaminated." A key informant, working with Girls and Women Empowerment Network, mentioned that as a result of water scarcity sewer bursts have increased in the community and children literally jump sewage on their way to school posing health risks. The volunteer further mentioned a notable example of sewage always flowing in front of Seke 1 High School and Seke 5 Primary School both situated in Unit D area. The researcher during transect walks in the community also noticed sewage in front of these schools and countless other locations in the community.

There were many concerns over dehydration from the respondents. The Chitungwiza Junior Town Clerk mentioned that dehydration was her major health concern for children, "of which if you are already affected by other diseases it is rare that you survive," (Interview, 5 April 2020). A community volunteer who is a scientist pointed out that children suffer from dehydration which causes the brain size to shrink and result in unbearable headaches. In interviews with key informants from local organizations, they mentioned that most of the children in Unit D area they engaged with, were continuously complaining of headaches. The researcher observed that children who were in queue for water at the borehole were being scorched by direct heat from the sun with no covering on the heads. Babies and toddlers have not been spared as one Junior Councilor pointed out that, "they get to be on the backs of their mothers in queues and the sun

will be at its peak," (Interview, 5 April 2020). One parent pointed out how excessive heating from the sun at borehole lines can cause the skin to redden and intense headaches posing a health challenge to children of which most parents cannot afford to seek health care.

According to Muronzi (2020) access to clean, potable, affordable water is essential for maintaining individual and public health. A key informant from a local organization which advocates for child rights expressed concern over poor sanitation and hygiene in the community as a result of water scarcity (Interview, 4 April 2020.). The residents are now budgeting water and this causes deterioration of sanitation and hygiene. Parents expressed how they have to use dirty water for chores as they cannot afford to throw away any. One teacher expressed how the best interest of the child were at stake as their health is hard hit since they need general hygiene practices like bathing, toilet flashing and other forms of cleanliness which they are now denied of (Interview, 10 April 2020). The researcher visited one household and observed that a child in grade 6 was given less than 2 liters of water to bath and dirty dishes for the day were piled in the sink waiting to be washed at once to save water (Observation, 2 April 2020). A community volunteer also expressed concern that some children even skip bathing sometimes. A parent brought to light that babies' napkins are not thoroughly cleaned due to water challenges. Parents expressed how they were resorting to using pampas but were not changing regularly as they were expensive to purchase.

Adding on to maintaining individual health, menstrual hygiene for girls in the community is compromised. Organizations are encouraging the use of reusable pads as sanitary pads are now expensive and many are failing to afford them. "Sanitary pads are now very expensive, and it is no longer a sustainable menstrual health product to use," expressed a parent during an interview (Interview, 7 April 2020). Kingsman International, a local organization operating in the area, has

also identified the challenges of menstrual hygiene management for girls as sanitary wear is now expensive and water scarcity has compromised ensuring healthy menstruation for girls. However, parents and community volunteers complained that reusable pads require sufficient water to properly wash them to avoid infections. A key informant, working with Digital Advocate International, commented that for menstrual health hygiene management to be ensured among adolescent girls, water is prerequisite.

What was more worrisome during FGDs were fears by the community volunteers of children's risk of contracting coronavirus (covid19) at the borehole. The researcher observed that at the boreholes it was crowded and social distancing was not practiced putting lives of children at risk who were the majority in queues. During an interview, a key informant from a local organization, Kingsman International, expressed how people despite the lockdown initiated and the outbreak of a pandemic, people have no option but to go and look for water. Adults also risk bringing back the virus to babies at home whose immune system is weak as it is not yet fully developed thus at a more risk of death from the virus. One youth volunteer conveyed that, "Children are prone to disease like coronavirus due to lack of water to wash hands as it is recommended to wash hands under running water," (FDG, 6 April 2020).

# **4.2.3 Play time**

The water scarcity problem in Unit D area is undermining children's right to play. According to UNCRC article 31, every child has the right "to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts." However this right has been made a fantasy for most children in the community as a result of water scarcity.

