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Factors Influencing Equitable Access to Improved Water Supply in uMlalazi Local Municipality

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Declaration

I Ntokozo Herdwirg Bhengu, do hereby declare that this dissertation is my own original work to the best of my knowledge. All references citations and ideas borrowed have been acknowledged and none of the current work has been submitted for any degree or examination at any other University.

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Signature

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Date

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Dedication

This dissertation is dedicated to my late mother. Thank you so much for having me, Mrs Magdalena Yeye Bhengu.

Abstract

The fact that water is necessary for life is undeniable. One of the most difficult challenges for many local governments is providing basic services to all South Africans. The global community has made positive advances in many fields, but the basic needs of man, such as clean water, remain a mirage. For healthy survival, growth, and development, safe drinking water and good hygiene are essential. Various factors affect the equal and equitable access of households to improved water. The Department of Water and Sanitation (DWS) is responsible for ensuring that all South African citizens have access to basic water supply and that water and sanitation services are delivered rapidly. The Department of Water and Sanitation is responsible for managing water supply schemes for major rural areas and villages with the assistance of district municipalities. The DWS as the National Regulator is responsible for the governance of water resources of the country and ensuring accountability amongst other key players such as water service authorities (WSAs) and water service providers (WSPs).

The study examined community respondents' perceptions about the nature of water supply services they receive and water resources available in the area. In conducting the study, a descriptive design was used. One sub-location was randomly selected from each of the two wards with a sample of 274 respondents composed of 193 females and 81 males. Data was collected using questionnaires. Data analysis was done using descriptive statistics and presented using charts and frequency tables. Hypothesis was tested based on the significance level. This was against an alternative hypothesis which assumed that there is a significant relationship between the economic scale and distribution of water services in the uMlalazi Local Municipality.

The findings showed that the chi-square values for the variables were; size of economy (chi-square = 30.445a, df = 2, p-value = 0.00 and n= 274); access to pipe water within dwelling (chi-square = 109.540a, df = 2, p-value = 0.00 and n = 274); dependence on surface water (chi-square = 212.723a, df = 1, p-value = 0.00 and n = 274), water quality (chi-square = 115.635b, df = 2, p-value = 0.00 and n = 274), decreased water supply (chi-square = 12.314a, df=2, p-value = .002 and n = 274) and commitment to eradicate backlogs (chi-square = 30.445a, df= 2, p-value = 0.00 and n = 274). As a result, the study indicates that equitable water availability has an impact on health, human development, and economic growth. The findings indicated that a

lack of water might constitute a severe threat to public health and community development, since widespread consumption of dirty surface water could expose the population to disease (bacteria) infections transmitted through water. Findings also discovered that household's access to improved water supply was largely determined by their income, and home location, on the other hand, were important variables in gaining access to better water for other domestic purposes whilst access to water is better for other household uses. The effect is anticipated to increase among low-income rural households, expand the rural-urban development divide, and intensify public dissent and conflict among rural water end-users. Furthermore, the data demonstrated that water plays an important role in rural socioeconomic development. As a result, water resource management that is sustainable may be able to solve challenges like equitable improved water access. The study findings further showed that the community at large were dissatisfied with water provision. Government direct involvement in participation, cooperation, coordination and developing a culture of empowerment should bring better water services for the local community of uMlalazi. The study recommends that one of the main pipelines from the plant to uMlalazi should be installed and awareness campaign for effective and efficient use of water should be launched. This might help ease and improve the present precarious situation.

Acronyms

ANC	African National Congress
COGTA	Department of Cooperative Governance and Traditional Affairs
CWSS	Community Water Service Strategy
DPLG	Department of Provincial and Local Government
DWS	Department of Water and Sanitation
DWA	Department of Water Affairs
DWAF	Department of Water Affairs and Forestry
ESG	Equitable Share Grant
FBWP	Free Basic Water Policy
IDP	Integrated Development Plan
KCD	King Cetshwayo District
KZN	KwaZulu-Natal
MDG	Millennium Development Goals
MIG	Municipal Infrastructure Grant
MSA	Municipal Structures Act
NEPAD	New Partnership for Africa's Development
NWA	National Water Act
NWSS	National Water Service Strategy
NGO	Non-Governmental Organisations
RDP	Reconstruction and Development Plan
RSA	Republic of South Africa
SALGA	South African Local Government Association
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organisation

UNGC	United Nations General Comment
UMLM	uMlalazi Local Municipality
UNWWDR	United Nations World Water Development Report
WHO	World Health Organization
WSA-WSP	Water Services Authority- Water Service Provider
WSDP	Water Services Development Planning

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Access to water is very vital for the development of human beings and quest for effective healthcare delivery is imperative. This indicates that access to clean and drinkable water can provide an opportunity for sustainable good health care. In addition, access to safe and affordable drinking water is among the first targets of the Sustainable Development Goal 6 (SDG6) which has been established by the United Nations in 2015 (Hung et al., 2020). This indicates that poor drinking water has various negative impacts on human's social and natural environments. In addition, the dangerous effects of poor drinking water in human beings' children and animals are too much because it puts them at risk of exposure to contaminated water which causes water related diseases. Exposure to faecal contamination is due to poor water supply, sanitation and hygiene. Prüss-Ustün and Cumming (2014) revealed that poor drinking water and poor sanitation in developing countries such as South Africa can cause diarrhoea diseases and other illnesses.

In a study which examined the chemical composition of 68 water samples and at the same time 2013 biological samples which involved both human hair and urine of four districts in the boundary of the Red River Delta in Viet Nam, the findings revealed the concentrations of arsenic in human hair and urine in the majority of the drinking water sources (Agusa, Pham and Vi ML, 2014). The implication of this is that arsenic exposure constituted a major source of drinking water pollution in the study areas. Clean water distribution is very necessary for every household irrespective of their location. In addition, drinking water from a particular source does not mean that the water is safe for human consumption. This is due to the fact that there is a high possibility of contamination of drinking water with various organisms. Based on this, it is very necessary for governments at all levels to provide clean and safe water for human consumption for every citizen.

The importance of water in human development cannot be underestimated. Humans uses water for various activities such as energy generation, food production and sustainability of ecological systems. Based on this, there is a need for better allocation of fresh water sources between societal needs and at the same time natural ecological system (Cordier and Meinzen, 2017). Scheerling (2011) argues that challenges associated with water resource allocation can be traced to association between anthrophonic activities and nature-induced climate variability. It can be said that there is a need for effective water management in this 21st century. In section 27(1) of the 1996 Constitution of the Republic of South Africa, it is stated

that “all people have a right to access adequate food and water”. This means that every citizen in South Africa has a right to enjoy quality water supply without any discriminations in terms of age, sex, and colour (Constitution of the Republic of South Africa 1996).

The Department of Water and Sanitation (2013) stated that the South African government inherited huge backlogs in water supply and sanitation after apartheid. This is due to the aftermath of discrimination and effect of apartheid in the country. In dealing with such national level challenges related to water, the Sustainable Development Goals in 2015 re-emphasised on the importance of equitable access to water particularly in rural communities and for the poor people in the society. Consequently, the South African government has made various attempts to provide equitable access to water supply in the country. In 2000, the Minister of Water Affairs and Forestry Ronnie Kasrils, announced the policy of Free Basic Water (FBW) policy and on the 14th of February 2001, he goes further to say that every household in South Africa will have access to 6kls of water per month without them paying for it. This indicates that 6kls of water will be given to each household free of charge (Department of Water and Sanitation-DWS, 2001). Though, the FBW Policy targeted poor households who are indigents, most municipalities decided to provide this subsidy to all people regardless of whether they are poor or rich. In Durban for example, 9kls of free basic water was initially provided to all households regardless of income status, up until 2017 when this policy was revised to 6kl of free basic water provided to indigent households (Ndimande, 2021).

In order to ensure that the Free Basic Water Policy is implemented in the country, there was an increase in the Treasury allocation to the Department of Water and Sanitation and other stakeholders in order to subsidise the cost of water supply in the country. In order to provide the capacity building for achieving better funding for the Free Basic Water Project in South Africa, the Water Research Commission was established in 1971 by Act 34 and since 2002, it focused on conducting studies on free basic water subsidies. The South African government makes efforts to build the capacity of local authorities in order to achieve the Sustainable Basic Water project. The Water Board makes arrangements with non-government organisations and sell bulk water to them from reservoirs in order to reticulate to municipalities (DWAF, 2002). The essence of all this is to support Free Basic Water Policy of the South African government. The DWAF (2002) maintains that every municipality is to develop and make plans for the realization of the Free Water Policy for the general public and households. According to the World Health Organisation (2017), it is estimated that over 785 million people are not having access to clean water while 144 million people are dependent on surface water, particularly in the rural areas mostly in developing countries. The United Nations World Water

Development (2020) reported that 2.2 billion people worldwide do not have access to safe drinking water. In addition, the Department of Water and Sanitation (2021) reported that for the effective implementation of the FBW policy, there is the need for water institutions especially the water service authorities (WSAs) and water service providers to be capacitated. The FBW policy was launched on the 1st of July, 2001 which was the tandem with the financial year of local municipalities in the country. DWAF affirmed that the essence of the policy is basically to reduce poverty in households which will give opportunity to poor households to have access to basic supply to water. However, the implementation of FBW was not seen in most of these areas. Kasrils (2004) reports that despite the FBW policy in South Africa, over 5 million people in South Africa failed to have access to portable water in the country. As a result, what is lacking are the necessary capacities, such as expertise, money, logistics, and climate challenges, which continue to plague towns and undermine their efforts to execute the FBW policy.

The Stats SA mid-year 2019 estimated a population of 58.78 million in South Africa, of which 60% of the population dwell in urban areas while 40% lives in rural settlements (Statistics South Africa, 2020). Massachusetts Institute of Technology (MIT), Water for all Project (2020) stated that in South Africa, 77% of water use is from surface water, 9% is groundwater, while 14% is from recycled water. This implies that the country's population is dependent on water which is not evenly distributed. Massachusetts Institute of Technology (MIT), Water for all Project (2020 and Grönwall, 2020) notes that 74% of rural people in the country largely depend on groundwater which can be in the form of local well or pumps.

On the other hand, areas and cities that have access to universal water distribution network get their water from various surface sources such as Limpopo and Komati rivers. Helen Suzman Foundation suggests that the increase in immigration and growth of population particularly in the rural areas in South Africa, is putting stress on water supply in the country (Mnisi, 2020). Omotayo (2021) affirms that 19% of rural populace in South Africa have no access to clean and reliable water supply while 33% do not have access to basic sanitation.

There are various reasons for inequitable access to water in South Africa. This includes climate change, pollution, population growth, and aging water infrastructure are all putting pressure on limited water resources (SIWI report by Karar and Wilkinson 2020).

According to Jones (2009), equity is founded on the notion of moral equality, which states that people should be treated equally regardless of their gender, colour, or religion. As a result, despite their many differences, all people share a common humanity or human, dignity and as a result, how each of them should be treated must be considered. The basic concepts for safeguarding and managing water resources in South Africa are equity, sustainability, and efficiency (RSA, 1998). These principles drive the main goal of water service management systems, which is to provide customers with sufficient quality and quantity of water in a reliable manner (RSA, 1997). The Department of Water and Sanitation (DWS) articulated this goal succinctly with its early slogan, "some for all, forever," which encapsulated the principles for equally distributing a finite resource while correcting previous inequities (King and Pienaar, 2011).

Van der Zaag (2007) argues that equity as related to water allocation is difficult to measure or define. However, Articles 5 and 6 of the 1999 UN Watercourses Convention defines equity as “reasonable utilization and participation”. The UN sees “equity” as a reasonable and fair distribution of water resources. In particular, equity relates to the attainment of optimal and sustainable distribution and utilization of water, taking into account the local interests, and consistent with adequate protection of water sources (McCaffrey and Sinjela, 1998). In addition, Article 6 of the UN Watercourses Convention maintains that for any nation to achieve equitable and effective utilisation of water, the following considerations should be ensured;

1. Considerations for ecological, climatic, hydrographical and hydrographic.
2. Examination of the social and at the same time economic needs of watercourse.
3. The assessment of population dependent on the watercourse in each watercourse.
4. The implication of the use of the watercourses in one watercourse state particularly on the other watercourse states.
5. The existing and benefit of using watercourse.
6. Preservation, conservation and at the same time development of economic usage of water resources as related to the watercourse particularly, the implication and costs of measuring taken for that effect.

Gupta (2015) and McCaffrey and Sinjela (1998) note that the availability of alternatives of comparative value as related to a particularly planned or existing use of other water resources is essential. For effective equitable water distribution, there are some necessary criteria that need to be assessed for better water resources distribution in both developed and developing countries. Equitable distribution of water is the opportunity to availing every person to have

equal opportunity for accessing water based on their needs. This implies that equity is related to having equal opportunity to access to water. The United Nations (2010) argue that accessibility to water must be related to water affordability and at the same time equality and equity which has been seen as a human right by the United Nations General Assembly and also the United Nations Human Rights Council (UN, 2010). However, in allocation of water to users the following must be considered which include scarcity, completion and at the same time availability. Equity to water resources provide acceptable ways of water distribution and regular supply of freshwater.

The government of South Africa has critically examined various reforms that will address rural poverty and various inherited inequalities which was inherited from the apartheid regime. Perret (2002) argues that the government of South Africa introduced a new water legislation that focused on equity, sustainability and also efficient water management which include decentralisation, new local and regional institutions, water user registration and licensing and water right markets. Similarly, the South African water law (1998) is expected to introduce various changes particularly the ways in which water is shared among various users. The major objective of the water legislation is to promote equity, efficiency and balance the needs of water allocation. The essence of this is to guarantee equitable water access in order to meet the basic needs of water in the country.

The South African Water Service Act of 1997 sets out the requirements for regulating the functions of water service providers in the country, as they are those ones who provide water and sanitation. The main aim of the act is to partner with relevant water institutions and at the same time, ensure sustainable water supply in the country. According to WSA of 1997, everybody in South Africa needs to have access to drinking water and basic sanitation. In addition, the objectives of the Acts are specifically for;

1. The need for the right of access to basic water supply and also the right to basic sanitation and need to have access to sufficient water for usage.
2. The need to have standard tariffs for water.
3. The need to prepare and adopt water service development schemes.
4. There should be a regulatory body for water services institution in the country.
5. The need for the establishment of water boards.
6. The need to monitor water services and at the same time intervention by relevant ministries and agencies.
7. There should be provision of necessary financial assistance to water service boards.

8. The need for access to information in a national information system as related to water distribution (Maphela and Cloete, 2020).

This study examines factors affecting the equitable access to enhanced water supply in eMabhokwenI / eNyezane (Ward 17) and Nackerville (Ward 18) under the uMlalazi Local Municipality, using the Ecological Economics Framework. The study further examines the provision of free basic water for households in the uMlalazi Local Municipality in wards 17 and 18 and analyses the relationship between the economic scale and water distribution in these areas. In this study, a quantitative research technique was employed under a random sampling methodology.

1.2 Research Background

South Africa adopted the Millennium Development declaration to reduce poverty (UNDP, 2008) and Sustainable Development Goals in 2015 (RSA, 2017). Improved water supply was one of the priorities for the citizens to have access to water. There is a global concern of having access to improved water. South Africa as a developing country, is suffering from a lack of access to safe drinking water from improved sources (WHO, 2006). People are still depending on water sources that are not protected such as rivers, lakes, dams and streams. These sources are vulnerable because they are exposed to animal and human contamination.

Maphela and Cloete, (2020) mentioned that due to its hot environment, South Africa is ranked as the world's 30th driest country (Green Cape 2017), with minimal rainfall and high, erratic, and high evaporation (Hoffman et al. 2009). According to Joint Monitoring Programme (JMP)-2021-progress-report two billion individuals lacked access to well-managed services, with 1.2 billion having basic services, 282 million having limited services, and 367 million utilizing unmanaged services and 122 million people drink water from unimproved sources and water on the surface. Therefore, sanitation and hygiene practices are limited because of inadequate access to improved water supply. The most important component for measuring access to an improved water supply is the quality of water. Normally, quality ensures safety in water in terms of chemical, physical and bacteriological parameters (WHO, 2004).

1.3 Research problem

Despite the fact that adequate and quality water needs to be made available for every house, unfortunately, the supply of safe drinking water has not been put in place due to the absence of adequate infrastructure in many African countries including South Africa. According to the

World Health Organisation (2014), over 3.4 million deaths occur annually due to water–related diseases and the situation has become more worrisome in rural areas of developing countries. Furthermore, the World Health Organisation (2018) indicates that unsafe water particularly in developing countries has brought about infections and at the same time increased the global burden of various diseases which include diarrhoea. The WHO (2018) goes further to say that over 17.3 million infections are caused by unsafe water which include 4.52 million of diarrhoea and 109 000 diarrheal DALY's (Disability- adjusted life-years), and 1560 deaths each year, especially in low and middle-income countries. Faltering is highly concentrated particularly in the area where there is deep poverty and poor access to improved water which is very common in South Africa (Hung et al., 2020). Over the years, the South African government has invested in rural water supply. Consequently, Khabo-Mmekoa, and Momba, (2019) reported that in 2015, 3.64 million households in South Africa lacked access to improved water supply despite the fact that Former President Thabo Mbeki in his State of the Nation's Address in May 2004 made a promise to all households that they will have equitable access to improved running water within five years. In terms of progress, this goal was never achieved. In some rural areas, woman spend up to one-third of their time fetching water from wells and streams. Poverty is one of the factors that lead to the lack of accessibility to improved water supply.

Even though the concern of equitable water is perceived as general problem for both urban and rural inhabitants, women bear the greatest burden because they are responsible for using water for domestic chores such as cooking, washing and cleaning. The lack of access to clean and safe water is a critical matter that necessitates prompt action. Water cans, for example, are delivered once a month with a limited amount of water regardless of the number of people in the household and depend on the effectiveness of a ward councillor. Several studies have been carried out on factors that influence equitable access to improved water supply by households in Nigeria (Sridar, Okareh, and Mustapha, 2020), Ghana (Mahana, Anaman, and Osei – Akoto, 2014), India (Fracies et al., 2014). However, there is paucity of research on the topic in South Africa at local level. As a result, this research was carried out at a local level in rural areas, with the goal of bridging the gap of equitable water supply in rural communities.

Although water is recognized as a human right in South Africa, there is still inequitable distribution and access to improved water. This study is concerned about what could be a reason for those who have no access to improved water in a constituency considered to be water endowed. What factors influence equitable access to improved water by households in the area and if they exist, what are these factors? This study seeks to answer these questions

in order to comprehend the prevailing conditions in wards 17 and 18 of the uMlalazi Local Municipality.

1.4 Aim of the study

This study aims at analysing the factors that influence equitable access to improve water supply by households in uMlalazi Local Municipality.

1.5 Research objectives

1. To identify the factors that influence equitable access to the improved water supply in wards 17 and 18 of the uMlalazi Local Municipality.
2. To examine the provision of free basic water to inhabitants in uMlalazi Local Municipality in wards 17 and 18.
3. To analyse the relationship between the economic scale and the distribution of water services in wards 17 and 18?

1.6 Research question

The main research questions that this study sought to answer will be as follows:

1. What are the factors that influence equitable access to the improved water supply in wards 17 and 18 of the uMlalazi Local Municipality?
2. What is the extent to which free basic water is provided to the inhabitants?
3. What is the relationship between the economic scale and the distribution of water services?

1.7 Hypotheses of the study

The null hypothesis of the study was that there is no relationship between the economic scale and the distribution of water services. This was against an alternative hypothesis which assumed that there is a significant relationship between the economic scale and distribution of water services in the uMlalazi Local Municipality.

1.8 Significance of the study

The basis of every research exercise is to generate new ideas, develop and communicate new findings for the purpose of solving an existing problem or bringing up innovative ways of doing things that affects positive change in society. This study was therefore intended to enable the researcher to analyse the factors which influence equitable access to improve water supply for households in uMlalazi Local Municipality. By so doing, more knowledge is contributed to the existing literature on the subject matter. Specifically, the findings of the

study are of immense significance to the Department of Water and Sanitation, King Cetshwayo District Municipality, uMlalazi Local Municipality and uMhlathuze Water Board as it enables them to develop strategies to provide accessible water to every household.

To the municipality, this study provides an opportunity for them to look into ways in which they can make water available to the people and into the various health hazards likely to confront people who drink from unclean water sources. In addition, the study is useful to policy makers on various governments' efforts of providing improved water to the people and the steps that they need to be taken to make this task achievable. Furthermore, the outcome of the study has equally awakened the consciousness of the public on the need to manage water resources and protect rural water facilities. In addition, the study provides data to policy makers on the need for effective water supply in every community. The findings of the study are also useful to South Africans in order for them to know the views of the people about access to good water in their communities and a reminder to the government on the need to continue with the policy of free access to quality water by local governments. This study helps the government to review the policy on water in the country. Finally, the society at large would find the outcome of this study very useful for the need to manage water, the importance of good water in society, and the dangers of taking unclean water.

1.8.1 Scope and limitations of the study

The study is limited to the analysis of factors which influence equitable access to improve water supply by households in uMlalazi Local Municipality. The respondents for the study were residents of Ward 17 and 18 of the Municipality. The residents of the wards were selected because they were in a better position to provide their perspective on equitable water supply in their areas. However, the findings of the study were not generalised to other wards in the province because of their different contextual and environmental settings.

1.8.2 Subject scope

The focus of the study was on factors which influence equitable access to improve water supply by households in uMlalazi Local Municipality. The issue of access to water is an interdisciplinary which cut across the sciences, technology, social science and humanities.

1.8.3 Methodological scope

The study employed quantitative research methodologies. The survey method was used to gather data for the study. In addition, questionnaire was used to collect the data.

1.8.4 Literature scope

The study explores current literature from published and unpublished work which included peer review articles, journals, conference proceedings, workshops papers, electronic database journals, and textbooks. The reasons for the review of literature, in this study, are to describe, explain, evaluate, and summarize what various scholars have done on the subject matter. The literature review, for this research, provides the theoretical basis for the study and access to existing body of knowledge.

1.9 Format of the study

Chapter 1

This chapter introduced the study. It covers the background of the study, the research problem, objectives, research questions, and the significance of the study.

Chapter 2

In chapter two, the empirical literature of the study will be discussed. The chapter contains the literature review on the factors influencing equitable access to improved water supply, concerning the envisaged objectives of the study, focusing on matters of equity, basic needs, distribution, and economic scale concerning equitable access to improved water supply in the poor areas of uMlalazi municipality.

Chapter 3

Chapter three contains the theoretical framework of the study. The study is framed according to Ecological Economics. The sub themes that are relevant to this study are scale, natural capital, thermodynamics, basic needs and water distribution.

Chapter 4

Chapter four presents the methodology.

Chapter 5

Chapter five contains the findings, analysing and interpretation of the findings.

Chapter 6

Chapter six provides the summary, conclusions and recommendations.

1.10 Conclusion

The introduction and context of the study are provided in this chapter. It looks at equitable water supply and the extent to which it affects households. Furthermore, the chapter emphasized the significance of the study, which indicated that water availability might have a significant impact on households and the country's economy. Furthermore, it has declared a problem statement, which highlights the concerns that the communities of uMlalazi Local Municipality confront when it comes to improved water access. Local governments are experiencing increases in water demand, necessitating the implementation of strategies for ensuring continuous supply of water. The study objectives which were to identify the factors that influence equitable access to the improved water supply in uMlalazi Local Municipality, were presented in this chapter. In addition, a hypothesis was developed, outlining the assumptions and relationship between the study variables. The scope and limitations of the study, subject scope, Methodological scope and literature scope were all covered in this chapter. The next chapter contains the literature review related to equitable access to improved water.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature related to the study. The objective of this study was to examine factors which influence equitable access to improved water supply. This chapter begins with discussions on equitable access to water supply, water as a basic need, Free Basic Water Supply and economic scale. The review further covered water distribution systems in rural and urban areas of South Africa, action undertaken to improve rural water supply, and Integrated Water Resource Management. In addition, the chapter will go over how lack of equitable access to water can affect human health and how gender plays a role in water access.

2.2 Equitable access to water supply by rural communities

The term "equity" is normally related to "fairness" because equality is normally understood as an essential part of fairness. Equity in water access means influence of water access that is acceptable to people and their community (Goff and Crow, 2014). The General Comment No. 15 of the United Nations and Section 27 of the South African Constitution are explicit about the right to water for the people (Sutherland, et al 2015). Despite this, there is a serious challenge to the implementation in SA, especially in rural areas. It is necessary to note that both animals and plants depends on water for survival. UNESCO (2006) stated that every country needs to make distribution of water a priority because access to improved water is very important for human survival.

Kammeyer (2017) postulated that water is a crucial aspect in order for people to survive. This may be due to the fact that food, business and energy structure depend on it. Kammeyer (2017) further stated that there is an increase in water due to the increase in the human population. He goes further to say that over 700, 000 children under the age of 5 years have lost their lives due to inadequate water. The UN Sustainable Development Goals (SDGs) stresses the need for adequate and equitable access to improved water and hygiene, which they advise every country to achieve by the year 2030 (UN, 2020). Water is quintessential and necessary to sustain life and environmental quality. Therefore, the importance of water cannot be overemphasized. Management of water is important for life and health. Without water, there is no life in the environment and socio-economic development is impaired by lack of access to water (Gebrehiwot, 2006). Scholars have observed that because of the huge disparities in socio-economic development, many people in developing countries continue to

use contaminated water for numerous human activities (Adelodun et al., 2021). Similarly, Grönwall (2008) argues that for poverty to be eradicated in developing countries, there must be access to improved water supply in every community. Since lack of access to water is a violation of human rights (Ohwo and Abotutu ,2014), every household should have access to at least 20 litres of clean water a day (UNDP, 2006). Basic access to water is defined by WHO as the process in which a person must have at least 50 litres of water per day (WHO, 2003). According to Gleick (1996), international organizations, national and local governments should adopt a basic water requirements standard for human needs of 50 litres per day and ensure access to water by all individuals, regardless of their social, political and economic status. Also, Greek (1996) affirmed that for healthy living, every person must have access to 50 litres of water per day. Smith and Hanson (2015) argue that even though improved water sources are available in many areas in developing countries, they are often far away from households. For the WHO, the time of water collection should not exceed 30 minutes. Nevertheless, for a person to do washing, cooking, and drinking necessary to ensure basic hygiene, it requires about 30 to 40 litres of water per day per capita (Singh, undated).

Couzens (2015) stated an instance in which the government denied people access to good water. He cited the example of the installation of prepaid meters in a township area of Johannesburg called Phiri, where if water used exceeds 6 cubic meters, water supply will be cut-off if no payment is made and that generated protests in poor neighbourhoods. These acts indicate a violation of the 1996 South African constitution which guarantees right of citizens to accessible good water. The implication of this is that it is unlawful to deny people access to water. It is in line with this, that the High Court of South Africa in 2008 delivered a judgement against pre-paid meters because they denied many people access to adequate water. The High Court ordered the City of Johannesburg, Johannesburg Water and the Department of Water and Forestry to provide 50 litres per person per day for free. The City of Johannesburg and others appealed against the High Court Judgement to the Constitutional Court. Against this backdrop, the Constitutional Court decreased free basic water to 44 litres per person per day to enable equitable access of drinking water for all citizens and considered the availability of funds argued by the City of Johannesburg and others (Dugard, 2014 cited in Meyiwa et al., 2014).

Gleick (2000) noted that the reason for using pre-paid metres is to save water, particularly for those that can afford to pay. However, the constitution says that water should be distributed fairly to the people irrespective of race, colour, and sex. Several factors were suggested by

UN-Habitat (2009) that require the achievement of a minimum level of affordable and safe drinking water. Such as:

Each person should have at least 20 litres of water per day within the household. It must not be difficult to have access to water, which means it should not take more than one hour to fetch water from where it is allocated. It must not cost more than 10% of the total income of the household. Bourblanc (2012) stated that in developed countries, water supply has increased, particularly in rural areas. However, the opposite is the case in developing countries, where both rural and urban populations fail to have access to water supply. The South African government focuses on 'equality', which suggests that all those citizens must have equal access to water (Bourblanc, 2012). One of the challenges the government is facing is financial constraints to improving people's lives concerning access to improved water supply (Bond, 2007). South Africa is noted to be an arid country. The major challenges in providing accessible water supply include high population density and poor maintenance culture which involves broken water pipes (Bond, 2007). Again, the National Water Act outlines that uneven distribution of water constitutes a major challenge in South Africa (Madzivhandila, 2010:45). Consequently, the FBW policy was designed to enable the municipalities to mitigate these existing conditions. The Free Basic Water Policy of King Cetshwayo District Municipality allows for only (6kl) per month (KCDM, 2019). Other cities like Durban (eThekwini Municipality) allocated (9kl) per month up until 2017 when the amount of free basic water was reduced to 6kl (Sutherland et al., 2019).

Mudenge and Zulu (2004) postulate that the reduction in drinking water is recognized to be a result of the increasing pressure on the few water facilities installed in developing countries. For instance, in Kenya, there has been a constant decrease in access to water. The ratio of un-piped to piped households has decreased from about 8:1 in 1967 to 2.6:1 in 2005 due to pressure on piped water facilities in the municipalities (Mahama, Anaman and Osei-Akoto,2014). WHO/UNICEF (2015) identifies various causes of poor access to water, including inadequate distribution and marginalisation of people dwelling in rural areas. In sub-Saharan Africa, drinking water sources often include, boreholes, wells, rainwater harvesting and piped connections. Most of these can easily be contaminated with bacteria because they are unimproved water sources (Obeng-Odoom, 2012). Mahama, Anaman and Osei-Akoto, (2014) mention that the wealthy and middle classes frequently construct their residences near piped water, enabling them direct and uninterrupted access to government-subsidized water. On the other hand, poor people and rural residents only receive FBW from the government as part of service delivery and to try to elevate poverty from the communities. Ensuring

reasonable quality and reliability of water to the poor, thus constitute key constraints to basic water supply in South Africa.

2.3 Water as a basic need

The South African Water Service Act of 1997 (Act 108 of 1997) considers basic water to be the minimum average of water supply services and the quality of water supply to every home for their personal hygiene. The essence of basic water needs is to eliminate poverty and promote the development of underdeveloped communities (Anger, 2010). The difficulty in obtaining clean water determines the extent of poverty. In order to achieve Millennium Development Goals (MDGs), freshwater supply should be a primary priority, as stated in the goals, because it is impossible to eliminate or ameliorate poverty without it. As a result, if poverty is to be erased as planned by the Millennium Development Goals, access to freshwater supply should be placed at the top of the development agenda (Gleick, Cooley, Morikawa and Morrison, 2009).

As a human right, water should be made accessible to everybody without any form of discrimination, even for those who are unwilling to pay for it. This indicates that in South Africa, everybody must have access to basic water supply (Matose, 2013:16). This concludes that each individual must have access to water without being excluded under any condition. The rich and the poor can enjoy access to water while the government assists in paying for their services. Matose (2013) reveals that every state needs to support access to water as a human right. Water is part of what needs to be endorsed as a basic right (Earle, Goldin, and Phemo, 2005). However, South Africa has achieved some success in the provision of improved water supply not only for cities but also for rural areas (Harvey and Reed, 2004).

Claassen et al (2013) argue that South Africa's water agency indicated plans to provide accessible tap water in rural communities by the year 2025. The need for adequate water supply in South Africa is because the country is coming from the negative effects of apartheid, in which black areas or communities were neglected in terms of social amenities, which includes quality of water supply. Water policies in South Africa were implemented with the key purpose of correcting the inequities of the past created by the apartheid era and to improve the living standards of the poor and to ensure that the previously disadvantaged are provided for (Gleick et al., 2002). Similarly, Earle et al. (2005) and Coalition Against Water Privatisation (2004) indicate that the state has the mandate to ensure the right of every citizen to be

respected, particularly concerning the issue of water, not as an honour determined by ability to pay.

2.4 Free Basic Water Supply

The Municipal System Act 32 of 2000 (MSA) places the responsibility for water service on local governments. It thus becomes each city's responsibility to provide basic water and sanitation services for all residents. The funding for improvements on water and sanitation systems comes from the national government through the Municipal Infrastructure Grant (MIG), which is a funding arrangement with the aim of assisting the poor to gain access to infrastructure and an equitable share grant that serves low-income households to ensure that services are delivered efficiently or through local revenue collection or equitable shares (Nastiti, 2017). The Department of Cooperative Governance and Traditional Affairs (COGTA) disburses conditional grants to municipalities with the goal of ensuring that the foundation activities can be executed, especially in rural areas (Republic of South Africa, 2014). In addition, Boris (2015) argues that the basic function of local governments is to provide various social amenities to local households. The South Constitution of 1996 maintains that every tier of government; national, provincial or local, is entitled to an equitable share of revenue in order to provide basic services (which include water to the people). To achieve this, the equitable division of revenue is mandated to provide funds for the provision of social amenities such as water. The Division of Revenue Act in South Africa put into consideration the capacity of each tier of government in the provision of necessary amenities based on what is stipulated in the constitution. Equitable shares are financial allocations in the form of unconditional grants that enable municipalities to provide basic services to poor households, and to enable municipalities with limited own resources to afford basic administrative and governance capacity and perform core municipal functions (Hazelton, 2004).

The Division of revenue provides equitable shares from the national, provincial and local spheres of government for their allocation of equitable share for water infrastructure development. Access to basic water and sanitation is provided at no cost to poor families, respecting the constitutional right to water while maintaining financial sustainability (SIWI, 2014). Each municipality decides if free basic water is made available to everyone or only to the poor community (Muller, 2008). Despite these legislative efforts, in his 2010 State of the Nation Address (SONA), President Zuma observed that South Africa is not a water-rich country, yet it loses a lot of water through leaking pipes and inadequate infrastructure.

Similarly, the former Minister of Water and Sanitation Affairs, Nomvula Mokonyane, also alluded to water loss challenges, adding that her department is fully aware of the inability of municipalities to deal with issues of maintenance and operational challenges which result in the loss and compromise of the quality of water (DWS, 2015). In 2019, the ANC stated that in 1994, only 6 out of 10 South Africans had access to clean drinking water and that figure has increased to nearly 9 out of 10 South Africans in 2020. In rural areas, improved access to water services will not only reduce the time spent on water collection, but will also give more time for productive activities. In pursuit of this, the government of South Africa expressed commitment to continue to maintain water infrastructure and expand access to improved water for all, while maintaining quality and management for the sustainable use of water resources (Department of Water and Sanitation, 2019).

Subsequently, the FBW policy was adopted. As expected, the FBW policy was implemented in urban areas without difficulties. However, rural areas were more difficult, and until today there are rural areas that still lack access to basic water (Balfour, 2004). According to Madumo (2015), among other challenges that affects local municipalities is to sustain themselves with finance. This makes municipalities fail to present suitable strategies to ensure that they provide good water to the households. The Free Basic Water policy is part of water service delivery in the provision of water, where municipalities are instructed to provide such services to people (DWAF, 2002:32). Free basic water consists of at least a basic quantity of 6kls of water per month per household. This quantity of water may differ among municipalities. Rober (2015:73) states that the local governments are mandated by the constitution to give people access to water services. Looking back, democratisation was a political achievement for black South Africans. On the other hand, South African democracy is faced with incapability to meet basic needs with a high level of inequalities. Rivatt and Ferrar (2014) stipulates that the free basic water initiative was introduced as a response to economic constraints which left underprivileged people unable to access water. Since 2001, the South African government has provided each household with 6kls of water. This is good but inadequate as some of the households are larger in size. More allocation needs to be given to poor households in line with equitable distribution outlined in the Water Services Act of 1998 and the Water Act of 1997.

Poorest households are eventually disconnected due to inability to pay for water services. The role of water as a basic need, an economic, a social, and environmental resource makes pricing of water very difficult. Besides, prices based on instrument application, once a suitable value system has been approved, is mostly difficult (Perry, Rock, and Seckler, 1997). It is a

historical fact that water is a vital resource not only for human survival, but for other productive activities to occur (Michael, 2016). Due to socio-economic inequalities among South Africans, the poor and underprivileged fail to have access to water and other social amenities. The lack of water and infrastructure worsens the condition of many people in South Africa (Muller, 2008). Water is important for life. Therefore, as a common resource, water should not be owned by certain groups of people or individuals. If the water is owned by nobody, it cannot be sold.

To sustainable livelihoods of South Africans, the municipalities should pay attention to water access and its impact on the day-to-day productive activities of community residents (Allan, 2006:962). In rural areas, quality of life of residents can be achieved only if equal opportunities and free water is provided for all citizens (Denhardt 2000:35). This indicates that there is the need for municipal infrastructure services to be provided in a sustainable manner for the generality of the people. The quality of life also includes an environment where individuals feel safe and protected to live without any social disturbances which could arise from lack of access to water related conflicts (Gildenhuys, 2001:21). It is the government's duty to come up with solutions to address this challenge and to ensure that all South African people live better lives (Lennan and Munslow, 2014:17).

2.5 Economic Scale and Water Supply at King Cetshwayo

The King Cetshwayo District Municipality is the Water Service Authority (WSA) for uMlalazi Local Municipality. UMhlathuze Water Board is the Water Service Provider for uMlalazi areas (DWA, 2017). King Cetshwayo is located in the north-eastern region of the KwaZulu-Natal province (KZN). It covers an area of 8 213 square kilometres from Gingindlovu in the south. This district in 2019 accounted for a total of 982 726, or 8.6% of the total population in KZN, with a slight increase from 971 135 in 2016. UMhlathuze has the highest population (421 000), followed by uMlalazi (222 000), Nkandla (109 000) and uMthonjaneni (79 000) respectively. The district’s population consists of 52.6% of females and 47.4% males. In terms of age, 49% of the population is younger than 19 years, whereas 44% are between 20 and 59 years. About 49.8% of the households are headed by women, 40.2% are headed by men and 10% are headed by children younger than 18 years. Approximately, 80% of the population and households of KCDM are rural and 20% are urban based (King Cetshwayo District Municipality, 2021).

The total number of households decreased from 225 798 in 2016, to 222 000 in 2019. This represented about 7.7% of the total number of households in KZN. Comparatively, the King

Cetshwayo District Municipality had a lower average annual household growth rate of 1.4 in 2009 reduced to 1.2 in 2019. Compared to the provincial growth rate of 1.44% (in 2009) and 2.09% (in 2019) of the national rate, the growth rate of the Municipality is relatively low.

In terms of water access, uMlalazi Local Municipality has 7154 (15.2%) households that have access to piped water within their dwellings, while 13 351 (28,4%) have access to water inside their yards. The main concern is that almost 13% of households still depend on rivers and streams as their main source of water supply. Therefore, this raises concern about hazardous impacts on the household's health and, ultimately, their economic productivity. KCDM, as a WSA of uMlalazi, has the obligation to intervene on how to improve water sources and water quality.

The Budget speech presented on the 24th February 2021 showed the 2021/22 Division of Revenue allocated as follows,48.7% Nationally, Provincial at 41,9% and Local Level 9.4% therefore, local municipalities must ensure that basic services are delivered to the poor-households by managing the available resources. Local government is set to increase the equitable share to 9.7% of the Division of Revenue in 2023/24, (The National Treasury, 2021) and therefore; this raises concern about the current year regarding basic needs to the poor households that are currently behind from getting basic services. Table 2.1 indicate the different types of water sources within uMlalazi Local Municipality.