During a FGD one key informant revealed that, "Water scarcity has made it impossible for most if not all children to exercise their right to play. The situation is made worse by lack of knowledge or respect for this right by parents and guardians hence it is seen as a luxury not a right. They cannot play, all the time is consumed queuing for water." (FDG, 6 April 2020). One key informant who is a former Chitungwiza Junior Mayor pointed out that, "To most children and some parents as well, the situation is nothing different they tend to have normalized the abnormal. So they don't feel the effect, yet this has a great deal on the well-being of children," (Interview, 6 April 2020). Another responded in a FGD brought out that "a lot of time is consumed fetching water which greatly debars the children from getting rest, study and play time," (FDG, 6 April 2020). Of all the five children observed by the researcher, they barely had sufficient time to play. The three girls had no time to play at all, while the two boys played only for an average of an hour per day. All parents and guardians during interviews expressed no concern over children being denied time to play. To them playing was not important and it did not even concern them. This clearly showed how children are suffering with their right to play being denied as it is not regarded as of importance.

# **4.2.4 Safe Environment**

According to Zimbabwean 2013 Constitution section 73 (1) (a) "every person has the right to an environment that is not harmful to their health or well-being;" and this includes children as well. This right of every child to a safe environment is being violated in Unit D area as a result of water scarcity. A key informant complained that children are exposed to sewage not only outside their homes, but even within their homesteads. Another respondent mentioned that, "hazvichatomboshamise kuona payard pevanhu pachibuda sewage pakazara mukova wese," (Meaning it has become common to see sewage flowing in people's yards), (FGD, 6 April

2020). A key informant who volunteered with SOS Children's Villages Chitungwiza Family Strengthening Program also raised concern about how during home visits to program beneficiaries sometimes they had to conduct them outside the yard or fail to conduct as the whole compound will be flowing with sewage. The researcher also observed sewage flowing from three homesteads in the community. Kubatana (2019) brings to light how in Chitungwiza some residential stands are located where there are sewage tanks with continuous sewer bursts occurring.

Adding on, community volunteers were concerned about the environment children were being exposed to at the boreholes. According to them, at these water sources children are exposed to vulgar and bad language. "The environment there is just toxic for any human being, let alone children" pointed out a community volunteer who works on advocacy of environmental child right rights in the community with Citizen Child (Interview, 8 April 2020). Chitungwiza Junior Councilors also expressed concern on the environment children are exposed to at different water sources, even witnessing fighting and vicious arguments. ZPP (2019) notes that, "the conflicts that erupt at the watering holes as citizens jostle to get their buckets ahead of the many hoping to get the precious liquid ahead of everyone else." A key informant from a local CBO mentioned that, "children must live in a free, friendly and safe environment for them lead a healthy life however Unit D is neither a friendly nor safe environment for children because of lack of continuous and sufficient water supply." A youth officer from a local organization, Youth Advocates Zimbabwe, said, "The environment at water sources leaves children vulnerable and exposed to mischiefs as they spend most of their time (especially girls) with older boys and in the evenings promoting promiscuous behavior," (Interview, 4 April 2020). Muronzi (2020) quotes a key informant who said that, "the young girls are also spending nights here with boys

their age and some older. And it's dark out here. They end up doing crazy things, and that is also worrying for parents."

#### 4.2.5 Sexual abuse

UNCRC Article 19 gives children the right to protection from sexual abuse. ACRWC Article 16 states that children should be protected from sexual abuse and Article 27 of the same charter further buttresses this stating that "children should be protected from all forms of sexual exploitation and sexual abuse." This right of children for protection from sexual abuse if also raised in Zimbabwe's 2013 constitution section 81 (1) (e). Water scarcity in Unit D area has left children vulnerable and exposed to sexual abuse which is a violation to their rights.

Junior Councilors fervidly raised that most children in the area and in Chitungwiza in general have been raising complaints to them that sometimes the people selling or in charge of water wants to be paid in kind instead of monetary form. A community volunteer highlighted that the girl child was more vulnerable to sexual abuse and violence compared to boys. A key informant working on SRHR indicated that, "With high levels of poverty in the area, some struggle to afford a meal and it is impossible to purchase water hence girls end up being sexually abused to get a mere bucket of water," (FGD, 6 April 2020). Another key informant working with a local organization in the area, Youth Advocates Zimbabwe, unearthed how children were becoming victims of social dangers such as SGBV and indecent assaults as a direct consequence of water scarcity. A community volunteer expressed deep worry on high risk and already existing cases of SGBV towards girls as "they sometimes fetch for the precious liquid at night," (Interview, 6 April 2020). According to ZPP (2019), "women and children especially young girls bear the brunt of the water crisis. This group spends most of their days looking for water and there have

been unconfirmed reports of men soliciting sexual favors from women so that they easily access water at boreholes."