Table 2.1: Types of water sources in the uMlalazi Local Municipality

Indicator	Type	Number	Percentage (%)
Main source of drinking water	Piped (tap) water inside dwelling	7 154	15,2
	Piped (tap) water inside yard	13 351	28,4
	Piped water on communal stand	8 244	17,6
	Borehole in yard	308	0,7
	Rainwater tank in yard	815	1,7
	Neighbours' tap	758	1,6
	Public/ communal tap	4 831	10,1
	Water carrier	3 479	7,4
	Borehole outside the yard	1 228	2,6
	Flowing water/ stream/river	6 063	12,9
	Well	0	0,0
	Spring	552	1,2
	Other	169	0,4

Source: uMlalazi Local Municipality (2021)

Table 2.1, indicates types of water sources with piped (tap) water inside dwellings accounting for 15.2%, piped (tap) water inside yards accounting for 28,4%, and flowing water/stream/river accounting for 12,9%. Therefore, this is substantial evidence that equitable water distribution is a big concern in uMlalazi area. Table 2.2 indicates that uMlalazi has the highest number of

water supply backlogs within KCDM. This has decreased from 81% to approximately 34% between 2001 and 2018 (uMlalazi Local Municipality, 2021).

Table 2.2: Water backlogs within uMlalazi Local Municipality.

Local municipality	2015 households	Households with water coverage	Household's backlog	Percentage backlog (%)
uMfolozi	24,082	18,892	5,910	24
uMlalazi	43,851	27,484	18,367	42
uMthonjaneni	17,759	13,432	4,327	24
Nkandla	22,484	16,712	5,772	26
Total	108,896	76,520	34,376	32

Source: uMlalazi Local Municipality (2021)

The SDG goal 6 shows that clean and available water for everybody is a basic aspect of the world in which we live in. Apartheid and the instability of the region by proponents of White supremacy intensified the uneven growth that left a legacy of high racial and regional inequality in infrastructure (Klug, 2021). As a result, South Africa still has a long way to go in terms of meeting the existing SDG goals for domestic water (Maphela and Cloete, 2020). However, KCDM is committed to eradicating backlogs with the new strategy to provide water with a volume of 5l/capita/day at least to 90% of the backlog population within 1000m walking distance and to provide water at least 100l/capita/day to 35% of the backlog population with the RDP level of service (uMlalazi Local Municipality, 2021).

According to the Daily News report on the 13th July 2020, uMngeni Water took over water supply from the King Cetshwayo District Municipality. It began managing and operating from 1st of October 2020 to supply water to the municipality. The then Minister of Water and Sanitation, Lindiwe Sisulu had mandated water boards across the country to assist municipalities that are water service authorities to deliver water and related services to all citizens of the Republic. The King Cetshwayo District Municipality took this decision in order to provide a high quality of water to all citizens and also to close the gap in inequality. Currently, uMngeni Water provides bulk water services to more than 70% of the population with improved water supply within KwaZulu-Natal (Daily News report, 2020). The KwaZulu Natal government partnered with uMngeni Water in order to develop a Universal Access Plan, which is the blueprint for water provision in the entire province of KwaZulu Natal. Shami Harrichunder, spokesperson for uMngeni Water, in their joint statement with the Department of Human Settlements, Water and Sanitation and uMngeni Water Board on the 10th of July 2020 stated that "they are using their strong balance sheet to fund the Universal Access Plan for the benefit of KCDM residents".

Minister Sisulu added that "it is both highly uncalled for and regrettable that the people they serve, especially in this trying time of the proliferation of COVID 19, have to suffer further hardship through deprivation of basic water services". The KCDM has plans in place to provide improved water services within the district, and this includes upgrading of infrastructure, rehabilitation and refurbishment, and provision of new and ultra-modern infrastructure.

2.5.1 Dimensions of Poverty

According to Mashaimate (2014), the transformation of the public service into an efficient and effective tool to deliver equitable and quality basic services to every citizen and to drive state economic and social development has been one of the major responsibilities of democratic government since 1994. To make this possible, the South African government has decided to transform the public service that failed to meet the infrastructure needs of the people in the local communities. Charlton (2018) mentioned that many government agencies fail to meet the needs of ordinary people. This affects governments of total eradication of hunger and poverty in rural areas of South Africa. The necessary amenities must be put in place. The Human Rights Commission Equality Report (2017/2018) established that South Africa still remains one of the most unequal countries in the world regarding wealth and income distribution. The concentration of wealth and income seems to be on the minority of society. The tendencies of income, wealth inequality, and income inequality show that inequality and poverty continue to manifest along the lines of gender, race, and disability. In the South African Local Government Association (SALGA, 2015/2016) annual report, contributions have been made by the local government to ensure that basic services are delivered to disadvantaged households in order to improve the dignity and quality of life. However, the enjoyment of social goods such as education, health, water, housing and education remains unequally distributed in certain geographic areas.

The King Cetshwayo District Municipality (2020) estimated that in 2019, about 709 000 people were living in poverty, using the upper-bound poverty line definition, across KCDM. This is 5.43% higher than the 672 000 in 2009. People living in poverty has decreased from 73.67% in 2009 to 72.11% in 2019. This indicates a decrease of 1.55% percentage points. Therefore, KCDM or local municipalities had a negative indication because it appears that a high rate of unemployment and poverty still exist. The poverty headcount of the district decreased from 11.1% in 2011 to 7.7% in 2016. This is considered to be multidimensional poverty. In various

municipalities, the differences between them are considerable and range between 2.3% in uMhlathuze to as high as 17.9% in Nkandla in 2016.

From 2011 to 2016, all local municipalities had a positive indication that the poverty headcount had decreased. The incidence of poverty was very similar in 2016 across the different local municipalities. However, it is also important to note that poverty increased between 2011 and 2016 in all local municipalities except uMhlathuze, which recorded a decrease from 41.6% to 39.6% (KCDM, 2020). South Africans are still under-represented in the middle class and the race is still one of the strongest predictors of poverty. Households with large number (i.e. female-headed homes), and households that live in rural areas experience high risk of poverty and their chances of being ranked amongst the middle class are limited (Schotte, Zizzama and Leibbrandt, 2017). This is very common in rural areas where inhabitants are denied access to basic needs (Karriem and Hoskins, 2016).

King Cetshwayo District Municipality is amongst the key role players in the economy in terms of their contribution to GDP in the KwaZulu Natal Province. In 2016, KCDM contributed 6.5% of the estimated total provincial GDP (King Cetshwayo District Municipality, 2020). It is within this framework that KCDM is among the largest districts that contribute towards the provincial GDP, as eThekwini and uMgungundlovu at 59.5% and 11.3%, respectively. In Table 2.3, the City of uMhlathuze is leading with a 44.0% GDP contribution, followed by uMfolozi (25.7%) and uMlalazi (21.3%). KCDM has the highest average growth rate of 4.34% in the mining sector and an annual growth rate since 2009 to 2019, contribution to Gross Value Added (GVA) in the industry. The agriculture sector has the second highest average annual growth rate (2.53%) per year. The annual growth rate of the construction sector account for 0.73%, while the electricity sector is the lowest with 0.91% average annual growth rate. In 2019, overall negative growth existed in all industries with an annual growth rate of-0.92 since 2018 according to King Cetshwayo District Municipality (2020).

Table 2.3 Gross Value Added (GVA) of broad economic sector

	2009	2014	2019	Average annual growth
Agriculture	1.84	2.42	2.36	2.53%
Mining	2.27	3.02	3.48	4.34%
Manufacturing	6.98	7.91	7.84	1.17%
Electricity	0.46	0.45	0.42	-0.91%
Construction	1.24	1.39	1.33	0.73%
Trade	2.83	3.35	3.49	2.14%
Transport	3.25	3.64	3.80	1.57%
Finance	3.30	3.68	4.07	2.12%
Community services	4.72	5.37	5.62	1.75%

Total industrial	26.89	31.23	32.41	1.89%

Source: King Cetshwayo District Municipality (2021)

Although the economy of KCDM is predominantly dependent on the tertiary sector (47.9%), the secondary sector (29%), also plays a significant role in its economy, especially the manufacturing sub-sector. The agricultural and mining sectors have capitalised on the mineral-rich land in the district. Therefore, the size of the economy of King Cetshwayo is big enough to allow the municipality to increase the subsidy of poor households. In order to ensure equitable distribution of water services, the scale of the economy needs to be considered (Costanza, 1998). KCDM consists of four sectors, as follows: the primary sector, secondary sector, and tertiary sector, and the informal sector. The primary sector has the leading producer of titanium minerals, Richards Bay Minerals (RBM), followed by Exxaro KZN sands. The agricultural sector has a dual nature which is more concentrated on activities in the district, i.e., traditional or commercial agriculture. Therefore, uMlalazi Local Municipality is economically stable because of the surrounding industries and they can improve the lives of the local community (King Cetshwayo District Municipality, 2020).

Electricity, manufacturing and construction sectors fall under the secondary sector. Manufacturing deals with equipment, metal products, wood, paper, and chemical products and is highly focused and specialized on export. UMhlathuze has these activities forming a part of the primary manufacturing sector and uMlalazi forms the secondary manufacturing centre. UMthonjaneni has small-scale projects, whilst uMfolozi is dominated by the Sappi and Mondi manufacturing industries. In the district, metals and related products contribute more than 40.0% of the economy, followed by the plastic, rubber, petroleum, and chemical industries, which contributed 18% and 13% contributed by the paper, wood, and printing industries. More than R 350 million contributed by tobacco products, food, transport equipment, and furniture products to the KCDM economy (King Cetshwayo District Municipality, 2020). The Tertiary sector consists of four broad economic sectors as follows: transport, trade, and finance, and the community service sector. In 2011, the trade sector had the highest economic growth at 5.1%, followed by the finance sector at 4.1% and the transport sector at 3.9%. In 2019, the trade sector had the lowest growth rate at-0.5% and the community service sector, which largely consists of government, had positive growth in 2011 at 4.1% and the lowest growth rate in 2017 at 0.3%. In 2024, the KCDM finance sector is expected to grow faster at an average of 0.9% annually from 4.07 billion to 4.62% and manufacturing is expected to be the largest in KCDM with a total of 2.0% of the total GVA growing at an average of 1.2%. The construction sector is estimated to be the slowest in

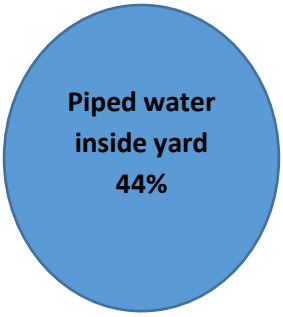
annual growth at-4.15%. KCDM is well endowed with natural resources in terms of the tourism industry, with a good cultural heritage, a good climate, and a scenic environment, and coastal terrain that opens up avenues for tourism development (King Cetshwayo District Municipality, 2020).

Given the challenges of poverty and unemployment, it is critical to develop an appropriate economic development strategy for the district and to devote adequate attention to the development of small, medium, and micro enterprises. (SMME) as a means of encouraging new entrepreneurs to start businesses and rapid job creation (King Cetshwayo District Municipality 2020). A study conducted by Jili (2020) indicates that the local economic development purpose is to form the economic capacity in the local area to improve the quality and future of life for all by working together to create better conditions for economic growth and employment for generations to come, and also assist in improving the investment climate, thus increasing the productivity and competitiveness of local entrepreneurs and workers.

Therefore, KCDM can create new strategies to improve economic growth and fight poverty and unemployment by creating economic opportunities where the community will be able to be independent and solve the problems they encounter along the way. There have been limited studies on the realities and tendencies of equitable water supply, including an understanding of who actually gains from the state-provided structures and how the beneficiaries receive the efforts aimed at improving community living standards. In 2016, the King Cetshwayo District Municipality (2020) reports indicated that 85.6% of the population received water from a regional and local service provider, which is a higher rate than the KZN of 83.35%, with 44% of households having piped water inside their yards (see Figure 2.1).

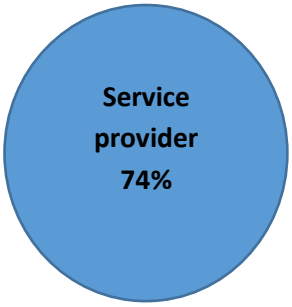
Figure 2.1 Population water source and Population by Water supplier

Population by water source



King Cetshwayo District Municipality (2020)

Population by water supplier



King Cetshwayo District (2020)

The city of uMhlathuze has the highest number of households with piped water inside the dwellings (74.12%) and Nkandla is the lowest with 2.69% within KCDM, (King Cetshwayo District Municipality, 2020). However, most people in the district depend on government's social grants, which are not a sustainable means of living. In most rural communities, water supply is one of the main concerns. Mothetha (2013) maintained that many communities in the municipality used to be denied water for various reasons, which included non-availability of operators and officials from the municipality responsible for water issues. KCDM has 49% of households that have access to flush or chemical toilets and 3% has no access to any toilet facilities, and 44% has pit toilets (KCDM, 2020). The City of uMhlathuze is the highest with 82.73% of units of formal dwellings of the total units of the King Cetshwayo District Municipality and Nkandla is the lowest with 1.69% (King Cetshwayo District Municipality, 2020).

In 2019, the KCDM Gini coefficient was at 0.61, which reflects a decrease in the number of 10 years from 2009 to 2019. The Gini coefficient is a statistical summary of income inequality. If the Gini-coefficient is equal to zero, income redistribution represents equal income distribution. That means within the population, there is no adjustment between the high- and low-income earners and if the Gini coefficient is equal to one, income is completely inequitable (King Cetshwayo District Municipality, 2020). In terms of the Gini coefficient in 2019, KCDM was at 0.61 with the City of uMhlathuze as the highest with an index of 0,621, followed by uMlalazi (0.60) and the lowest was at Nkandla local municipality with an index value of 0.513. The percentage and the number of people living in poverty within KCDM from 2009 to 2019 is at the value of 0.621 (King Cetshwayo District Municipality, 2020). This could be one of the factors that affect poor communities not having proper access to improved water supply. Therefore, the assumption from the KCDM Integrated Development Plan (2021) is that they are faced with challenges of sustainable development that will meet basic needs and improve the quality of their communities in order to contribute to the growth of the local economy.

Biyela, Khambule, Nzimakwe, and Mthuli (2018) indicate that challenges of uneven wealth distribution and spatial inequalities are still facing rural areas in South Africa. Dapira and Mpongwane (2018) also mention that the central features of the South African context of the rural development impasse are the high rate of unemployed people, the lack of income creating opportunities and the obvious inequality in terms of income distribution.

Smith and Hanson (2003) recognised that income of the household is one of the main factors affecting access to water facilities. In a study conducted in Cape Town, households earning less than R800 were found to have limited opportunities to improve their water condition. In addition, Bosch et al. (2001) found household's income levels as among other factors that

limit their access to improve water services. Households with low income are hardly able to afford high connection fees to piped water and hence limit their connectivity. In Mahama's (2013) study, income was discovered to have statistically influenced the possibility of access and use of improved water. Similarly, the economic status of a household was discovered by Kimenyi and Mbaku (1995) to have a positive connection with affordability of services such as water. In addition, Koskie et al. (2013) found that the type of work by the head of the household significantly influence the type of water used by their families. The household expenditure is one of the fundamental factors which require the inhabitants to rely on unimproved water sources. Again, these empirical studies revealed the need for authorities to grant special attention to the poorer households. They also highlight the need for planning and implementation of strategies in order to improve access to reliable and safe water.

2.6 Rural Water Distribution Systems

According to Lehohla (2016), the distribution of basic services is delivered to groups of people who live together and share resources as households. Most families in rural areas are categorized and isolated on the hillside above flood plains. In South Africa, up to 2.7 million people live in such isolated patterns. They are gathered into more than 15 000 groupings of settlements which are categorized into more than 7 500 small villages and those that have less than 5 000 people (DWAF, 2014). This settlement pattern is a huge challenge for providing water distribution systems (DWS) in rural communities.

According to WSA terms, the standard for basic water supply is as follows:

- A minimum quantity of water for low-density areas is 7 litres per person of portable water, available on a regular basis.
- A minimum of water for high-density areas is 25 litres per person per day available not more than 200m walking distance from the household-at a minimum flow rate of not less than 5 litres per minute available on a daily, regular basis-supplied from a source of raw water which is available 98% of the time, not failing more than once in fifty years with an effectiveness of not more than one interruption in supply per year (Thompson, 2002).

The WSA established goals to reflect short, medium and long-term objectives with respect to water supply services. The 2019 election manifesto of the ANC mentioned that improved access to water service has reduced time spent in fetching water and increased time for productive activities. In addition, 9 out of 10 South Africans were found to have improved

water resources. However, the distribution of basic services at the local level appears to be accessed by those who can afford to pay for such services. Hence, the post-apartheid government introduced the WSA to guarantee that municipal services are no longer enjoyed by the privileged people, but as a realistic right for all citizens, mainly the individuals that were formerly underprivileged (Jili, 2012; Pretorius and Schurink, 2007).

2.6.1. Water uses in rural areas

In rural areas, water users differ from domestic uses (i.e., cooking, washing, and cleaning), to agricultural uses such as feeding livestock and watering gardens, and for small profitable businesses that prepare food for sale. In rural areas, water provision services have to be planned and designed with these additional needs in mind, aiming at maximizing the benefits for the rural population from water provision (Moriarty, 2012).

2.6.2. Water access in rural areas

Availability of access to improved water, which is reasonable, is described as at least 20 litres per capita within one kilometre of the household. The World Bank (2002) posited that government policy on water provision in South Africa defines water supply as 25 litres per person per day, within 200 meters of the home, at an acceptable quality. A significantly high proportion of people without access to improved water are in rural and urban areas. By 2015, the Millennium Development Goals (MDG) targets for water to halve the proportion of the population without justifiable access to improved water supply and basic sanitation, were missed significantly. In 2010, South Africa had achieved some of the water supply targets, but performed poorly on sanitation targets. However, 748 million people globally still do not have quality and improved water supply in 2012 (UN, 2014). In 2015, the Sustainable Development Goals were introduced to replace the MDGs development framework, setting an ambitious goal: by 2030 to achieve equitable access to affordable and safe drinking water for all. The SDGs interpretation of “for all” is that all citizens must be provided with suitable water without discrimination. Equity is an important issue in the SDG water target. Furthermore, Goal 17 (Target 17.18) of the SDG also highlights to increase water access by 2020 (Nastiti, 2017).

When the water supply system is provided by the water utility, organization, or governmental department, public standpipes may be used as a means of water access in rural communities. These standpipes should be located within the population groups found in rural areas and should meet the basic water supply standards in South Africa, i.e., at a distance of not more than 200m from any household (World Bank, 2002). In rural areas, especially in developing

countries, wells are equipped with hand pumps and are also used as a means of accessing domestic water supply for the inhabitants. Some rural households do have private water taps that are connected to the municipal water distribution system that may be shared with neighbours, but the municipality allows them to use them for a few hours per day (Whittington and Boland 2002; Arouna and Dabbert 2012).

The distribution of water is usually carried out by use of buckets and cans in such setups, and it is not enough for the effective promotion of personal hygiene and health (Wagner and Lanoix, 1959). Wells should, therefore, be closer to the rural population groups to minimize the distance from the households. When the groundwater table is high enough for abstraction, wells may be used and water may be of acceptable quality. If that is not possible, other means of access to improved water supply should be discovered. Bosch et al (2000) state that most poor households have access to lower quality services than those who are rich and further claim that some poor households are connected to water networks. In concurrence, Rusca and Schwartz, (2018) highlight that the water utility provides services directly, often access water at subsidised rates, while in low-income areas, where service provision is outsourced, studies have shown that most of the urban poor are excessively underserved (World Bank, 2003). A water supply system can be operated by community groups in the rural areas as opposed to having an external body such as NGOs or the government operating it. Thirty per cent (30%) of rural dwellers in Kenya with access to improved water supply through piped or point-source systems are attended by community-managed water supply schemes (Rukunga, 2006).

In 1994, the Department of Water Affairs and Forestry (DWAF) was expanded and restructured through the merger of eleven water and forestry related departments distributed across the former Republic and homeland areas (Mehta and Ntshona, 2004). The Department of Water Affairs and Forestry (DWAF, 2005a), after 1994, took over these schemes and inherited 600 rural water supply schemes (Matji, 2003). Access to improved water supply in South Africa has improved from 63% to 88% between 1990 and 2012 (WHO and UNICEF, 2012). Mudombi (2020) posits that ninety per cent (90%) and beyond of the households in seven out of nine provinces used an improved water source, with the exception of KwaZulu-Natal and the Eastern Cape, which had 88% and 76% respectively. However, numerous provinces had a high percentage of households using improved water sources, the analysis shows that it is not good. Eastern Cape households have 24%, followed by KwaZulu-Natal with 12% of backlogs that use unimproved water sources.

Some NGOs focus on poor communities to improve the water supply, such as The Mvula Trust, which is providing services in Empangeni and surroundings (Carden and Amitage, 2013). As a result, challenges to water supply experienced in urban areas include: inadequate sanitation facilities, over-exploitation of water resources, access to improved water services in informal urban settlements, contaminated drinking water supplies, and water loss through leakage in WDSs (Carden and Amitage, 2013). Despite basic service delivery in South Africa, many local authorities are struggling to keep pace with urbanization, and a serious lack of capacity and technical skills has also seriously impacted on the ability of national and local authorities to control and manage the water sector (Carden and Amitage, 2013).

2.7 Gender and water

Gender disparities are social processes in which people are discriminated against and treated unfairly because of their gender identity (Gezen, 2020). Women and girls are shown to bear the biggest water collection burden in water-insecure situations (Geere and Cortobius, 2017; Graham et al., 2016) in maintaining household water security for domestic use (Geere & Cortobius, 2017; Graham et al., 2016). Furthermore, especially in resource-constrained contexts, women and girls play an important but largely unacknowledged role in water management for livelihoods such as subsistence agriculture (Yuerlita, 2017). Notably, despite persistent gender disparities in social and economic structures, which limit women's control and access to resources (Farnworth et al., 2020), women have remained strong and have taken on key roles in securing household water by leveraging social capital demonstrated in everyday water-sharing. When investigating intra-gender disparities in access to water based on intersectionality, such as age, marital status, income levels, handicap, remittance flow, and land ownership, there should be a purposeful knowledge beyond the difference between women and men. If the poorest and most disadvantaged members of a community are to benefit from a program meant to increase equal access and use of land and water resources, for example, gender inequalities must be better understood (Leder et al., 2017). The rural community can never be considered a homogeneous entity; these inter- and intra-group dynamics define their existence and, as a result, influence patterns of water access from various sources.

2.8 Action Undertaken to Improve Rural Water Supply

In many countries, attempts are being made to improve rural water supply for the benefit of the people. In a cooperation involving the community, government, NGOs, and the

commercial sector, achieving goals and sustaining a healthy relationship are critical (Etongo, Fagan, Kabonesa, and Asaba, 2018). Harvey and Danet (2010) affirmed that NGOs can also come to the aid of the government in improving water supply in the rural areas of South Africa. In doing this, NGOs need to follow the stipulated rules and regulations in providing the necessary infrastructure to rural people. In addition, NGOs need to provide necessary support to the local government to improve the lives of average South Africans. Harvey and Danet (2010) stated that governments and communities need to put mechanisms in place in order to check the activities of NGOs in the field. Unfortunately, governments and communities are unable to hold implementing organizations to account. Mistakes and monitoring mechanisms as a whole are extremely weak. Normally, those who do good, funding agencies, pursue their interest in what they believe to be right, slightly more than those people of the rural areas they are trying to serve.

Governments and NGOs today are not held responsible for their actions even five to ten years after the intervention. Implementing organizations and funding agencies can meet their deadline prospects and unbending expenditure cycles on communities, no matter what the season, time or ability that it takes rural inhabitants to prepare and plan for new infrastructure (Rural Water Supply Network (RWSN), 2010). In public donor agencies, much of the rural water supply sector is still seen as providing essential services on a generous basis to powerless people in desperately poor communities. In general, transparency and accountability are lacking regarding investment concerning practices that are followed. The outcomes and the outputs of independent provision are very rare. One can work on a project supplying water to rural areas for years without ever being held accountable. An important outcome of this lack of accountability is a lack of work ethics and professionalism among many (RWSN, 2010).

The coordination between rural water supply actors at national and local levels should be at a standard. Awareness should be raised among agencies of the damage that can occur if they do not respect the existing policies, high levels of work ethic and professionalism among rural water supply sector actors and to ensure that project implementation schedules not only benefit the funding agencies but mostly rural inhabitants. Finally, there is no quick way of resolving these issues of access to improved water supply. It all takes time, but most people can be held accountable and transparent for all the services they provide regarding water supply (Iyer, Davis, and Yavuz, 2006).

Political influence is very important in order to achieve the fairness in the distribution of water services. The fact is that at local levels, politicians are emphasized and take the last decision on the allocation of resources. Politicians are representatives of the people who come to the resource allocation forum with their own people in mind and interest. The politician's perfect mission is to assist her or his community to improve their livelihoods and thereby increase his or her political ground. Some politicians are good at promoting and supporting the community at different levels, using council meetings to demand the allocation of services to their areas. NGOs at the national level do not have any formal mechanism to direct activities of projects to the most deserving districts. Inequality is likely to result in cases where some municipalities and districts that were previously under-served have continued to receive service and NGO support for a very long time.

2.9 The South African Water Sector Institutional Framework

Sustainability starts with ensuring that all people have access to basic services. These basic services are the building blocks which will reduce poverty and promote sustainable economic development (Muruvan, 2002). The Constitution of the Republic of South Africa, Chapter 2 Section 27 (b) Bill of Rights states that everyone has a right to have access to sufficient food, water, and social security.

However, the Constitution further states that all the rights stated in the Bill of Rights must be respected, protected, promoted, and fulfilled by the state" according to the Water Services Act (No 108 of 1997). It is also simplifying the role of other water institutions, such as water boards and water service providers. Therefore; it cannot be governed by economics. It is a human right to have access to safe, clean running water and that must be accessed within a reachable distance (Abrams, 1996). The Department of Water Affairs (DWA) is the custodian of South Africa's water and forestry resources. (DWA) is the main actor of the policy that is responsible for formulation and implementation of policy, governing sectors that overseeing the activities of all water sector institutions National/ International resource planning and allocation (DWA, 2013), as well as the institutions in a local government in the form of local/district municipalities who are tasked to assist communities with provision of water. The Department is also responsible to arrange the role of water sector institutions, creates the institutional preparations for water service provision, arrange the planning requirements and co-ordination by demanding that each water board must compile a water board business plan and that every water services authority (WSA) compiles a water services development plan (WSDP) (DWA, 2013).

It also has the overriding responsibility for water services provided by local government. Local municipalities have a responsibility to provide the first 6,000 litres of water per households free of charge per month as a Water Service Authority (WSA) according to the Department of Water Affairs. Free Basic Water (FBW) was implemented with the aim to ensure that those who are unable to pay, mainly the rural poor households, have access to basic water level as required for basic needs. Each year government provide capital funds to the institutions, municipal infrastructure grants (MIG) and equitable share grant (ESG) that serves the low-income households to ensure that services are delivered efficiently (Nastiti, 2017). There has been a marked transition, about policy, objectives and goals, suggesting upon examination of the “old” Water Act 54 of 1956. This Act took a strict order in non-democratic government using centralisation approach where government made all the decisions.

The NWA (RSA, 1998) is one of the world's most comprehensive examples of water legislation, centred on equitable water allocation as a unifying method to transform historical social injustices in order to foster economic growth, environmental integrity, and poverty reduction (Schreiner and Van Koppen, 2002). The Act allowed public participation in water resources management since it is a democratic country. It also promotes management of water resources through the establishment of new regional and local institutions such as agencies and catchments (Harpe, 1998). The water sector’s primary focus is to ensure that the provision of basic water and sanitation service is provided to all inhabitants, also provides a regulatory framework and establishment of water services institutions such as water boards, water services providers and this reverberates to the constitutional demand of every citizen's right of access to improved water. It is this constitutional command that had introduced the announcement of our new water legislation. This legislation came a long way in setting the framework of change towards constitutional fulfilment (DWA, 2007).

Government policies regularly state that resources will be distributed with equity but it’s extremely unclear what constitute equity (Syme et al., 1999). Water policies in many countries equity goals are often stated as a priority, even if is unclear. In practice, efficiency concerns continue and twisting allocation in support of those who have the ability to use water to produce the utmost economic returns, thus trading off equity against efficiency goals (Mehta, 2016). Equity can also be supported as an instrument for economic growth and development (World Bank, 2006). Hence it is understood that equity in water allocation significantly impacts outcome in water access by users with diverse levels of power needs.

Furthermore, the agreement of national water policies with the international water governance agenda, the de-politicisation and universalization of water allocation is what put the SA water

sector on a global scale (Boelens and Seeman, 2014; Joy et al, 2014; Perreault, 2014). As a result, guiding principles of water distribution equity, efficiency and sustainability have been assumed to equally benefit all members of society when, in practice, these concepts are far from being neutral. With the aim of contributing to the existing knowledge on equitable factors influencing access to improved water supply with a specific interest in the rural areas, the study interrogated FBWP. Also, by understanding the factors that influence the access to the improved water supply to sustainability starts by ensuring that all people have access to basic services. These basic services are the building blocks which will reduce poverty and promote sustainable economic development (Muruvan, 2002).

2.10 Water Governance

The Water Service Act (No 108 of 1997) and the National Water Act (No 36 of 1998) provide the basis for the legislative framework within which water supply and sanitation services are provided. The Water Services Act mainly deals with water services, drinkable or potable water, and sanitation services supplied by municipalities to households and other municipal water users. It comprises the rules on how water supply should be provided by municipalities and sanitation services (Harpe, 1998). It sets up the basis for the establishment of new municipalities in the A, B and C categories (Metropolitan, Local and District, respectively), explains the way municipalities are to be recognized and creates the way councils are to function and control the division of powers and functions between municipalities. In this regard, district municipalities are responsible for bulk water, sewage supply, purification works and sewage (DWAF, 2004).

In addition to these Acts, several related pieces of legislation contribute towards the definition of the legislative framework. These are discussed under comprehensive headings of the legislation impacting on water resources management and services. The National Water Act (No 36 of 1998) legislates and provides the framework for how water must be protected, developed, preserved, used, managed and controlled. In addition to Section 27, this Act acquires its order from Section 24 of the Bill of Rights in the Constitution, which states that everyone has the right to an environment that is not harmful to their health or wellbeing, and to have an environment that is protected for the benefit of preserving future generations through a reasonable legislative framework (Republic of South Africa, 1996).

The depletion of natural resources and misuse pose serious and growing threats to sustainable development and environmental protection, emphasizing that human health and

welfare, food security, economic development, and ecosystems are all at risk unless water resources are managed more effectively in the future than they were previously (UNCED,1992). Despite the fact that water shortages are occurring all around the world, Stringer (1997) notes that multiple studies show how local towns and large cities, agriculture and industry, developing countries and industrialized economies are all mismanaging water resources.

Quality fresh ground water is crucial for natural ecosystems, household needs (such as drinking, cooking, and bathing), and industrial and agricultural production activities, according to the WHO (2012). As a result, safe drinking water is both a human right and a basic requirement. As a result, hazardous or contaminated water poses a serious threat to both the natural ecosystem and human health. Water is deemed contaminated when its qualities and conditions have been altered in such a way that it is insufficient or unsuitable for the purposes for which it was intended if it were in its natural state (Grigg, 2011). Furthermore, as a result of population, agricultural, and industrial use, as well as water pollution caused by human activity, water resource governance is vital for ensuring clean water and mitigating the effects of harmful behaviour (Gani and Scrimgeour, 2014).

Plummeting water quality concerns and enhancing global environmental resource governance are global priorities that are clearly founded on multi-level solutions that operate at the national, international, and local levels at the same time (Paavola, 2007). As a result, governance considerations encompass a wide range of enabling and regulatory tasks that support and monitor the resources utilized to manage water for human and environmental requirements. According to a study by Gani and Scrimgeour (2014), the effectiveness of government agencies and the quality of water institutions are the most important factors in enabling countries to achieve long-term growth and ecosystem development. Institutional quality has a significant impact on environmental quality since suitable institutional structures for production-led activities can help reduce environmental degradation such as water pollution.

As a result, realizing the right to clean water necessitates the adoption of policies and legislation, as well as judicial systems, to ensure that human, animal, and plant populations have access to pollution-free water (i.e., agriculture). A legal framework for water care can protect people's right to clean water, and that right to clean water can lead to the adoption of water policies that facilitate sustainable water allocation and a legal right to pollution-free water as part of water governance (Tigino, 2011). Water governance, according to Grigg

(2011), is concerned with equity and efficiency in resource and service allocation and distribution, as well as water administration, the balancing of economic and ecosystem needs, policies, legislations, and institutions, and the clarification of the roles of government, civil society, and the private sector in water management (Tortajada and Islam, 2011). All stakeholders, especially people at the local level, must participate in order to achieve growth and development. People's participation in terms of freely and unconditionally expressing themselves on policies that may influence their personal and national interests is crucial.

2.11 Legislation impacting on water resources management and services

The aim of the SA water sector is to use natural resources, promote reasonable social and economic development, and to secure ecologically sustainable development and to avoid ecological degradation, pollution, and support conservation. The objective of the Water Services Act is to help municipalities to embark on their role as water service authorities and to look at the needs of consumers (DWA, 2013). It also simplifies the role of other water institutions, such as water boards and water service providers. This policy has made water available to previously disadvantaged people. The State must take reasonable legislative and other measures to achieve the progressive realization of these rights.

The National Water Act is determined to ensure that the nation’s water resources are used, developed, protected, preserved, managed and controlled in ways that take account of:

- Meeting human basic needs
- Redressing the impact of past gender discrimination
- Equitable access to water is promoted (DWA, 2013).

Goals set by the government have not been met after policies and interventions were made to provide good service delivery. Therefore, available resources should be utilised effectively so as to give maximum results, with a priority being given to assuring that everyone enjoy the gratification of basic needs and access to improved water. The two pillars, which are: equity and sustainability, were found in the National Water Act of 1998 (Act 36 of 1998). It calls for the creation of a National Water Resource Strategy (NWRS) to build a national framework for water resource management, among other things.

The National Water Resource Strategy (DWAF, 2004a) provides the national implementation framework and divides the country into nineteen water management areas. In 2013, the second Water Resources Strategy reduced the water management areas into nine provinces

and former Minister Nomvula Mokonyane created Catchment Management Agencies, one per province. The late Water and Environmental Affairs Minister Edna Molewa said that the main focus of the NWRS2 was equitable and sustainable access to and use of water by all South Africans. "Equity and redistribution will be achieved through the authorisation process, such as water allocation reform, financial support and rural development initiatives" (Esterhuizen, 2013).

Dube (2020) argues that these reforms are token and they to date did not contribute in increasing water allocation to women, black people, small scale farmers and people living with disabilities. She further argues that only the white controlled irrigation boards benefitted from such reforms. Furthermore, she stated that the skills gap in black agricultural communities is also mentioned in the position paper on water allocation reform.

The Constitution defines the role of a municipality in the sense that it must establish and manage its administrative, financial, and planning processes in order to prioritize the community's basic requirements and support the community's social growth (Waldt, 2015). The Municipal Structures Act (No 117 of 1998) makes a provision that there is an essential arrangement in our country to promote a vision of a democratic and developmental local government, where the obligations of the constitution must be fulfilled to focus on basic needs, sustainability and efficient municipal services, and promote economic development and social economics (Department of Provincial and Local Government (DPLG), 1999, Tissington, 2011: 68). The water allocation reforms taking place in South Africa are related to similar reforms taking place in China, South Asia, Kenya and Nigeria.

China's rapid industrialization and vast population put a strain on the country's water supply. The need for water in Asia is expanding across industries, widening the gap between supply and demand for water. Asia is home to two thirds of the world's population who do not have access to improved water supplies. According to the survey, nearly 670 million people in Asia do not have access to improved water supplies or 18% of the overall population. According to the Food and Agriculture Organization, East Asia and South East Asia account for roughly 80% of the global water supply. In many parts of the country, Asia is still used for agricultural purposes, particularly for irrigation and this cause a water stress (Ferdoushi, 2014). A study conducted by Silali and Njambi in 2014 mentioned that over 3 million people in sub-Saharan Africa, where Kenya is located, do not have access to safe drinking water, and over 5 million do not have access to basic sanitation and hygiene, according to UN Habitat, (2012), which can only be solved by focusing on creative and integrated water programs, synergistic

participatory scenario analysis, and feedback workshop at the community family level (Southerland,1998)], in order to create sustainable water resource management programmes (Conroy, 2002).

China's water resources continue to suffer significant management challenges, posing a serious threat to the country's social, economic, and environmental sustainability (Yong, 2009; Li, Li, Wang, Peng, Cai, and Huang, 2018). Liu, Peng, Liao, and Long, (2018) mentions that water conflict, pollution, and saltwater intrusion have all increased considerably in recent decades, posing a danger to regional water security and putting regional development under pressure. Growing demand for irrigation water, combined with restricted management measures, is putting a strain on water resources (Liu et al., 2017). Current food production in critical farming regions of India, China, and the United States, according to Aeschbach-Hertig and Gleeson (2014), cannot be maintained unless groundwater levels are stabilized. Therefore, China's policymakers and decision-makers continue to place a high value on water resources as a source of long-term development.

In the year 2018, it was reported that Nigeria’s Water, Sanitation and Hygiene was terrible to the extent that the government of the country declared a state of emergency. In addition, in the year 2019, over 60 million of the people were living without access to basic drinking water in Nigeria (World Bank, 2021). It was revealed by World Bank report in the year 2019 that there is inadequate infrastructure as poor human capital, and a deficient enabling regulatory environment are various challenges facing over 60 million Nigerians that are living without adequate access to drinkable water while over 80 million people in the country had no access to necessary sanitation facilities and over 167 million Nigerians have no access to hand washing facilities. In addition, only nine litres of water which is based on average are available to a family in a day in Nigeria.

Therefore, the objective of MSA is to encourage a healthy and safe environment by working with communities to create an environment and human settlement in which all people can lead uplifted and dignified lives (Waldt, 2015; Mubangizi, 2021). The goal of the Bill of Rights of the 1996 South African Constitution is to gradually ensure that citizens can exercise their rights to access water, healthcare, a clean environment and dignity (Bond, 1999: 44). Therefore, all citizens should be able to have fair access to water for their basic needs. It should be highlighted that the above policies or legislation might not have been regarded as a flaw or a responsibility, but rather as evidence of the government's strong political commitment. The above policies focus on water resource management in general and

collectively (Folifac, 2007). Most poor South Africans need their most basic needs satisfied and, most importantly, free basic water must be distributed to the poorest of the poor since it is their human right. However, post-1994, there was a radical change to balance service delivery and spread out to the rural commonalities, seemingly by the improvement made in the water sector (Section 2.2). The below principles and objectives (Fundamental Principles) were developed to emphasize the importance of water service:

The first principle promotes the values enshrined in the Bill of Rights (Folifac, 2007). Equality is one of the democratic values in the Constitution. Rural communities still have less access to improved water and equity related problems persist and, in many cases, have become worsened despite world-wide mitigation efforts at both local and regional scales. Water equity is about creating a kind of process in order to achieve a better outcome (Wilder and Ingram, 2018). Therefore, local municipalities should combine equality and equity as a strategy to overcome the backlogs and as an effort to ensure fair water access within their local communities.

In addition, Principle 8 states that water is required to ensure that all people and that access to sufficient water should be “reserved” (Folifac, 2007). Equitable solutions to water problems avoid unbearable conflicts that wear away capacity for collective action and build public support (Gerlak et al., 2011).

Again, Principle 10 provides that water is required to meet basic human needs referred to in principle 8 and the needs of the environment shall be identified as "the Reserve" and shall enjoy priority of use by right. The use of water for all purposes should be subject to authorization (Folifac, 2007). Countries and local municipalities must use their available resources to provide water as a basic need and government should provide support for the municipalities (Palmer, 2016).

Principle 25 of the Bill of Rights puts emphasis on the right of all citizens to have access to basic water service necessary to afford them a healthy environment on an equitable, economically, and environmentally sustainable basis (Folifac, 2007). The New Partnership for Africa’s Development (NEPAD) mentions that conservation must be improved and the use of the continent’s water resources, quantity and quality of water available must be improved for rural households and improve equitable access to affordable water (AUDA-NEPAD, 2021).