## 4.2.6 Physical development

According to UNCRC Article 6 (2) children have the right to survival and development and UNCRC Article 27 recognizes the right of every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development. ACRWC Article 15 stipulates the right of every child from performing any work that is likely to interfere with their physical development. This right has been throw down the gauntlet by water paucity affecting the community.

The researcher observed five children in the community and each of them despite their age was carrying water. Children in primary school were carrying 20 liter water buckets and walking long distances with them. An elderly community volunteer highlighted in Shona that, "Vana vadiki even ane makore gumi vakutakura mabucket mahombe emvura zvinovakanganisa kukura zvakanaka," (Meaning children as young as ten years old are carrying heavy water buckets which hinders their physical growth), (Interview, 6 April 2020). According to a Chitungwiza Junior Councilor, "younger children are vulnerable as they end up carrying buckets of water which are not equal to their body abilities," (Interview, 5 April 2020). A key informant raised that children require to rest as they are still growing, but as a result of water shortage children are walking long distances in search of water and no longer have time to rest. Mothers who are still breastfeeding have no option but to leave their babies home and "they cry until they cannot cry anymore" pointed out a key informant (FGD, 6 April 2020). The key informant added that some mothers carry children on their backs and according to their elders' these children will be feeling

the weight of water carried by the mother posing health threats to the baby and even slowing down physical growth.

#### 4.2.7 Child labor

UNCRC Article 32 and ACRWC Article 15 grants children the right to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. UNCRC Article 36 additionally mentions that children have the right to be protected against all other forms of exploitation prejudicial to any aspects of the child's welfare. The Zimbabwe 2013 Constitution section 81 (1) (e) states that "every child, that is to say every boy and girl under the age of eighteen years, has the right- to be protected from economic and sexual exploitation, from child labor, and from maltreatment, neglect or any form of abuse."

The right of children not to perform any work hazardous to them and not to be used as child labor has failed to be realized in Unit D area as water scarcity has left children deprived of this right. The researcher observed that majority of water merchants who were moving around the community selling water were boys who were young and should be in secondary school. One of the water merchant interviewed reviewed that he was fifteen years of age. According to a community volunteer, "child labor is at stake as the children will sometimes be forced to carry 10 to 20 litre containers of water not age appropriate to them," (FGD, 6 April 2020). Local CBOs expressed their concern about the high rate of child labor as children are given the responsibility to walk long distances in search of water, stand in long queues for most part of their day and even carry heavy water containers. ZPP (2019) mentions that the crisis has brought about issues of extortion and exploitation of children.

# 4.2.8 Degrading treatment and Verbal Abuse

According to UNCRC Article 37 no child shall be subjected to torture or other cruel, inhuman or degrading treatment or punishment. This is also raised in the ACRWC Article 16 which states that, "children should be protected from all forms of torture, inhuman or degrading treatment..." Zimbabwe 2013 Constitution section 81 (1) (e) gives every child the right to be protected from maltreatment. UNCRC Article 37 (c) gives children the right to be treated with humanity and respect for the inherent dignity of the human person.

According to key informants, children in Unit D area are subject to humiliation and belittling by adults at water sources. A volunteer pointed out that adults have a tendency to take advantage of children in water queues, demeaning them as minors in an effort to get ahead of line. Respondents reported that children have grievances over the behavior of adults and some children had developed an attitude of disrespect towards adults so as to stand their ground. Junior Councilors did shade more light on the matter highlighting how adults treated children as though they are not people and expect them to be docile in the name of respect your elders as stipulated in ACRWC Article 31. The researcher observed a young boy being insulted by an elderly woman at a public borehole (Transect walk, 25 March 2020).

"Children are demeaned by adults at water sources, and when they try to stand their ground, it is a shame that the adults even gang up on them," expressed a guidance and counselling teacher during an interview (Interview, 10 April 2020). The teacher mentioned that bad language is used at water sources and is often directed towards children. The worry of a Chitungwiza Junior Councilor was bad language eroding good morals in children. Adding on to the verbal abuse children suffer, all four parents and guardians interviewed confessed to have witnessed children being demeaned and verbally abused at water sources. "Vana vanotukwa kumvura uku, zvimwe

zvacho zvonyadzisira zvavanotukwa hazvitaurike," expressed a parent in Shona (Meaning children are insulted at water sources and even in vulgar language), (Interview, 7 April 2020).

# 4.2.9 Special protection of children living with disabilities

Children living with disabilities have not been spared from the impact water scarcity. According to ACRWC Article 13 "every child who is mentally or physically disabled has the right to special protection to ensure his or her dignity, promote his self-reliance and active participation in the community. According to UNCRC Article 23 a mentally or physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community.

One Chitungwiza Junior Councilor vehemently expressed that, "they also have to be in the long queue like the rest of the children.....they are not given any privilege to cut in line due to their state," (Interview, 5 April 2020).Respondents expressed how children living with disabilities were prone to emotional abuse at water sources by other children and even in some cases by adults. A projects manager of a local CBO, Digital Advocate International, mentioned that children living with disabilities are being affected by water scarcity as they encounter discrimination, segregation and verbal abuse at water sources. The projects manager mentioned that in one of their project, they found out that although not given importance in water scarcity discussions, children living with disabilities appear to suffer more from this crisis. "Children living with disabilities in Unit D area cannot enjoy a full and decent life or have full dignity as they are living in an environment with no water and encounter challenges like discrimination and verbal abuse at water sources apart from challenges that all children are facing. It is surely a double tragedy," said communications officer of a local CBO working with children living with disabilities in the area (Interview, 4 April 2020). One key informant supposed that children living

with disabilities suffer emotional abuse continuously as verbal abuse, segregation and discrimination aids emotional abuse.

# 4.3 Secondary impact on child rights

## 4.3.1 Education

Water scarcity has indirectly affected children's educational grades, pass rate and even causing school dropouts. One of the key informants volunteering with a local organization mentioned that, "It's very difficult especially if they are still going to school because they have to balance school and the demand of water at home. This on the long run is eventually affecting the children's performance and grades at school," (FGD, 6 April 2020). During an online FDG, all six participants expressed their concern on the impact of water scarcity on children's pass rate at the end. For them, water scarcity was sacrificing the future of children as education is the key to success. Poor concentration due to tiredness from fetching and queuing for water and lateness at school raised by key informants as direct results of water scarcity eventually leads to poor performance and low grades for students. ZPP (2019) records that "without water, the chances of them attending school and learning productively are compromised." Water scarcity in Unit D area has brought about school drop outs as boys leave school to engage in water selling business and girls drop out due to unwanted pregnancies (FGD, 6 April 2020).

Magarira (2016) quotes a mother residing in Unit D area identified as Kelvin's mother saying, "There was a time I stopped my child from going to school due to stomach pains and also the unavailability of water makes it impossible to wash his school uniforms and bath him", (Interview, 7 April 2020). A junior councilor pointed out that children were continuously turning absent from school as a result of health problems posed by water scarcity and in some cases end

up dropping out of school. A representative from a local CBO strongly emphasized how children were turning absent as a result of sickness saying, "Vana vakurovha nekuti nhasi musoro, mangwana mudumbu apa vabereki havana mari yekutenga mishonga ikudhura" (meaning that children were turning absent as a result of different sicknesses such as headaches and stomach problems of which most parents cannot afford medication which is expensive), (Interview, 4 April 2020).

#### 4.3.2 Life

The health threats posed by water scarcity threaten the children's right to life as stated in the ACRWC article 5 and Zimbabwe 2013 constitution section 48. UNCRC Article 6 (1) States Parties recognize that every child has the inherent right to life. 2. States Parties shall ensure to the maximum extent possible the survival and development of the child. Muronzi (2020) said that, "residents are fearful of the life-threatening conditions the current water crisis could create." Two key informants brought to light how the water scarcity indirectly threatens the children's right to life. "Living in an environment with high risk of cholera and typhoid and other health concerns puts the life of children at risk and exposes them to the threat of premature death which can be avoided by making water available," a community volunteer expressed concern (FGD, 6 April 2020). All 5 Chitungwiza Junior Councilors engaged were worried that the lives of children were at high risk in face of any disease outbreak as they are more vulnerable. A parent passionately mentioned that, "Kune vana vacheche vatofa nechirwere chemudumbu chapararira nekuti mvura yacho yatakushandisa haina kuchena." (Meaning there are babies that have lost their lives in the community because the water being used is not safe.) (Interview, 7 April 2020).