2.12 National Water Resource Strategy

The first NWRS was published in 2004 and the NWRS2 was introduced in 2013. The purpose of the NWRS2 was to ensure that national water resources are developed, protected, used, managed, conserved, and controlled in a sustainable and efficient manner in order to achieve South African development priorities in an equitable manner. This strategy reacts to a main concern set by the government within the National Water Act and National Development Plan (NDP) requirements that support sustainable development. The NWRS2 recognizes that South Africa is a water-stressed country and is facing a number of challenges, such as inefficient use of water and security of supply.

The NDP argues that South Africa, as a water stressed country, should introduce programmes and management technologies and conservation, and it further argues that water management and consumption will require more care (National Planning Commission,2012). On the contrary, Edokpayia, Enitan-Folamib, Adeeyoa, Durowojua, Jegedec, Odiyoa (2020) state that water and wastewater treatment plants are graded on a number of indicators to determine their overall performance. It is common knowledge that wastewater should be treated before being discharged into water bodies. This strategy works together with water conservation requests for water-reuse to be implemented where possible. This can be achieved through waste water treatment programmes (Mukheibir and Sparks, 2003; Zhuwakinyu, 2012). For rural areas, rain water harvesting projects are implemented (Department of Water Affairs, 2013). Water is essential for life and economic development and protection, South Africa has introduced sustainability plans and water protection that include wastewater treatment programmes (DWA, 2013).

The National Water Resource Strategy also recognises that the manner in which it was used to allocate water in the past was unequal and favoured only the white section of the population in South Africa. The National Water Act and the National Development Plan cooperatively inform the intended means to redress past imbalances in the manner in which water is distributed. Some institutions and local municipalities have begun to address the challenge of water loss, and the NWRS2 stresses that effort must be increased with the specific targets set to reduce water loss, since people are not all aware of the scarcity of water, they need to be informed that they can use water efficiently and value water (DWS, 2013). Therefore, water use will be protected and not be wasted.

2.13 Integrated Water Resource Management

The concept of IWRM originated in Europe and North America, and was then propagated and translated as best practice in the African setting via external and internal channels (Funke and Jacobs, 2010; Mehta and Movik, 2014; Mutondo et al., 2016; Movik et al., 2016). These efforts to implement IWRM in sub-Saharan African countries have been hampered by issues such as representation and participation in newly formed decentralised institutions; the complexity of river basins (inter-basin transfers, scarce resources); and the complexity of river basins (inter-basin transfers, scarce resources). Power imbalances, multiple legal systems, and a lack of international cooperation are all factors.

The Integrated Water Resource Management policy was adopted by the African Development Bank in 2000 as one of the conditions for funding water resources management projects, water supply, and sanitation in Africa (Ginidza, 2007 and Rakatobe, 2009).

It focuses on the requirements of society at large and their needs with regards to water at present and in the future, and aims at maximum sustainability in all senses (ibid). Although water is a renewable resource, its ability to regenerate is becoming increasingly dependent on how it is managed (Ogden, 2011). As a result, Integrated Water Resources Management (UN-Water 2008) is touted as an ideal technique for achieving efficient, egalitarian, and long-term development and management of the world's finite water resources. Therefore, it reconciles basic human needs, ensures equity and access to economic development, and the authoritative of ecological integrity, while respecting trans-boundary commitments.

Integrated Water Resources Management (IWRM) in South Africa entails the decentralisation of water resources management from the national level to the regional level through the establishment of new institutions such as the Catchment Management Agencies. The disparities in access to water for productive purposes and involvement in designated water governance structures (DWA, CMA, IBs, WUA) have not considerably changed in the 20 years since apartheid ended (King, 2005; Schreiner et al., 2010; Schreiner, 2012; DWA, 2012; Brown, 2014). It is consequently vital to investigate how varied interpretations, obstacles, and consequences surrounding the implementation of the water reform are seen and affect people, particularly black farmers, on a local level, particularly in rural areas. However, Improvements in water supply planning, better water quality control, scale-appropriate system management, equal protection of in-stream and off-stream users, and more cost-effective solutions are all advantages of integrated management (Najjar and Collier, 2011). IWRM

differs from prior water management efforts, according to Mukhtarov and Gerlak (2014), because it emphasizes the integration of many areas of water management.

Globally, there is a broad agreement that water is a limited and susceptible resource, Van de Zaag (2002). New legal framework and water policies are therefore prepared to express new principles and strategies for IWRM. IWRM encapsulates each of the water principles identified at the International Conference on Water and the Environment, which was held in Dublin, Ireland in 1992. The Dublin statement on water and Sustainable Development stated that fresh water is a susceptible and limited resource, essential to sustain life, development and the environment. The principles highlight the individuality of water as a service that is vulnerable and whose value should be recognised as an input to economic activities. Equity can be defined in the context of IWRM as an allocation that takes into account all relevant factors and circumstances in order to maximize benefit for all while minimizing harm (Xie,2006). 'Sustainability' necessitates the preservation of ecosystems and ensuring the resource's long-term viability in the present and future generations. In practice, IWRM tries to manage watersheds in such a way that economic, social, and environmental considerations are suitably balanced in decision-making, ensuring the twin goals of equality and sustainability are met.

2.14 Decentralisation

Decentralisation is a system of delegating power from the central state to a lower-level structure. It is now common in sub-Saharan Africa. The abilities and powers differ from one country to another, mainly because they include the shifting of political, fiscal, and administrative responsibilities from higher levels of government (Gueye, 2005). According to Rondinelli, (1978), it is a movement of administrative and political improvement allowing the assignment of a variable number and varying degrees of functions, political responsibilities, budgeting powers and resources to the lower levels of the state (World Bank, 2014). Assignment of functions and responsibilities may also be involved in semi-public and private institutions. Therefore, it is used as an instrument for strengthening popular participation and democracy in the management of local affairs (ibid).

In South Africa, Integrated Water Resource Management (IWRM) requires the decentralisation of water resources management from the national level to the regional level through the founding of new institutions such as the Catchment Management Agencies. The decentralisation process emphasised in these principles and IWRM requires the creation and early operation of river basin organisations generally denoted as Catchment Management

Councils. These organisations may be referred to as governance-beyond-the-state and require greater participation from citizens and communities since they are called to actively participate in the management of water services (Mokoena, 2015). The current study is premised on the IWRM Dublin principles, which argue for the following: Principle 2, deals with decentralisation, which is the management of water at the lowest level possible. In the case of SA, this is local authorities acting as WSA (Muller, 2009; GWP, 2008). For Nojiyeza (2014), decentralisation occurs across four key areas:

- A political based locally, not in the nation.
- Bodies are separated by law from the national centre in which local representatives are given formal powers to decide on a range of public matters.
- A limited area of authority entrenched with the right to make decisions on areas within their jurisdiction.
- Local authorities who command resources that may be spent and invested at their own will.

2.15 Costs Recovery

According to McDonalds and Pape (2002:18), cost recovery is the "recovery of all or most of the costs associated with providing particular services by a service provider". It ensures that consumers are taken account of services being rendered to them. In most cases, consumers pay for installation and for maintenance and pay for services which can be charged using volumetric approaches. These services may include electricity and water. Cost recovery was recognised at the Dublin conference which observed water as an economic good, which is opposed to the equitable distribution of water, which is recognised as a human right and social good (GWP, 2008, Gleick, 2000). Water regulations have been standardised (Bourblanc, 2012). Cost recovery was introduced as a result of the World Bank's intervention to perceiving water as an economic good (Allouche, 2016; Gleick, Wolff, Cholecki, and Reyers, 2002; Matose, 2013; Bond, 2007). In South Africa, cost recovery has created a culture of water business and business principles such as profit accumulation are being prioritised more than the needs of the public (McDonalds and Pape, 2002; Bond, 2007).

Furthermore, the Water Service Act 1997 has been used as a primary vehicle to allow business principles in the South African water sector (Naidoo, 2005). Besides, white South Africans and industries benefit more since they have funds to pay, while black South Africans are faced with bills they cannot afford. When it comes to charging for services, there are

biases which support the wealthy. For example, Pape and McDonalds (2002) argue that rural areas in African households pay 48c per kilowatt hour while their counterparts pay an average of 32c. For industries, they pay 12c and large clients pay 35c for electricity. As a result, the poor pay an extra amount and, due to the culture of commodification, they face the challenge of not being well serviced. As noted above, there are claims of current water scarcity (McKenzie and Bhagwan, 2015; Turpie et al., 2008). However, water is not scarce for all people and sectors. Allouche (2016) corroborates this by stating that, among all water-using sectors, agriculture consumes the most.

The politics of water access was observed as a commodity at the Dublin conference and that led to cost recovery being promoted. The World Bank had a great influence on this decision (Allouche, 2016; Bond, 2007). Commodifying water through cost recovery is meant to promote equity and sustainability in theory (Alba, Bolding and Ducrot, 2016). But equity is not realised in practice, instead the poor are still prohibited. Also, water licences allow access by only the wealthy. There has been a great segregation in the global south of poor households because of the implementation of cost recovery. Through cost recovery, these World Bank informed thoughts are forced and institutionalised into the public sectors. However, the IWRM has been used as an end rather than as a point of withdrawal to fix water resources management issues. It fails to allow substitution but is being promoted as a solution to water management issues as promoted by international donors to be a global water policy (Giordano and Shah, 2014). Giordano and Shah, (2014) further argued that though water challenges are not being addressed properly but the IWRM agenda is being nursed by the countries through the use of strategies such as decentralisation.

2.16 Conclusion

Providing safe, adequate and equitable drinking water is essential for improving the socio-economic development of rural households. The literature review was discussed in this chapter. The chapter begins with identifying factors that influence equitable access to improved water supply. It also looked into the provision of Free Basic Water supply in South Africa. The chapter also discussed the relationship between the economic scale and the distribution of water services in order to better understand how these factors affect water supply in households. The role of government in addressing water supply was also examined, with a focus on water governance. In addition, the chapter examined the role of the non-governmental organizations (NGOs) in ensuring access to improved water supply. The chapter presented discussions on how a lack of access to water might affect human health,

as well as how gender plays a role in water access. It also looked at the IWRM and decentralisation strategies in addressing water issues and cost recovery regarding water as an economic good. In the next chapter, the study presents the theoretical framework and explores the relationship between economic scale and the distribution of water services as well as equity.

CHAPTER THREE: THEORETICAL FRAMEWORK

3.1 Introduction

The theoretical framework serves as a foundation upon which the study can be built and supported. As a result, the theoretical framework is made up of the chosen theory that support one's thinking about how they comprehend and want to explore their issue (Raeff, 2016). The theoretical framework of this study is based on ecological economics. According to Schools of Geosciences (2018) Ecological economics can be defined as the science and management of long-term sustainability, which connects the environmental, social, and economic systems.

This theory was used in the study because it describes the human needs, equity, economic scale and distribution of wealth. This ecological economics framework treats water primarily as a basic need. Basic need is responsible for a large proportion of the ecological economic system's real commodities and services. The majority of studies in South Africa focus on how companies and the agricultural sector may best utilize water for their benefit (Alloche, 2016: Wensley, 2015).

There are few studies that look into how farmers may safeguard water resources for the benefit of other species that rely on the same services. Furthermore, several ideas have been shown to solve the water issue from a single point of view, particularly economics. Water is a natural resource that is typically used by the wealthy to increase their riches rather than to benefit the poor (Munda, 1997).

Water is a significant component in production (Distefano and Kelly, 2017), contributing to economic activities in all sectors and areas of the global economy. Lack of access to improved water may thus have far-reaching effects for people, society, and ecological systems, as well as posing a threat to a country's economic progress. As a result, this chapter discusses the history of ecological economics in order to grasp the key ideas and how they may be used as a foundation for the study's analysis. It also defined ecological economics and explained why it is important for water sustainability. It also included information on the three principles of ecological economics, namely, Principles of Ecological Economics on Water, thermodynamics, basic human need as well as water sustainability and equity, the chapter discusses the significance of economic scale, equitable access to the improved water supply, extent to which free basic water is provided to the inhabitants, Ecological Economics Theory, and finally, the relevance of the theory to the research.

3.2 Background of Ecological Economics

"Everyone has the right to an environment which is not bad for health or wellbeing; and to have the eco system protected, for the benefit of the present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development and use of natural resources while trying to promote justifiable economic growth," according to South Africa's Act 108 of 1996, Chapter 2, Section 24 (Republic of South Africa, 1996). As a result, the introduction of free basic water (FWB) had to comply with Section 24 of Chapter 2 of the South African Act 102 of 1996. As a result, water as a human right meant that people should be given water if they were unable to obtain it, and that this should also be done in order to improve their wellbeing or food security through agricultural activities.

Environmental conservation and economic stability prompted the development of ecological economics in the late twentieth century (Ndou and Aigbavboa, 2017). It emerged as a modern discipline in the 1980s as a result of the efforts of several European and American academics working in the field of relations (Paehike, 1995; Scott, 2009). It was formalized in 1988, when the International Society for Ecological Economics w as founded. Since then, the growing number of regional organizations demonstrates acade mics' broad interest in ecological economics (Ropke, 2004). According to Malte-Faber, an ecological economist, ecological economics is defined by its focus on nature, justice, and time. Intergenerational equity (the concept of fairness or justice between generations, for example, using natural resources in a way that prioritizes future generations), irreversibility of environmental change (such as species extinction), uncertainty of long-term outcomes, and sustainable development are all factors that influence ecological economic analysis and valuation (Faber, 2008). Ecological economics is also a transdisciplinary and interdisciplinary topic of academic inquiry, according to studies. However, the goal was to address the interdependence and coevolution of human economies and natural ecosystems (thus the mutually beneficial relationship between humans and natural resources) both intertemporally (i.e., any relationship between past, present, and future events) and spatially (i.e., how humans and natural resources fit together) (Xepapadeas, 2008).

3.3 Principles of Ecological Economics on Water

3.3.1 Thermodynamics

Thermodynamics can be defined as the branch of physics that deals with the relationships between heat and other forms of energy (Lucas, 2015). It describes how thermal energy (the energy a substance or system has due to its temperature) is converted to and from other forms of energy and how it affects matter. Hence, to transport water to households we need energy and that is where thermodynamics fit in. Nonetheless, water needs the minimum amount of energy in order to be purified and transferred to households, to flush toilets as part of ensuring hygiene in the household (World Energy Council, 2009).

3.3.2 Natural capital

This is the stock of natural resources or assets that can produce a continuous flow and are available for consumption (Daly, 2003). The natural resource is a critical component of development, sustaining and improving life (Costanza, 1997). Ecological economics recognizes that industrial societies rely on natural capital as well as labor and human-made capital to survive. All those components of the ecosphere are included, as well as the vital interaction between them, whose organizational honesty is critical for the system's continuous output (Rees and Nagel, 1997). Water sustainability in research is only possible when beneficiaries are involved. Therefore, zero natural capital can compromise lives of human beings who depend on water for survival. Where societies are deprived of access to equitable water, it decreases the chances of having prosperous lives.

Thinking of water cut-offs and natural capital, questions may arise on how policies can ensure that all inhabitants have equitable access to water regardless of their economic status. However, there is also manufactured capital of which is dependent on innovation and human mind creation that is given by nature for free. But without natural capital, there will be no manufactured capital (Costanza, 1997). This is where water harvesting, water purification and other means created by human mind become critical. Society ensured that they have sufficient sources of water using their capabilities. But it all depends on geographical politics; such services are not free for different reasons but what about the consequences to the poor who cannot afford such services.

In the planet, water is very essential and critical to every life and act as a factor of production which is also crucial for producing different supplies. Portable water that is treated for

domestic use is enormously valuable in producing human capital (Lant, 2004). There are no ecosystem services which can be provided without water. Therefore, this challenges the concept of unaccounted for resources which are not protected. Water should be protected due to its declining nature but this does not mean poor people must be deprived of access to water. Ecological economists believe that water is a human right that is essential and must be sufficiently accessed by all people. Most inhabitants who still lack access to water services and safe drinking water are those who have inadequate income and to develop a market for water that would make a profitable investment in delivery infrastructures. Equitable access to water can assist in food production and consumption hence affecting positively on nutritional intakes which will result in fewer child mortality (Lant, 2004). Furthermore, an integrated water resource management strategy is the key to determine the quantity and quality of water. Therefore, it is important that proper planning be carried out in order for all people to have equitable water supply and that all other beings access water adequately and freely.

3.3.3 Right to Water

Starting with the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, it should be noted that neither of them explicitly recognizes human rights to water. Water must thus be examined to see if it is implicitly recognized in other clauses of these international human rights agreements (Winkler, 2014). However, to a South African context water is recognised as a human right according to the South African Constitution of 1996. Water as a human right advocate for "all citizens, without discrimination, to have access to water, including those who are prepared to pay" (Motose, 2013:16). As a result, everyone should be able to get water regardless of their circumstances.

Basic water supply, as defined by the Water Services Act 1997 (Act 108 of 1997), is the prescribed minimum average of water supply services necessary for the reliable supply of sufficient quality of water to families for consumption and personal hygiene. The goal for basic water is to eliminate poverty and promote development in underdeveloped areas. Streeten (1977) posits that water is an essential requirement. The UNDP (2004), acknowledges that water is a human right and thus, expresses the willingness to give content and effect to this right could encourage the international community and governments to increase their efforts to meet basic human needs and achieve the Sustainable Development Goals (SDGs), which include water. Following the MDGs, the SDGs were created to ensure long-term development and livelihoods. As a result, achieving SDGs would indicate that the country's economy is

growing and capable of satisfying fundamental human requirements. This does not mean that water is a universally recognized human right. However, on a political level, 2010 was a watershed year for the human right to water; resolutions acknowledging the human right to water were accepted by both the United Nations General Assembly and the United Nations Human Rights Council (United Nations, 2015).

3.3.4 Water as basic need

Life is impossible without water and therefore we cannot live without water. Water is vital to all industries and is central to sustainable economic activity and growth (Natural Capital Coalition, 2017). However, in 1992 the United Nations stated that 'water has an economic value in all its competing uses and should be recognized as an economic good'. However, this study does not recognize water as an economic good since it opposes ecological economics. Although water is a basic human need, there are still some difficulties around accessing it. Usually, these complications are affecting women more than man. For instance, the average distance that women in Africa and Asia walk to collect water is 6 kilometres (UNDP, 2004).

Ecological economists argue that economy must be composed of equity, sustainability and economic efficiency. Equity is based on the idea of moral equality, the principle that people should be treated as equals (Jones, 2009). Therefore, water and sanitation represent a basic need for all people and hence all people should have access to such services regardless of economic situation. Hence, rural people must be prioritized and be the first ones to benefit from the local rivers, also women, girls and people with disability should be a priority.

3.3.5 Equity

According to ecological economists, the economy must be built on the principles of equality, sustainability, and economic efficiency. As a result, there is a rising understanding that equity is critical for development. Despite the fact that issues of equity and inequality have been debated for a long time, equity in relation to water access suggests that protection of access to safe drinking water and water rights is a basic human need. Equity is regarded as enjoyment of natural resources, including water, across generations of people (Divan and Rosencranz, 2005). In the view of Kufa, (2018), rural poor households lack access to water and it is mandatory to save water by using prepaid meters while the rich can afford to pay for water access and accessing water freely without installed meters. For the security of the poor, water should be distributed and accessed fairly by all people. However, planning for

sustainable water provision must be in place in order to realise that, the ideas from different chastisement which might range from social sciences to natural sciences and economics should be evaluated, reflected and used if it is acknowledged to be reliable (Pavoola and Adger, 2005). It is important to have that in place not to allocate water for the rich (i.e., those able to pay), but also, for those who are unable to pay.

The South African government takes equality into consideration which imply that all people should have equitable access to water (Bond, 2007; Bourblanc, 2012). For an example, people approach local municipality if a new village is formed in order to have water connection as well as electricity, but the local municipality will ask for the connection fee to render those services they required. Equity can never be achieved under these conditions. The ability to pay is not applicable to all the households, especially the poor segments of the population (Bond, 2007). The approaches in allocation of water are supposed to differ between rural and urban areas as their water conservation plans, water sources and the quantity they use differ (Gillham and Archer, 2004; Dyer, 2006; Van Zyl, Hay, Riemann and Mlisa, 2011). The local views and realities must be investigated before taking any decisions and conclusion. Therefore, ecological economics believes in equity more than equality (Gowdy and Erikson, 2005).

There can be neutral ways to render water services. Places with inadequate water resources can be assisted by those with sufficient water resources. This can be achieved by water transfers and exchange. Sustainability issues are not addressed on the other hand and articulated by existing approaches. If development is reflected as economic growth not as ecological wellbeing, then that development is unsustainable.

Equitable shares are financial allocations in the form of an unconditional grant that allow municipalities to provide basic services to poor households while also allowing municipalities with limited own resources to afford basic administrative and governance capacity and perform core municipal functions (Hazelton, 2004). According to the DFID, 60 million physically disabled people face problems with water supply and sanitation. However, access to safe drinking water and sanitation are essential sanitary issues and other water-related issues disabled people's problems are not discussed or addressed in a high-level way policy document at the national, state, and local levels, such as the three now available versions of the World Water Report, and the Memorandum for the World Water Report World Water Protocol (MWWP) or the Human Rights Protocol (HRP). The Division of Revenue distributes equitable portions from the national, provincial, and municipal levels of government. Poor

families have free access to basic water and sanitation, upholding their constitutional right to water while ensuring financial viability (SIWI, 2014).

UN-Water, (2021) states that because having access to water is a basic human right, everyone has the right to enough safe and appropriate water for domestic and personal use that is physically accessible and affordable. However, in case of uMlalazi Local Municipality disabled individuals have distinct ideas about how their needs might be satisfied (Water for all,2006) but this knowledge is largely ignored in mainstream discussions about clean water and sanitation. The World Water Report, the Memorandum for a World Water Protocol (MWWP), and the Human Development Report 2007/2008 despite recognizing other oppressed groups such as indigenous peoples, women in developing nations, the rural poor and their children, young housewives, workers/peasants, etc., none of them addressed the concerns of disabled people (World Bank, 2007 and World Bank World Report on Disability (2011).

Government is focusing on the industries such as Mondi and Sappi because they buy bulk water. Therefore, subsidy on free basic water should focus on poor people, child headed households, girls, women, people living with disability and the elderly. uMlalazi Local Municipality must prioritize rural people and ensure that they are the first people who benefits from the local rivers and dams. As a result, the municipality has a Poor (indigent) Register in place, which is a database that lists the indigent people who need assistance from the government. Currently, 615 people from all four urban wards are listed on the registry (uMlalazi Local Municipality 2021). This implies that uMlalazi Local Municipality focused on taxpayers within the municipality.

3.3.6 Scale of the economy

Scale refers to the size of the human economy comparatively to its containing, sustaining the ecosystem. It is based on sustainable quantity of resources comparative to the environment because the scale is limited (Czech, 2009). Any enunciation of rural water policy must consider that the economic challenge is different from urban water supply in terms of demand, scale and finance. The scale at which rural water delivery has been implemented is within the community at large which is served by one water point. In contrast, piped systems are often used in urban areas for serving urban population. In effect, water policy that is used in rural areas transfers financial and operational risks to individual communities (Hope and Rouse, 2013). These risks are increasingly feasible with service providers and institutions, which

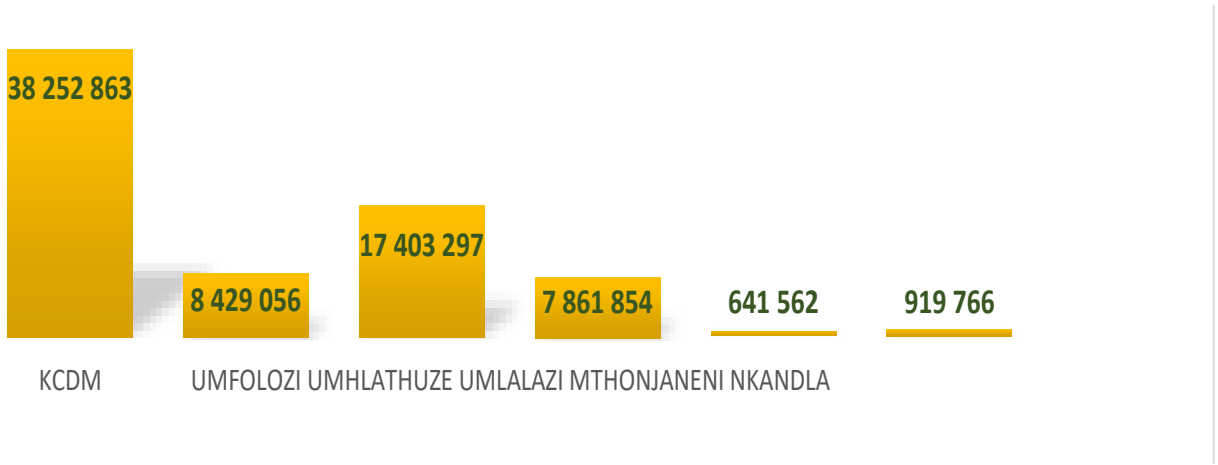
supports multiple water-points by using automated monitoring system such as situ sensors (Thomson et al., 2012a; McNicholl et al., 2019; Van Der Wilk, 2019).

Scale is both institutional and physical phenomenon. A piped network is as much an institutional concept as a physical object. The guidelines for piped systems are planned to contract, price, license and regulate the delivery of access of water to urban areas. Though guidelines of piped systems can be applied in rural areas, the only difficulty lies in the degree of the institutional coordination across the service delivery within the network (Ahlers, Güida, Rusca, and Schwartz, 2013). For example, various settlements in rural areas can form a network of supply nodes regulated and managed by rural service provider under private, public or mixed management and ownership arrangement. Ecological scale mismatches are frequently overlooked in ecosystem service evaluations (Chan, Shaw, Cameron, Underwood, and Daily, 2006; Fisher, Turner, and Morling, 2009), decreasing the utility of assessments for resource development and policy creation. Though institutional design of the monitoring and information systems is often different from a singular piped network, the architectural design, operational guidelines, contracts and agreements are fundamentally the same (Hope, Thomson, Koehler and Foster, 2020).

Secondly, water demand varies from rural households because they choose from multiple, off-site water-points of opposing quality from rainwater harvesting, hand-pumps, public tabs, vended water, or private tab connections (Andres, Thibert, Lombana, Cordoba, Danilenko, Joseph and Borja-Vega, 2019). The singular notion of water supply as observed through national representative surveys used for worldwide monitoring, simplifies the multifaceted choices people make about water on daily basis. Individual choices are formed by self-motivated communication between water value, price and cost. Groundwater quality, rainfall deviation and other environmental factors influence demand by location and season (Guo, Zuo, Meng, Wang, Teng, and Liu, 2018).

Ground water quality variation and environmental factors affect the demand by location and season. Productive use of domestic water supplies in particular, is common with high demand for taking care of livestock and watering in times of drought (Elliott et al., 2019). Rural water institutions hardly manage risks and responsibilities effectively. Accountability of the institutions are often low service delivery is largely unknown and unquantified, and the structure frequently fails (Foster et al., 2019; McNicholl et al., 2019). Lastly, funding and finance to meet the determination of the Sustainable Development Goals new ideas are required on how to allocate and generate sector funds from government, users and donors to create and sustain verifiable outcomes (Mattes et al., 2008; Foster et al., 2019).

Figure:3.1 Socio- economic Development



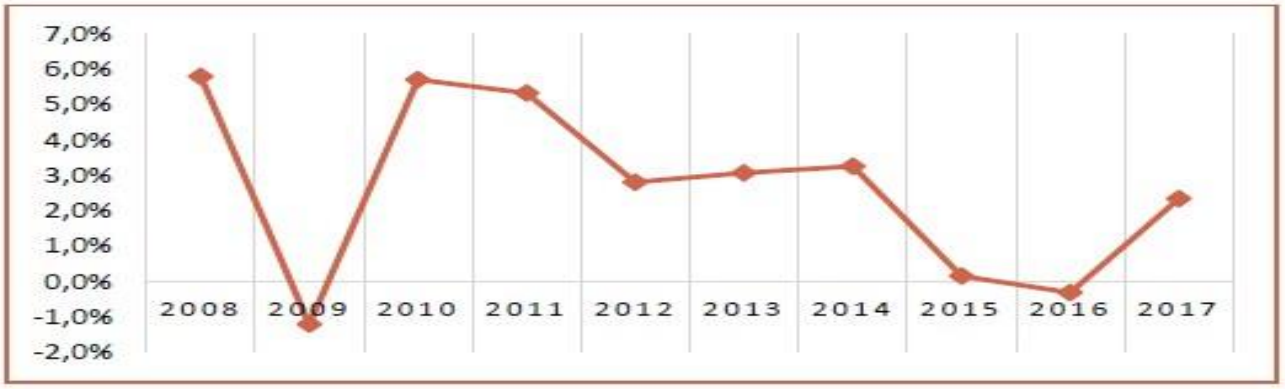
Source: King Cetshwayo District Municipality (2021)

As the Figure 3.1 illustrates, uMlalazi is one of the municipalities that has poor socio-economic development. However, agriculture experienced the most positive growth between 2009 and 2019, with an average growth rate of 30.4 % between 2009 and 2019 (KCDM, 2021). In 2010, the mining industry experienced its highest rate of growth of 15.4 % (KCDM, 2021). The agricultural sector grew had the slowest rate in 2016, at-9.7 percent, while the mining sector grew at the slowest rate in 2015, at-5.5 percent. Both the agriculture and mining sectors have experienced volatility in growth over the period (King Cetshwayo District, 2020).

GDP growth is frequently seen as an increase in output or in the economy's capacity to create goods and services required to reduce poverty rates. GDP is closely studied by policymakers and the general public, and it is regarded as a steady process involving the expansion of goods and services in a given economy (Kukaj, 2018).

As depicted on Figure 3.2, in 2009, uMlalazi Local Municipality's GDP dropped sharply, with a negative growth rate of -1.2%. The situation was rectified in 2010, when the Municipality's GDP increased by over 5.7% owing to a combination of factors to the 2010 FIFA World Cup, which was held in South Africa. The graph below depicts the annual growth trend since 2008 to the year 2017.

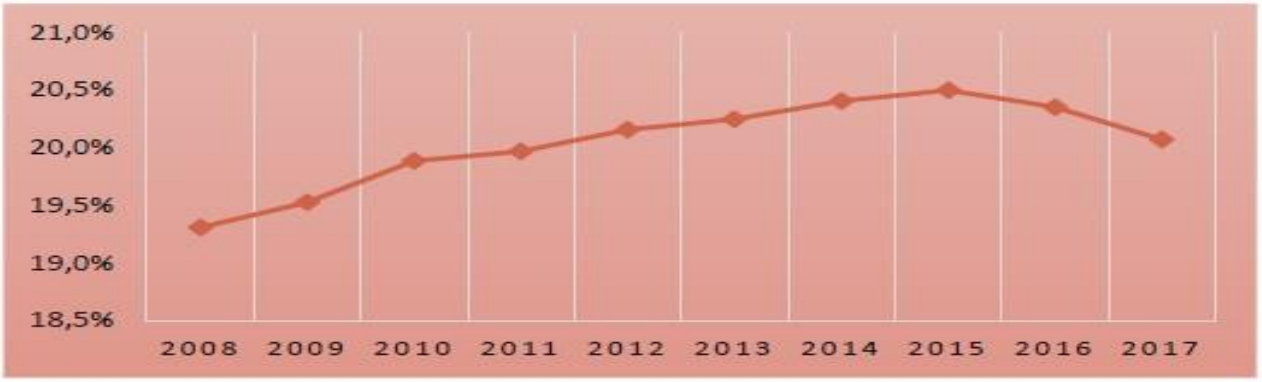
Figure:3.2 Annual GDP Growth Trends from 2008 to 2017



Source: uMlalazi Local Municipality (2021).

Between 2008 and 2015, uMlalazi's contribution to the District's GDP grew steadily. Since then, its contribution to district GDP has continuously decreased, now accounting for only 20% (uMlalazi Local Municipality 2021). uMlalazi Local Municipality's GDP is formed by small towns which consists of Eshowe (Spar), Gingindlovu (Spar) and Shoprite as economic activities within the area. These economic activities have less contribution compared to King Cethshwayo Disrtict where the GDP is higher. According to the King Cetshwayo District Municipality (2021) they contributed 6.5% of the anticipated total provincial GDP in 2016. Within this paradigm, KCDM, along with eThekwini and uMgungundlovu, contributes 59.5% and 11.3% of the province GDP, respectively. The City of uMhlathuze leads the way with a 44.0% contribution to GDP, followed by uMfolozi (25.7%) and uMlalazi (21.3%) respectively. Since 2009, KCDM has had the greatest average annual growth rate in the mining sector, at 4.34 %. Agriculture employs around 25% of the labor force in the municipal area, followed by wholesale (18.4%), community services (18.1%), and government (14.3%) (KCDM, 2021). Due to its deep rural location, uMlalazi Local Municipality's GDP contribution may be hampered by a lack of payment of rates and municipal services such as water and electricity. Small towns like uMthunzini, Gingindlovu, Phushini Park, and Eshowe are the only ones who contribute to tax and revenues. Between 2008 and 2015, uMlalazi's contribution to the District's GDP grew steadily. Since then, its contribution to the districts' GDP has continuously decreased, now accounting for only 20% (King Cetshwayo District Municipality, 2021).

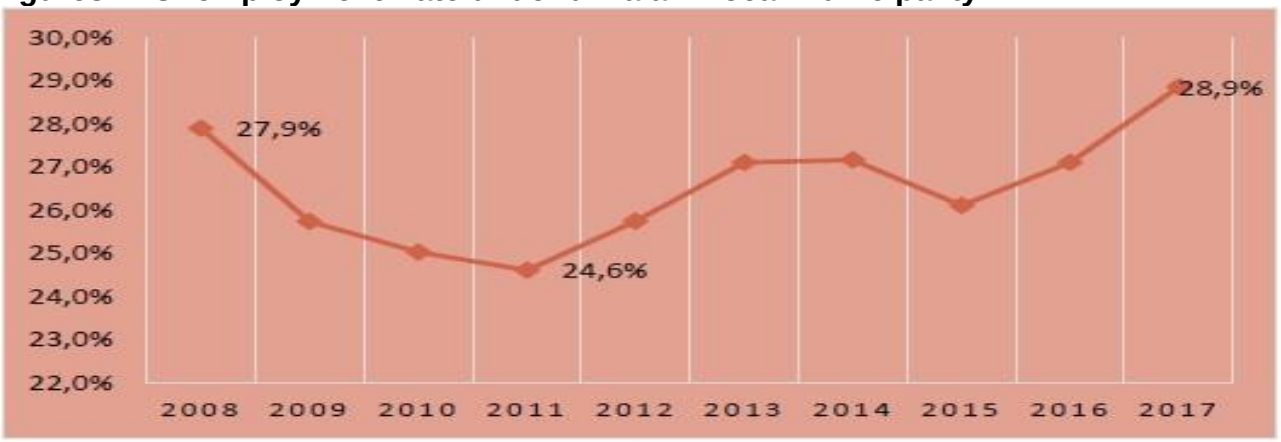
Figure:3.3 uMlalazi contribution to GDP



Source: uMlalazi Local Municipality (2021)

KCDM (2021) mentioned that based on the successful execution of the Richards Bay Industrial Development Zone (RBIDZ) programme, King Cetshwayo District is widely regarded as a world leader in innovative and sustainable manufacturing. This economic growth, combined with the district's rural development programme, resulted in the creation of decent employment opportunities, resulting in the province's fastest-growing household and individual income levels, as well as a reduction of the district's youth unemployment rate by more than half. It also resulted in a large reduction in the district's economic reliance ratio, as well as an improvement in the district's general quality of life. In uMlalazi, approximately 52% of the total population is in the working age bracket (15–64 years). Approximately, 36.5 % of persons in the working age group are unemployed. This suggests that a significant section of the population is financially reliant on a small group of people (KCDM, 2017). As a result of the low incomes, the municipality have a low scale, and the majority of the population relies on MIG and equitable share for their basic needs. The City of uMhlathuze should intervene by cross subsidise uMlalazi in order to improve people’s lives. Between 2008 and 2011, the unemployment rate fell steadily. Figure 3.4 shows that apart from 2015, however, unemployment has been rising, reaching an all-time high of 28.9% in 2017.

Figure3.4: Unemployment Rate under uMlalazi Local Municipality



uMlalazi Local Municipality (2021).

Unemployment is a bad condition that reflects a country's various economic and social aspects. The high level of unemployment and the length of the unemployment crisis had a detrimental influence on the economy, indicating that unemployment crises are not conducive for economic progress (Kukaj, 2018). Based on this, there is the need for local government to create jobs within rural communities to improve livelihoods.

3.4 Equitable access to the improved water supply

Water crises have been growing larger and larger in recent years, and they are now acknowledged as one of the most serious dangers to human progress and security, not least for businesses (World Economic Forum, 2015). The 'water crises' item continuously scores high among the top hazards identified in the Global Risk Report 2020 (World Economic Forum, 2020) as environmental considerations become increasingly relevant. There’s little doubt that climate change will exacerbate water difficulties, such as water stress. Economic activity is reliant on the availability of water resources, as well as the quality of those resources. At the same time, unregulated economic activities have an impact on the environment due to water extraction and pollution emissions (Logar, 2018). The world has long been aware of the widespread difficulties caused by inadequate water and sanitation. Despite this, approximately 700 million people still do not have access to improve water supplies, and nearly 2.5 billion people do not have sufficient sanitation (WHO/UNICEF, 2015).

As part of the Millennium Development Goals (MDGs), the international community pledged to reduce the number of people living without access to basic water and sanitation services by half (United Nations, 2007). The Sustainable Development Goals (SDGs) affirm a commitment to ensuring universal and equitable access to safe and affordable drinking water (United Nations, 2014). However, assessments suggest that only a small percentage of WSS are climate resilient, and that the danger of climate change may become a major motivation

for enhancing service quality and adapting to changing conditions (Howard et al., 2010). Regrettably, areas that lack proper water services also experience a slew of other socio-economic issues, including low income, energy poverty, poor education, and high incidence of respiratory illness due to poor air quality. Policymakers cannot determine the best degree of support for WSS without a thorough understanding of the nature and scope of the benefits. (Gunatilake et al., 2007; Whittington and Pattanayak, 2015).

3.5 Size of the Households

A family with twelve people will use more water compared to a family with only two people. This is in support of UN (2003) and Khalfan (2004) that clearly stated that water is part of human right and it is essential for living. Also, section 27(1) of the Bill of Rights of the South Africa's constitution guarantees that all the people of South Africa have a right to access adequate food and water. The constitution guarantees water rights because water is a resource necessary for human survival and wellbeing. Also, the study of Obrist, CisseÂ, Kone, Dongo, Granado, and Tanner (2006) affirm that in Cote d'Ivoire., factor which influence access to water is the size of the household. Approximately, 91.5% of households with large sizes used more water than households with a relatively smaller size. Hawkins, Blackett, and Heymans (2013) reveal that economic status is the main factor that influence the accessibility to water. This implies that people who are living in extreme poverty and who are also vulnerable and marginalized will not have access to water. Despite the vast potential of fresh water resources, recurring droughts and fast deforestation have disrupted the production system. People have access to improved water resources and yet are far away from home. Women and children in particular, spend significant time searching for water in areas far from their houses. They rely exclusively on groundwater for supply (Howard, and Gerber, 2018). Households without improved water supply are exposed to a variety of health issues. Boreholes, rivers, and precipitation are some of the water sources available (Ishaku, Rafee, Majid and Ajayi, Haruna, 2011).