#### 4.3.3 SRHR Problems

Muronzi (2020) points out that, "when people face barriers to obtaining safe water, it can have negative economic and social effects as well". As discussed earlier on, children are being exposed to sexual abuse as a result of water scarcity. According to a local CBO working on SRHR, the water scarcity in Unit D area poses major challenges to children as a result of sexual abuse which include unwanted pregnancy and STIs. "From our work in the area, we also have girls who are part of the sex workers we work with. Some of them live in child-headed households and mention that they ended up engaging in sex work to have money to purchase water," (Interview, 8 April 2020). The key informant highlighted how sex work exposes the children to STIs including HIV, child marriages and unwanted pregnancies as well. A community volunteer expressed how children were at risk from early pregnancy which could cause serious health complications even threatening their lives. This poses a huge threat to the children's right to health as stipulated in UNCRC Article 24 and ACRWC article 14.

# **4.3.4 Hunger**

Zimbabwe Constitution Section 81 (1) (f) gives children the right to nutrition and ACRWC Article 14 states that "every child shall have the right to enjoy the best attainable state of physical, mental and spiritual health. This includes the provision of nutritious food and safe drinking water, as well as adequate health care." Water scarcity is making this right nonexistent for children living in Unit D area.

According to a parent interviewed, prices of greens and vegetables have gone up which makes it difficult to purchase them. "Before when water was available, we used to have gardens within our homesteads and these helped provide nutritious food for our children but now doing gardening is a waste of time as there is no water to water the plants and eventually they

wilt,"(Interview, 7 April 2020). Two parents expressed that the little money they should be purchasing food for their families now had to be subtracted purchasing water. A local organization mentioned how it supported small scale farming projects to boost food security in the community for caregivers but the projects only had 20% success rate due to water scarcity.

# 4.4 Conclusion

The chapter presented data collected and analyzed by the researcher which is unique to Unit D area in Chitungwiza. The chapter first looked at the extent of water scarcity in Unit D area and proceeded to look at direct impact of water scarcity on child rights. Lastly, the researcher looked at secondary impact of water scarcity on child rights.

#### **CHAPTER 5**

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter provides a cogent summary of key findings. The chapter looks at broader implications of findings obtained and offers recommendations based on the larger meaning of the findings. Recommendations are offered with intention to reduce the impact of water scarcity on child rights and to address the water scarcity problem.

# **5.1 Summary of findings**

The research findings showed that water scarcity is a force that impedes the fulfillment of child rights. The research showed that children without doubt, play a critical role in the water paucity struggles resulting in their rights being violated on a day to day occurrence. Water scarcity has made child rights a luxury which most children from poor households cannot afford instead of being fundamental to all children. The findings also revealed that amidst of this plight of children in face of water scarcity, their rights are not considered or made a priority as it has become only an issue of survival.

Adding on, findings brought to light that the water scarcity situation is further escalated by human behavior. 'The tragedy of the commons' put forward by Hardin (1968) has befallen public water boreholes which are supposed to help the community but rather few individuals, particularly water merchants and those with political power gain monopoly and use the water sources for their own self-interests at the expense of the poor. This further escalates the situation and increase the impact of water scarcity on children who suffer both directly and indirectly.

Furthermore, the research found out that water scarcity impact on child rights cuts across all children of different ages groups. No child is spared despite their age showing that age is not a factor to spare one from the consequences of water scarcity. All children, that is from newly born babies, toddlers, adolescents, teenagers, those in primary school and those in secondary school face the impact of water scarcity on their rights. Findings also showed that children living with disabilities are affected again by the water shortages and they face a double tragedy.

In gender terms, water scarcity affects all children despite their gender. The research unearthed that both girls and boys are vulnerable to water scarcity challenges in their everyday lives. However, on sexual abuse and SGBV the findings showed that it is the girl child who is left more vulnerable compared to the boy child. Girls are more prone to indecent assaults and sexual abuse than boys which makes them more vulnerable to SRHR health related problems such as STIs and even unwanted pregnancy. Girls due to their biological nature, they are further affected during their menstruation cycle by water challenges as at the core of maintaining menstrual hygiene, water is requisite. Therefore, one can conclude that although both girls and boys are vulnerable, it is the girl child who is more vulnerable and encounters more suffering due to water scarcity.

In addition, the findings showed that the community has come up with different copying mechanisms to water scarcity and these depend on their financial status. It is the poor households who suffer the most and thus children from poor households encounter more violation of their rights. The poor are chiefly affected as they cannot afford to purchase water or water purifying chemicals, drill their own private boreholes or wells hence water scarcity has become a tragedy of the poor. Those with financial muscle, are actually seeing water scarcity as a joy since there

are now water tycoons selling the precious life sustaining liquid to the poor. Water has thus become affordable to the affluent only despite it being a basic need by any human being.

The findings showed that children do not only suffer directly as a result of water scarcity, but even indirectly. Water scarcity on the long term threatens children's rights to life, to adequate food, to health and even education. Conditions that are created, incidentally impact on various child rights hence increasing their suffering. Apart from that, findings showed that water scarcity increases children's vulnerability to their rights being violated as a result of the environment that has been created due to water paucity.

According to the research findings, water scarcity impact is further escalated by already existing problems in the community. Factors such as overpopulation, high levels of poverty and already deteriorated sewer systems further worsen the situation. This diminishes the ability of the community to cope with the water scarcity challenge and further worsen the impact of the water shortage on child rights.

It can be argued objectively that water scarcity is not only a child rights to water issue, but an issue of diverse child rights. The findings from this study show that water scarcity is one of the leading causes of child rights violations. The results of this research can be used to other areas with similar characteristics with those of Ward 15 of Chitungwiza, commonly called Unit D area.

## 5.2 Recommendations

## **5.2.1 Government**

❖ Through its various departments that are directly/indirectly linked to child rights and water management, should formulate and implement programs that specifically focus on reducing impact of water scarcity on child rights.

- ❖ The government should ensure that child rights violations are addressed and the laws regarding child rights are enforced thoroughly.
- ❖ The government should review water supply related policies and implement those policies in all local governments by channeling more resources towards water supply.
- ❖ The government should engage various stakeholders in coming up with sustainable solutions to water scarcity and ensure that the water scarcity discussion at its core takes children into consideration.
- ❖ The government should invest in water harvesting schemes like Egypt did and ensure equal water distribution across all cities despite being high or low density.
- ❖ There is need for the government to prioritize the construction of Muda dam to mitigate the water crisis in Chitungwiza since currently Chitungwiza relies on Harare for water supply yet Chitungwiza is the third largest town in the country.
- ❖ The government should prioritize making water affordable and accessible for all.

#### 5.2.2 Local Council

- ❖ There is need for the local Council to partner with business community, non-governmental organizations and CBOs in drilling more boreholes. This will reduce pressure on the few public boreholes and ensure that the distance each household travel for water is minimal.
- ❖ There is need for robust measures to ensure that water is supplied to all households equally despite their location geographically. The council should ensure not only households on lower veld receive tap water and aim to supply safe clean water on a regular basis.

- ❖ The council should establish a call free line where people can report sewer bursts and the council should address these on the same day a case is reported. On the long-term, the council should come up with a strategy to renovate or renew the sewer systems.
- ❖ The council further needs to replace metal stolen meters with plastic meters to all households for free to avoid losing revenue and water wastage.
- ❖ There is need for continuous lobbying for funds from the government to ensure that the Muda dam construction project is completed as this will go a long way in addressing water scarcity in Chitungwiza.

## **5.2.3 Junior Council**

- Junior Councilors should utilize their influence and connection to the senior Council to advocate on children's behalf in relation to water scarcity.
- Junior Councilors can have children in their respective jurisdictions sign a petition for change on water scarcity and petition the senior Council and other key stakeholders.
- Junior Council should be at the forefront of advocating for reliable and regular water supply and sustainable measures in combating water scarcity to protect children's rights.
  They can even engage local organizations and business community to drill boreholes in the community.
- The Junior Council should empower children with knowledge so that they make informed decisions in times of water shortage.

## 5.2.4 CBOs and Non-governmental organizations

Local organizations should educate parents and guardians on child rights and their responsibilities as parents as stipulated in Zimbabwe's 2013 Constitution, ACRWC and UNRCR.

- ❖ There is need for engagement in massive campaigns on sensitizing the community on cholera and typhoid outbreaks which are at high risk of occurring.
- Organizations should also raise child rights violations as a result of water scarcity and advocate for children.
- ❖ There is need to educate the community on the effects of verbal abuse to children, educate children themselves about their rights and provide platforms where children can report violations of their rights both online and offline and link them to platforms such as 116 toll-free Child line and 393 toll-free Youth Helpline.
- There is need for organizations to empower children with knowledge and skills transfers so that they make informed decisions in times of water scarcity.
- They should also partner with the local council to look at how climate change is affecting the water table.