3.6 Extent to which free basic water is provided to the inhabitants

The focus on safe and clean water for domestic use, according to Hall et al., (2008) is restrictive in terms of the influence on people's lives since it ignores water for productive purposes, such as subsistence farming (see also van Koppen et al., 2009). Water is a constitutional right in South Africa, and the post-apartheid water legislation is widely regarded as one of the most progressive in the world. Water difficulties, on the other hand, have been marked by a number of challenges since the democratic transition, including not just access

to resources and service delivery protest (Bond and Dugard, 2008), but also redressing unequal access to resources and service demonstration.

3.7 Ecological Economics Theory

The study is underpinned by the theory of Ecological Economics. Robert Costanza was one of the founders of the theory which relates to a trans-disciplinary approach for better understanding of how economics can influence the ecosystem in order to support all human activities (Costanza, 2008). This implies that ecological economics theory is not only advocating for economic growth as calculated according to the Gross Domestic Product (GDP), but also ways to improve long term livelihoods of human beings. The theory examines the importance of effective allocation of resources for the betterment of mankind. Also, the theory examines the relations between economic development and resources exploitation (Costanza, 2019). Neo, (2009) argues that the theory situates the fundamental problem of environment–economy nexus which is not in market failures but in human's inability to understand their role and their responsibilities within the larger ecological system. This implies that the benefit of ecological economics is basically on valuation of resources and sustainability. Ecological economics provide the opportunity for transformation of man's relationship with the environment. The value of ecological economics is basically to treat the environment well particularly for the benefit of mankind.

Ecological economics can be described as the relations between human housekeeping and nature housekeeping (Ballandonne, 2014). This implies that the ecological economics is basically the interaction between economic systems and ecological systems. Ecological economics identified production and consumption as a way of marketable relevant goods and services which is part of a very large process (Lant, 2004). This is the reason why ecological economics see sustainability as under-valued based on the fact that it deals with system thinking (Capra, 2002).

Some scholars see ecological economics as a form of transdisciplinary and interdisciplinary approach (Costanza, 1991), that provide an opportunity to link the humans and natural environment with social sciences particularly ecology and economics (Baumgärtner, Becker, Frank, Müller, and Quaas, 2008). Capra and Jacobsen, (2017) maintain that since the theory developed linkages between men and the nature, it is relevant to the study of equitable distribution of water. This is because water is a natural capital and also a catalyst for development. There is the need to strike a balance between sustainability and equal distribution of resources between various generations of man and also between humans and

other species (Costanza, 2000).

Not only that there is a wide gap between the rich and poor in our society particularly in developing countries, in South Africa, such gap was manifested between the white and black race, particularly during the apartheid eras (Meiring, 2018). South Africa is noted for being one of the world's most unequal countries, with a per-capita expenditure Gini coefficient of 0.67 in 2006 and 0.65 in 2015. According to Stats SA's (2020) research, inequality in South Africa still persist even after colonization and transition into democracy. In 2006, the wealthiest 10% of the population spent 8.6 times more than the poorest (40%). The ratio was 7.9. Between 2006 and 2015, these numbers show a decrease in overall inequality at the national level (Stats SA, 2020). This wide gap between the rich and poor in the society and this is affecting natural resources in our environment which include the water resources. This might have led to high loss of biodiversity which has a negative effect on climate change. Furthermore, Yeheyis, Hewage, Alam, Eskicioglu, and Sadiq (2013) argue that environmental and social aspects of issues that relate to sustainability can be done through recycling, by water demand management which can be to improve the condition of the local people. There are various aspects in which water can be recycled. This is water which is not only from purification and waste water treatment plants but also from other water sources such as rainwater and groundwater (Wang, Wang, Zhang, Li, Toure, Omosa, Chiramba, Abdel-Monem, and Pradhan, 2014). There are various quality standards in other countries such as U.S. (Utah) in which water can be sought which range from high quality and soft water which can be derived from melting snow and poor quality such as hard water (Jones, Aanderud, Horsburgh, Eiriksson, Dastrup, Jones, Bowling, Carlisle, Carling and Baker, 2017). The essence of sustainable development particularly as it relates to water resources management is becoming necessary in the sense that it will provide an opportunity for future generations to meet the actions of the present generations without necessary compromising the future or standards. However, sustainable development in water is very necessary because water is needed for various reasons which include industrial production of goods for industries like bottling company, energy and industrial production and host of others. Booth et al (2002) and Reinelt and Taylor (1997), argues that the hydrological cycle is the backbone of the ecosystems. This indicated that water is life –supporting for human social development and access to good water is very necessary for human development.

The equitable access to good water needs to be in both good quality and acceptable quantity which should be provided to everybody in the communities with any form of discriminations

or segregations. In order to support accessibility to water, in the year 2010, the United Nations General Assembly and the Human Right Council maintained that access to good water and adequate sanitation is an intrinsic part of human rights promotion. Also, the Sustainable Development Goals (SDGs) which were adopted in the 2015 made reference to issues of water as part of human rights and also the needs for equality and no–discrimination as related to Sustainable Development Goals. SDG 6 calls for access to adequate water and good sanitation and it clearly states that the UN member countries need to ensure universal access to water and sanitation, as well as long-term management of these resources (United Nations General Assembly, 2015). The ecological economics view sustainability as inevitable and need to be based on systems thinking (Capra, 2002). It is in this line that ecological economics see water resources as part of necessary resources needed by man to survive. Due to the fact that there is high demand for water particularly in meeting the core need of man needs, it is imperative that this resource is equitable distributed. Based on this, the available amount of water needed per person is decreasing due to high increase in the population. Nagpal (2014) states that between 1980 and 2015, the average water supply all over the world per man dropped to a third. This will continue in the future due to high increase in the population compared with low level of water supply to the generality of the people. Ecological economics have stressed the importance of optimum water allocation as very important issues that need to be considered in water policy (Musa, 2021).

The World Health Organization (2019) provided a guideline for effective and equitable water supply for developing countries in which every household will enjoy water supply which include adequate preparation for water issue, need for system assessment, effective monitoring, good management and effective communication and lastly, feedback and improvement.

A critical examination of Sustainable Development Goals on water as stated by the United Nations marinated that Water for all is a crucial component of the world we want to live in, and there is enough fresh water on the earth to do so. Millions of people, including children, die each year as a result of diseases linked to insufficient water supply, sanitation, and hygiene, either to lousy economics or poor infrastructure (UIA World Congress of Architects, 2021). This implies that government and the people need to find technical solutions in order to achieve equitable allocation of water.

Furthermore, access to water plays a critical role in the ecological-economic process of man which include seeing water as a source of raw material, secondly, as part of factor of production of various commodities which can also be discussed as marketable commodities

such as electricity, livestock and transportation (Forslund, 2009). Water also contributes to human health because water is used for domestic purposes which also contributes to human health development which translate to developing human capital. Furthermore, water emanate from oceans, rivers, soil and wetlands which are part of the components of hydrological cycle and at the same time part of the production of ecosystem resources (Bullock, 2003). It can be said that without water, there will be no ecosystem services in the entire world. Velis, (2017) argues that a wetland is very good example of water source that is being used to produce multiple ecosystems for human development which are being used for flood control and at the same time for water purification. The contribution and importance of water resources towards sustainable development of mankind cannot be over–emphasised. This is why water should be used judiciously and this notion need to be examined. Lant (2004) argues that judicious use of water will give value for water or what he referred to marginal value of changes in water quality which can be compared among users of water. Here the marginal value is being referred to as incremental changes which can be examined from a base condition or the examination of rate of exchange which is about total costs and benefits. Lant (2004) gave an example of the event that happened in summer in the year 2000 which was caused by low flow of water that led to tragedies on river Klamath in which over 33,000 fishes died due to low flow of water. The marginal ecological opportunity costs reduced the flows in the river which exceeded the marginal economic benefits. Zilberman (2002) maintained that low marginal value of water will affect the growing of crops which will have negative effects on animal feed which will also have an influence on human consumption.

Ecological economics of water, provides an opportunity for measuring the relative and the same time value of water particularly concerning usage. Costanza et al. (1997) indicate that the estimated annual value of the ecosystem in the world is $33 trillion, which is exceeding the annual output of goods and services from the world economy which is about $31 trillion. The overall well-being derived from water resources can be influenced by various sources such as biodiversity, health and aesthetic.

3.8 Relevance of the theory to the research

First, the theory is very relevant to the research on water because there cannot be economic development in any society without the use of the environment and natural resources (Barbier, 2005). Water is one of the natural resources needed for effective human living since no society can live without water. This is why the common saying that ‘water is life’ (Thieme, 2018). Based on this, there is the need for equitable distribution of water resources.

In addition, ecological economics allows critical evaluation of access to good water supply since ecological economic theory focus on types of values which include use value, option value and non-use value. Use value refers to the direct use of water resource for intended purposes (Crowards,1997). For example, using water from tap in order to quench one thirst for water, however, the option value is the value that man place to reserve the right for future usage of water (Farber, Costanza, and Wilson, 2002).

Furthermore, the ecological economic theory highlights the importance of equal allocation of resources. The theory examines the relationship between economic development and at the same time resources exploitation. The theory is very relevant for policy makers in decision support as related to water resources system design and water supply issues (Murphy et al., 1993), groundwater management (Hilton and Culver 2000), pavement drainage design (Hellman and Nicklow, 2000), and reservoir management (Nicklow and Bringer 2001). The ecological economics theory provides feedback to stakeholders on water usage on ways to provide and manage water resources. Ecological economics theory provides an opportunity for management of scarce resources that need to be allocated such as water which is very scarce in South Africa. The theory provides an opportunity for better understanding of the reason why there is a need for institutional reforms which is necessary in order to make water resources management more sustainable.

In addition, the theory assists policy makers to understand better ways of reforming water accessibility in terms of the relationship with sustainable development, the need to ensure access to water and better integration to water resources and management. In addition, water resources development and water resource management need to be based on participation approach, involving users, planners and policy –makers in public policy making related to water (GWP,2000).

3.9 Conclusion

This chapter defined the term "ecological economics," emphasizing on the significance of the ecosystem and economic system in achieving economic growth. The chapter also covered the importance of natural resource sustainability (water) and how it might be managed for future generations. The study also identifies the basic principles of ecological economics and how each principle is linked to water. Finally, it discussed fundamental topics in ecological economics and ensuring that everyone has access to water.

Ecological economics theory recognises water as a global environmental issue. The theory provides an opportunity and solutions to inadequate water resources and provides ways to

solve the issues of short and long-time water issues particularly in developing countries such as South Africa in order to promote the visions that will promote sustainable development in the societies. A critical examination of literature revealed that the theory has been widely used but it is not too popular on management and accessibility to water resources. Based on this, the study examined how equal access to water to both rural and urban communities in developing countries all over the world is realised. The chapter contributes to debates and discussion on ecological economics particularly as related to water issues in South Africa.

Thus, according to neoclassical economics, water should be an economic good. They argue that water accessibility is not the same between those who pay for water (i.e., towns or urban areas) and those who does not (i.e., rural communities). Hence, the assumption is that rural areas cannot afford to pay for water and thus they depend on FBW. Thus, those who pay for water, have an easy access to it than those who do not. However, the study is treating water as a natural capital and a basic human need that should be available to everyone regardless of location. The research technique is described in the following chapter, which covers the methods used to generate data in order to answer the study's research questions.

CHAPTER FOUR: METHODOLOGY

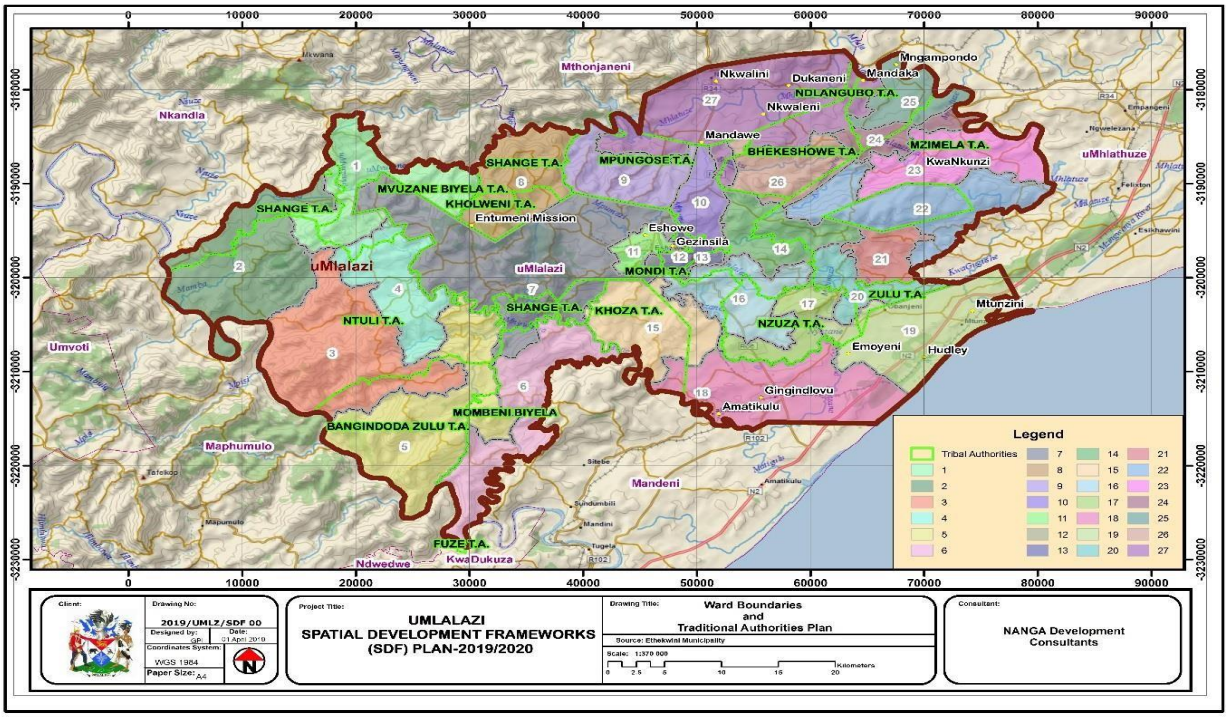
4.1 Introduction

This chapter begins by describing the study area and its population, and then provides an overview of the research methods used in the study. It also describes the location of eNyezane and Nackerville water service delivery within uMlalazi Local municipality's jurisdiction, and the analysis technique or approach used to analyse the questionnaires for the variables that were taken into account when analysing the equitable access to improved water supply. It further explains the purpose of descriptive analysis and chi-square analyse. The instruments are based on the literature on water access, specifically how water supply is conceptualized and measured in existing quantitative research. Water supply conflict scales include items representing water supply overlap into service delivery.

4.2 Study Area

It is critical to be informed about the geographical location, socio- economic status, and livelihood in order to effectively discuss and understand uMlalazi Local Municipality. As a result, this section will provide an overview of the municipality. In this regard, the 2020/2021 final Integrated Development Plan will provide useful and efficient data.

Figure 4.1 uMlalazi Local Municipality Map and Traditional Authorities



Source: uMlalazi Local Municipality (2021)

uMlalazi Local Municipality (KZN284) is located 125 kilometers north of Durban in KwaZulu Natal's north eastern coast. The N2 National and Provincial Development Corridor runs across the eastern part of the uMlalazi Local Municipality, connecting the two major economic hubs of Richards Bay and Durban. The municipality of UMlalazi is part of the King Cetshwayo District, which consists of five local municipalities: uMhlathuze, Mfolozi, uMlalazi, Mthonjaneni and Nkandla. uMlalazi have 27 electoral wards, and 14 tribal authorities' areas governed by Traditional Authorities, the district is primarily rural, with a limited formal economy and a high reliance on the government for employment and social grants (uMlalazi Local Municipality, 2021).

4.2.1 Study Population

uMlalazi has estimated a total population of 234 327 in 2019 at the area of 2 216 square kilometres and 100.7 people per square kilometres (uMlalazi Local Municipality, 2021). In terms of gender distribution, females are the most dominating with 53% while males make up 43% (uMlalazi Local Municipality, 2021). Regarding racial distribution, Black Africans are 21 7021, Coloureds are 1 068, Indians are 2 210, Whites are 2 832 and the population in ward 17 is 7 657 and the households are 1 548, in Ward 18 the number of households are 4 602.

Table 4.1 below shows the demographic information of uMlalazi Local Municipality.

Table 4.1: Demographic Information

Demographic information	**2016**	**2011**
Population	223 140	213 601
Population under 15	43,2%	37,2%
Population 15 – 64	51,6%	57,2%
Population over 65	5,2%	5,6%
Population growth P/Annum	0,99%	N/A

Source: UMlalazi Local Municipality, 2021.

Table 4.2 Households Information

Household information	2016	2011
Households	46 953	45 062
Average household size	4.8	4.5
Female headed households	56.6%	55.3%
Formal dwelling	62.4%	60.7%
Housing owned	80.7%	50.6%

Source: uMlalazi Local Municipality 2021

Table 4.3 Households Services

Household's services	**2016**	**2011**
Flush toilet connected to sewerage	12.3%	13.4%
Weekly refuse removal	13.2%	15.8%
Piped water inside dwelling	15.2%	19.6%
Electricity for lighting	81.3%	58.2%

Source: uMlalazi Local Municipality (2021)

The table 4.3 is the evidence that South Africa (RSA) is a 'developing country' that is still struggling to provide equitable basic water supply to a large percentage of previously disadvantaged people in our local communities (Fisher-Jeffes, Carden, and Armitage, 2017). The distribution of resources is critical for redressing imbalances in service delivery to various demographic groups (McIntyre and Kutzin 2012). As a result, the local government must prioritize piped water inside dwellings in order to meet the community's fundamental necessities. Unsatisfactory progress in getting drinking water to rural Africans over decades, combined with a new focus on water for rural institutions, provides a size and complexity

challenge that requires reconsideration. In Africa, rural water economics could help the continent's economy enhance policy actions. Therefore, water supply must be backed by proper infrastructure in order to be effective and distributed equally. Water treatment and transportation infrastructure must be protected.

uMlalazi Local Municipality receives its water supply from King Cetshwayo District Municipality (KCDM), which is a Water Service Authority, and it is the responsibility of the water service provider to ensure that all communities within the municipality have access to clean bulk water resources (uMlalazi Local Municipality, 2021). For this community, development means improving their current standard of living through better service delivery. King Cetshwayo District Municipality provides clear guidelines for uMlalazi Local Municipality to:

Implementing by-laws that guide the provision of water services in accordance with the Water Services Act, 108 of 1997, and relevant local government legislations such as the Municipal Systems Act, 32 of 2000, with the goal of ensuring long-term environmental health in the process of water service delivery are some of the issues that the municipality is contending with. There is the need to pay close attention to the development and maintenance of proper portable water supply and sanitation infrastructure in uMlalazi Local Municipality in order to prevent the spread of unclean water and diseases such as cholera in the future.

The Drinking Water Quality Framework developed by the Department of Water and Environmental Affairs (DWEA) outlines the fundamental requirements for safe drinking water (RSA, 1997). Safe drinking water that meets minimum drinking water specifications is critical for human health maintenance over a lifetime of consumption. If residents have access to safe drinking water, it will undoubtedly improve local livelihoods and protect the community from water-borne diseases.

4.2.2 Environmental Analysis

The general topography of the municipal areas and altitude vary, but it is comprised of chains of undulating hills and gentle rolling hills interspersed with streams and secondary valleys. The terrain's undulating nature may have implications for structural developments and storm water management. The municipality's key hydrological features include rivers and, more importantly, large patches of wetlands, most notably the uMlalazi Estuary and the Mbongolwane Wetlands. The majority of rivers are classified as free flowing rivers because they mostly follow their natural flow path created by the undulating terrains (uMlalazi Local Municipality, 2021). The uMlalazi Estuary River, located south of Mthunzini Village, is approximately 54 kilometres long and is mostly accessible by road. On the Northern Segment,

other rivers include Nyezane near EMoyeni, Mhlatuzana River, Mfule River, and Mateku River.