#### 5.2.5 Schools

- ❖ Schools, both government schools and private colleges should come up with measures to ensure constant water availability in schools. Projects like these should be done partnering the School Development Committees to come up with sustainable measures such as drilling boreholes.
- Mushrooming unregistered colleges should be regulated by relevant authorities and prioritize water as a necessity and ensure water needs of children are always met.
- ❖ Schools should also play a crucial role in ensuring access to water for the communities they are situated in by allowing the community to collect water from their premises.

## 5.2.6 Community

- ❖ The community should ensure that there is equality at water sources and no particular individual or group of people has a monopoly over water sources. Water merchants should not be allowed to collect water to sell from community public water sources, as this disadvantages the community which end up purchasing the water which they are entitled to for free.
- ❖ The community should prioritize children at water queues, such that they can attend school in time as most children fetch water before going to school.
- ❖ The community needed to ensure that boreholes were a safe environment for children.
- Children living with disabilities should be accorded first priority on fetching water at water points.

#### 5.2.7 Families

- ❖ There was need for parents and guardians to assist children on focusing on their education so as to improve performance. They must efficiently play their role in guiding their children and teaching them the advantages of good behaviors and positive relationships.
- ❖ The family unit should ensure protection of children, and by all means possible, safeguard the children's rights.

## **5.3 Conclusion**

The chapter offers conclusions derived from and consistent with the findings. The chapter concludes by offering recommendations to the government, local Council, Junior Council, CBOs, Non-governmental organizations, schools, the community and finally families to reduce the impact of water scarcity on child rights.

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#### **APPENDIX**

# Focus group discussion guide

I want to thank you for taking the time to discuss with me today. My name is Belinda Magarira, a final year Development Studies student at Midlands State University carrying out a research on the impact of water scarcity on child rights using a case study of Unit D area in Chitungwiza. We are going to discuss the extent of water scarcity in Unit D, the direct and indirect impacts on children. We will suggest possible solutions to the problems so that the impact of water scarcity on children may be reduced. The research is for academic purposes and the overall aim is to come up with recommendations which may be used by policy makers, council among others.

The discussion is going to take at most 60 minutes and I will be taking notes during the discussion so as to capture all the information you will provide. All responses will be kept confidential. This means that your responses will only be shared with the research supervisor and I will ensure that any information I include in the research report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the discussion at any time by excusing yourself.

Are there any questions about what I have just explained? Are you willing to participate in this discussion?

**NB:** The suggested questions included here are all just meant as guides and probes if the conversation is not flowing, answers need further clarification or when looking for more details than the participants share spontaneously. This means that as the focus group discussion progresses, the researcher may ask questions that are not included below, and similarly, it may not be appropriate or necessary to ask all of the questions included in this topic guide- the

discussion will be guided by what the participants say, NOT by the topic guide. For that to happen, the researcher will make sure she is familiar with the guide so that so that she can engage more fully in the discussion, and be responsive to what the participant is saying, by exploring these responses further. The researcher will try to integrate some of the information that the participants have shared into subsequent questions — this will demonstrate that the researcher was listening, and give participants a chance to clarify anything the researcher might be misunderstanding. It is important for the researcher to show that she is interested in what the participants are saying, and that the researcher is there to learn from them.

- 1. How often is council (ZINWA) tap water available in Unit D area? Can all households access it?
- 2. How is the community copying with water scarcity?
- 3. How much does water cost and in what quantities? Where do the residents purchase water from?
- 4. What roles are children playing in face of the water problems?
- 5. What is it like for children to live in Unit D area with water challenges inherent?
- 6. What direct challenges are children facing as a result of water scarcity in the community?
- 7. What are some of the secondary impacts facing children in the Unit D area due to water scarcity?
- 8. How best can we solve the problems discussed above?

Is there anything more you would like to add in relation to water scarcity and children?

I'll be analyzing the information you gave me and submitting a dissertation before end of May. I'll be happy to send you a copy of the final research once it is approved and submitted, if you are interested.

Thank you for your time.

# Unstructured interview guide

I want to thank you for taking the time to have this interview with me today. My name is Belinda Magarira, a final year Development Studies student at Midlands State University carrying out a research on the impact of water scarcity on child rights using a case study of Unit D area in Chitungwiza. We are going to talk about the extent of water scarcity in Unit D, the direct and indirect impacts on children. The research is for academic purposes and the overall aim is to come up with recommendations which may be used by policy makers, council among others.

The interview is going to take at most 60 minutes and I will be taking notes and recording during the interview so as to capture all the information you will provide. All responses will be kept confidential. This means that your interview responses will only be shared with research supervisor and I will ensure that any information I include in the research report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are there any questions about what I have just explained? Are you willing to participate in this interview?

## **Pre-determined goals of interview**

- 4. To find out the extent of water scarcity in Unit D.
- 5. To probe the direct effects of water scarcity in Unit D on children.

6. To inquire the secondary impact of water scarcity in Unit D on children.

## Focus for interview

The interview will be focused on the research questions of the study. These are:

- 4. To what extent is water supply accessible to households in Unit D?
- 5. How is the water scarcity situation in Unit D area impacting directly on child rights?
- 6. What are some of the secondary effects of water scarcity in Unit D area on child rights?

The interviewer will probe for more information in relation to different child rights as outlines in section 81 of the Zimbabwean 2013 constitution amendment, the African Charter on the Rights and Welfare of the Child and the United Nations Convention on the Rights of the Child, in an effort to see how the water scarcity is affecting different child rights both directly and indirectly.

NB:The suggested questions included here are all just meant as guides and probes if the conversation is not flowing, answers need further clarification or when looking for more details than the participant share spontaneously. This means that as the interview progresses, the researcher may ask questions that are not included above, and similarly, it may not be appropriate or necessary to ask all of the questions included in this guide- the interview will be guided by what the participant say, NOT by the topic guide. For that to happen, the researcher will make sure she is familiar with the guide so that so that she can engage more fully in the interview, and be responsive to what the participant is saying, by exploring these responses further. The researcher will try to integrate some of the information that the participant have shared into subsequent questions – this will demonstrate that the researcher waslistening, and give participant a chance to clarify anything the researcher might be misunderstanding. It is

important for the researcher to show that she is interested in what the participant is saying, and that the researcher is there to learn from the participant.

# Participant observation guide

My name is Belinda Magarira, a final year Development Studies student at Midlands State University carrying out a research on the impact of water scarcity on child rights using a case study of Unit D area in Chitungwiza. The aim of this observation guide is to guide the researcher during the observation process to observe the following issue as they will aid in providing answers to the research questions such as, to what extent is water supply accessible to households in Unit D, how is the water scarcity situation in Unit D area impacting directly on child rights and what are some of the secondary effects of water scarcity in Unit D area on child rights? The researcher will also closely observe 5 children in Unit D area, events transpiring at water sources, number of boreholes in the area among others.

| Activity                  | Child 1 | Child 2 | Child 3 | Child 4 | Child 5 |
|---------------------------|---------|---------|---------|---------|---------|
| Ages of the child         |         |         |         |         |         |
| Number of times a child   |         |         |         |         |         |
| fetches water in a day    |         |         |         |         |         |
| The time a child takes    |         |         |         |         |         |
| fetching water            |         |         |         |         |         |
| Quantity of water a child |         |         |         |         |         |
| carries at one go         |         |         |         |         |         |
| Time the child departs    |         |         |         |         |         |
| for school                |         |         |         |         |         |

| Time a child plays    |  |  |  |
|-----------------------|--|--|--|
| The amount of water a |  |  |  |
| child uses per day    |  |  |  |

# Other observation areas in the Unit D community

| Number of community boreholes               |  |
|---|--|
| Frequency and duration of tap water         |  |
| availability                                |  |
| The behavior of children at water sources   |  |
| The behavior of water owners towards        |  |
| children at water sources                   |  |
| The behavior of adults towards children at  |  |
| water sources                               |  |
| The behavior of children towards each other |  |
| at water sources                            |  |
| Are there children who are in water selling |  |
| business?                                   |  |
| Are there unprotected wells being dug at    |  |
| households?                                 |  |
| Is the environment at community boreholes   |  |
| safe for children?                          |  |
| Attitude, character and beliefs of water    |  |

| merchants.                                    |  |
|---|--|
| Is the water at community boreholes           |  |
| accessible to children?                       |  |
| The treatment given to children at water      |  |
| sources.                                      |  |
| Treatment of those who sell water towards     |  |
| children.                                     |  |
| The time water merchants start selling water. |  |
| Male children versus female children seeking  |  |
| water.  |  |