It should be noted that no critically endangered areas of water biodiversity have been identified within the municipal area. The rivers in the municipality are classified as one of three types of ecosystem threats. Category A and B rivers include the Mamba, Ngonje, Mateku, and Mhlatuzana rivers (unmodified or largely natural). The uMlalazi River is also a B, meaning it is mostly natural with few modifications. The Mfule River is classified as Category C, indicating that it has undergone more severe modification from its natural state. The Mthunzini River is the most endangered, with the others being Vulnerable and Least Threatened, (uMlalazi Local Municipality, 2021).

Figure:4.2 uMlalazi River

Source: Author (2021)

Figure 4.2.1 shows the current water condition in the uMlalazi Local Municipality

Figure 4.2.1 Phobane dam with purified water

Source: Author 2021

According to an uMlalazi employee, Phobane is a large dam that supplies the facility with a large amount of purified water. In Figure 4.6, the bottom brown area of the dam strata indicates a lack of rain due to climate change. uMlalazi Dam that supply water within local areas, is the main source of water to uMlalazi Local Municipality.

4.2.3 Geology

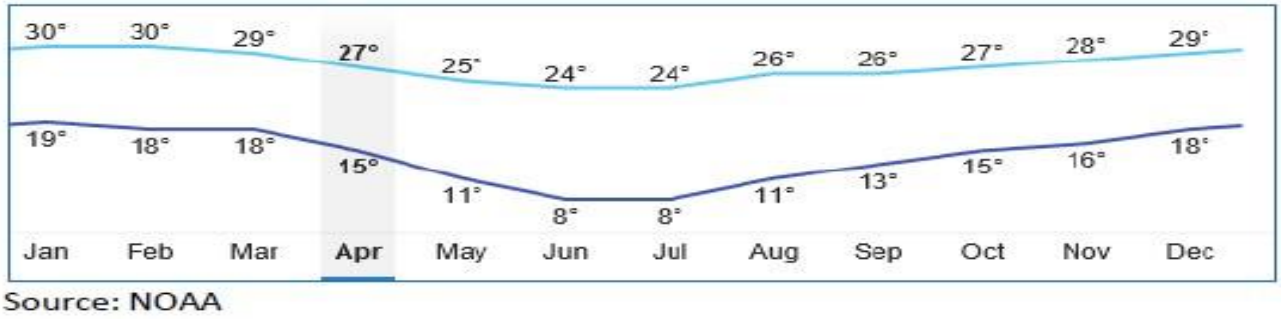
The geological composition of the municipality is quite diverse. The predominant geological composition consists of five major geological classifications, with two major metamorphic formations, Arenite and Amphibolite, sandwiching each other and covering roughly 70-80% of the municipal area. These stretch from the North-western to the South-eastern outskirts of the municipality. Granite patches spread from eastern parts of Mandawe to the northern parts of Kwa-Nkunzi. Large patches of GNEISS can be found South of Kwa-Nkunzi on the municipality's mid-eastern and south-western boundaries. Metamorphic GNEISS is well-known for its many commercial applications, including flooring, house facing stones, gravestones, and other ornamental uses (uMlalazi Local Municipality, 2021). This wonderful resource should be well preserved, and if properly explored, it can be of great benefit to the

municipality's economy in addition to ensuring its long-term use. The geology of a region also has a significant impact on the types of soils and agricultural potential. This also determines the land's stability and potential for infrastructure development.

4.2.4 Climate

From Figure 4.3, the uMlalazi Local Municipal area has a relatively good to moderately good climate with cool breezes, according to the Department of Agriculture's climate classifications. In general, the climate is favourable for agricultural and recreational activities. Temperatures are higher in the summer, reaching around 30°C, and lower in the winter, reaching a low of 7-8 around June and July, (uMlalazi Local Municipality, 2021).

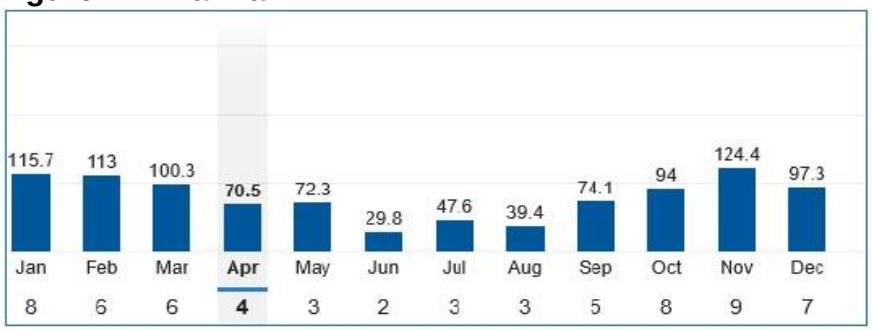
Figure 4.3: Typical Temperature levels in uMlalazi Local Municipality



Source: uMlalazi Local Municipality, 2021

In Figure 4.4, the rainfall pattern in the Municipality's major areas is normally higher in the warmer months of November to February, and lowest in the winter months of May to July. Figure 4.4 depicts a typical rainfall pattern.

Figure 4.4: Rainfall



Source: uMlalazi Local Municipality (2021).

Uncertainties such as weather unpredictability, climate change impacts, and changing socio-economic situations, according to Pahl-Wostl et al., (2008), provide new difficulties that cannot be addressed within the traditional technology-driven command-and-control management paradigm. This dominant paradigm is founded on the conviction that risks can be measured and optimal tactics selected, and that technical infrastructure can be controlled and predicted using established regulations. Pahl-Wostl et al. (2008) discuss the concept of 'living with water,' in which the limits of control and the significance of uncertainties are both acknowledged. If actions are not taken to improve the country's water efficiency or ability to distribute water to its population, South Africa would face major water difficulties.

Figure 4.5: Sample of rivers drying up due to climate change.

Source: Author's construct (2021).

4.3 Rationale for the methodology

The formulation of the questionnaires was informed by the literature review, which were then tested in uMthunzini, Obanjeni and eMasundwini before being used in the field. Creating questions was based on current knowledge from a literature review. This strategy helps the researcher to verify the validity of existing data (Barnham,2015; Matthews and Ross, 2010). By using a quantitative research method, the researcher was able to create standard questionnaires and replicate questions in order to quantify findings. This is critical for the researcher because it allows them to quantify their findings. This quantitative data allowed the researcher to gain a sense of how fair water is distributed among a larger group of individuals. Quantitative research, according to Neuman (2011:174), provides for the use of statistics or charts that can be used for debate. Tables and charts can be utilized to convey a more quantitative sense of the findings in this research.

Despite the fact that quantitative research methods have been criticized, the researcher cho se this method because of its ability to collect numerical data. One of the most common criticism of the research method is that, while the objectivity is respected and fostered in quantitative research, this component of the method isolates the researcher from the participants (Gray, 2014; Matthews and Ross, 2010). However, because the researcher required factual subjective views and more information, the questionnaire was administered by the researcher.

4.4 Research Design

A descriptive design was combined with a quantitative method by the researcher. The goal of descriptive design is to describe or interpret the facts of current conditions in a given area (Mertler, 2016). Furthermore, descriptive design is guided by rules, such as subjects are usually measured only once. The goal is to establish relationships between variables, and the study may include a sample population of hundreds or thousands of subjects to ensure a valid estimate of a generalised relationship between variables (Langkos, 2014). As a result, the researcher was observing real-life situations involving households. The researcher adopted an exploratory research design as well. The goal for the use of exploratory design in this study

was to provide a different perspective to address a previously unsolved problem on water supply.

4.5 Research Philosophy

According to Neuman (2011), ontology is a branch of philosophy concerned with the nature of being, or what exists; it is a branch of philosophy concerned with the question of what reality is, if there are multiple realities, and what the fundamental categories of reality are. It also acts as a belief in the existence of numerous universes. It once again focuses on how and what develops reality in one context may differ from what constructs reality in another. Epistemology is a branch of philosophy concerned with how we know the world around us or what constitutes a true assertion about it.

O 'Dwyer and Bernauer (2014:27) postulate that epistemology describes the beliefs that underpin knowledge claims, as well as the nature of knowledge and the creation of knowledge. A few questions might be raised in this regard, such as: who are the knowledge producers? What factors do they consider while creating and accepting knowledge? This is crucial to comprehend. It is crucial to have a voice and a point of departure while producing knowledge. One more time, what constitutes acceptable knowledge? When it comes to particular facts and understanding, all of this is critical. This dissertation is based on experimental realism, which holds that researchers are active social agents rather than passive observers. Perceptions influence what and how individuals perceive and measure, so the world cannot be viewed objectively. Metaphors are used by people to make sense of the world. Metaphors are used to distinguish humans from objects. In addition, the concept behind this dissertation will be disclosed further down.

4.6 Research Paradigms

Post-positivism is a research paradigm used in this dissertation. The researcher's job was to gather, interpret and present data as objectively as possible. According to Muijis (2004), post-positivism believes in the potential of total objectivity. Rather than being concerned with the truth, it is concerned with how reality is presented. With these paradigms, researchers aim to approximate reality as closely as possible.

A researcher can describe reality in an undiluted and trustworthy manner by studying certain and absolute truth. Post-positivism scholars use theory and literature relevant to equitable

water supply to effectively design a study and remove bias. All data collected during the fieldwork was analysed.

4.7 Target population and Sampling

The population of the study is the entire set in which the study would like to make generalisation about his research findings (LoBiondo-Wood and Haber, 2010). The target can be described as a group of people, respondents or objects in which the researcher would like to generalize his or her findings. However, the target population for this study was 234 327 households and 399 households where data was collected which comprised of key informants such as community development members, leaders and workers. The sampling is the process in which the study is going for a relatively small number of the population (Yunus and Tambi, 2013). Since using a large population in academic research will be time-consuming and involve the spending of a lot of money. The sample for the study was a representative of the whole population from which the sample was drawn. This is in line with Ani (2014) who stated that the need for adequate representation is very necessary in academic research. As such, the study explained sampling techniques, sample frame and research sample size accordingly.

4.7.1 Sample Size

Bless and Higson-Smith (2010) explain that the sample size is a subset of the whole target population that is actually investigated from which characteristics are generalized to the entire population. It is generally impossible to study an entire population in the study area. The study relied on sampling to obtain a subset of the population to participate in the study. The sample size was calculated using an appropriate sample formula, which in this case was a sample estimation formula devised by Miller and Brewer (2003), as follows:

$n=N/ [1+N (\alpha)^{2}]$

where, n= total sample size

N = the sampling frame (234 327)

α= error margin

set at (0.05) and 1= constant value

hence; $n=234\ 327 / [1+234\ 327 (0.05)^{2}]$

Therefore, n=234 327/ [1+234 327(0.0025)]

n=234 327/ [586.8]

n=399

n=399, therefore, 399 sample size approximated for the study. However, due to limited funds, the researcher was only able to perform a study with 274 respondents and 54 on piloting.

4.7.2 Simple random sampling

The simple random sample method was used to select 274 respondents from the study's total population. In this study, simple random helped the researchers to choose the appropriate sample with an equal chance of getting chosen for each household to participate in the study while avoiding bias. It also aided the researcher in having an accurate presentation and is a precise statistical assessment of a huge group of people. The researcher asked local community leaders about people who would be valuable sources of knowledge in the area.

4.8 Research Instrument

4.8.1 Questionnaires

The questionnaire was one of the data collection methods used for this study. The questionnaire is normally used in research because it normally contains the elements that will give a researcher the necessary information needed for his or her research (Brink, 2014). Viitatnen et al. (2011) stated that a research questionnaire is a tool that is commonly used in social science related research which gives an opportunity to a researcher to have an opportunity to get timely information. For the purpose of this study, questionnaires were given to 54 respondents in order to seek for information related to the research. For all the targeted pilot study respondents the questionnaire consisted of 43 questions which were administered by the researcher and were considered by this study to be appropriate and within the benchmark for reliability of research instruments.

4.8.2 Administration of Questionnaires

The manner in which questions are formulated and framed is very important for achieving the objectives of the study. It will be very difficult to achieve a reasonable research objective if the questionnaire was not properly constructed. Based on this, Sekaran (2003) states that three areas need to be examined in constructing a research-oriented questionnaire. He recommends that the wording of the questions should be at the same level of respondents, that is the respondents should be able to understand the language of the questionnaire; the language should not be ambiguous.

Secondly, there should be adequate planning particularly concerning the manner in which the variables will be measured and how they will be scaled and coded after the respondents must have filled the questionnaire. The third stage is about the outlook of the questionnaire. A questionnaire should be very neat and attractive with needed instructions on way it needs to be filled. Personal information such as monthly income, and open-ended questionnaire should be asked toward the end of the questionnaire, in order to avoid bias. Paul, Price, Rajiv Jhangiani, & Chant Chiang, (2015) has given the insight on ways to develop an effective questionnaire which include; the need for a questionnaire to be brief, precise and very easy to fill; the need for the questionnaire to be neat and attractive, and that the questions should be straight forward. There should be a section for demographic variable for respondent identifications.

The questions were five-point Likert scale designed and used for the items and respondents were asked to place themselves on the continuum from ‘Strongly agree =1, Agree =2, Not Sure=3, Strongly Disagreed =4 and Disagree 5. They also included three (3) themes: respondent characteristics, the importance of enabling equitable access to water, provision of free basic water to inhabitants, economic scale and water supply in the uMlalazi Local Municipality.

uMlalazi Local Municipality is predominantly populated by IsiZulu speakers, some of whom are unable to communicate effectively in English. As a result, the study used both languages (English and IsiZulu) to avoid respondents misinterpreting questions. During the survey, however, the respondents were given assistance with translation. As a result, respondents were needed to tick or cross the appropriate box. The data collection exercise for this study began in April 27 and ended on May 28, 2021.

Kahn (1999) points out that a good questionnaire must deal with a relevant topic, it can be used to solicit for information that cannot be found elsewhere. It should provide very brief instructions. It needs to define operational terms and should be written in simple and correct English. However, in developing the questionnaire for the study, all the aforementioned tips and suggestions by various authors were put into considerations. Clear and brief instructions were given for the respondents on way to fill the questionnaires and the questionnaire was written in simple and straight forward English.

The justification for using five-point scale for the study was based on the submission of Losby and Wetmore (2012) that Likert scale is commonly used in clinical informatics research because it is often used to measure the respondent's attitudes by asking the extent to which they agree or disagree with a particular question, as related to access and use of clinical informatics. In another development, the study uses Likert scale because it has been used in various similarly studies. Olok, Yagos and Ovuga (2015) used it in their study on the knowledge and attitude of doctors toward e-health use in Uganda. Also, Litho (2010), Anuobi and Edoka (2010) had used it in their different studies. Another reason for using Likert scale in the study is that which allow for adequate comparison of the results and it has been proven scale for the studies in Social Science.

4.8.3 Validity

The level at which a survey instrument measures what it is supposed to measure and behav es as it is designed to function is referred to as its validity. As a result, validating an instrume nt entail gathering and analyzing data in order to determine its correctness. There are a variety of statistical tests and metrics that can be used to evaluate the validity of quantitative instruments, most of which involve pilot testing (Dewar College of Education, 2009). Therefore, the researcher conducted a pilot study to assess the research instrument's ability to provide useful and appropriate responses. In order to accomplish this, the researcher piloted 54 questionnaires in a form of Likert scale type of questions. A pilot study, according to Rouse (2013), provides a platform for a researcher to test logistics, verify value, and uncover flaws before committing major resources or investing significant time, energy, or money in a large-scale project.

The researcher pre-tested the instrument on 54 respondents at Mthunzini, Obanjeni, and eMasundwini, who were asked to answer the questions that would be utilized in the actual project. All of the questions were answered by the respondents, and it took them between 20-25 minutes to do so. As a result, no significant adjustments to the questions were made, and

the surveys were found to be valid. The same questions were reviewed and revised and used for the study. Another method used for validity and reliability is observations, in which the researcher provided images taken in accordance with ethical standards when necessary. A researcher had the opportunity to watch events as they unfolded rather than relying solely on what they were taught. Seeing and hearing data helps researchers understand and analyse data more quickly and accurately

4.9 Data Analysis

The researcher used descriptive statistics to answer the research question and in order to make the survey data more understandable. The Chi-square statistical procedure was used to test the study hypothesis. Each item on the survey instrument was coded. Following the data collection, the researcher checked to ensure that all questionnaires were completed, and a spreadsheet was created to record questions, response options, and answer trends in numbers and percentages. SPSS Version 16.0 was used to analyse the data. The study also based its analysis on thematic analysis and the data was coded according to literature review themes.

4.9.1 Reliability

The goal for fieldwork was to acquire accurate data from the respondents; hence interview schedules were utilized. The internal validity of the instruments was assessed using Cronbach's alpha. Cronbach's alpha is a metric for determining the consistency or reliability of a set of scale or test items. Cronbach's alpha is a method of determining the consistency of item scales, according to Goforth (2015). Furthermore, researchers propose a minimum value of 0.65 to 0.8; coefficients less than 0.5 are usually considered undesirable (Pallant, 2003). As a result, all entries in each variable were found to be trustworthy. Furthermore, the supervisor had to approve the questions before they could be asked.

These are provided to back up what is stated in the findings and analysis chapter. The reliability test results are shown in the table 4.6.

Table 4. 4. Reliability Test Results

Reliability Coefficients	Cronbach's Alpha		Standardized Item Alpha		Number of Items		
	0.715		0.766		41		
Statistics for Scale	Number of items	Mean	Variance	Standard Deviation (SD)			
	43	76.7	112.36	9.14			
Item total Statistics	Scale Mean if item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Cronbach Alpha if Item Deleted	Mean	SD	n
Item 1	71.14	92.240	.135	.627	1.83	.805	54
Item 2	71.14	92.240	.135	.675	3.14	1.125	54
Item 3	71.14	92.240	.135	.692	1.55	.506	54
Item 4	71.14	92.240	.135	.611	2.34	1.233	54
Item 5	71.14	92.240	.135	.679	1.90	.900	54
Item 6	71.14	92.240	.135	.636	2.28	1.279	54
Item 7	71.14	92.240	.135	.653	2.41	1.268	54
Item 8	71.14	92.240	.135	.678	2.38	1.237	54
Item 9	71.14	92.240	.135	.659	1.72	.960	54
Item 10	71.14	92.240	.135	.747	2.38	1.321	54
Item 11	71.14	92.240	.135	.564	1.76	1.057	54
Item 12	71.14	92.240	.135	.612	1.93	1.193	54
Item 13	71.14	92.240	.135	.688	2.24	.830	54
Item 14	71.14	92.240	.135	.688	2.10	1.012	54
Item 15	71.14	92.240	.135	.496	1.72	.702	54
Item 16	71.14	92.240	.135	.614	1.76	.951	54
Item 17	71.14	92.240	.135	.560	1.90	.976	54

Item 18	71.14	92.240	.135	.606	1.90	1.012	54
Item 19	71.14	92.240	.135	.680	1.97	1.017	54
1tem 20	71.14	92.240	.135	.647	1.21	.412	54
Item 21	71.14	92.240	.135	.692	2.03	.981	54
Item 22	71.14	92.240	.135	.643	1.62	.775	54
Item 23	71.14	92.240	.135	.679	1.62	.561	54
Item 24	71.14	92.240	.135	.672	1.69	.967	54
Item 25	71.14	92.240	.135	.695	1.69	.761	54
Item 26	71.14	92.240	.135	.689	1.62	.903	54
Item 27	71.14	92.240	.135	.695	2.03	1.085	54
Item 28	71.14	92.240	.135	.685	1.66	.936	54
Item 29	71.14	92.240	.135	.674	1.83	.848	54
Item 30	71.14	92.240	.135	.705	1.83	.759	54
Item 31	71.14	92.240	.135	.663	1.93	1.223	54
Item 31	71.14	92.240	.135	.690	1.86	.990	54
Item 33	71.14	92.240	.135	.704	2.21	1.146	54
Item 34	71.14	92.240	.135	.694	1.97	1.052	54
Item 35	71.14	92.240	.135	.688	2.00	1.165	54
Item 36	71.14	92.240	.135	.702	2.14	1.187	54
Item 37	71.14	92.240	.135	.723	2.00	1.165	54
Item 38	71.14	92.240	.135	.647	1.86	1.125	54
Item 39	71.14	92.240	.135	.671	2.10	1.175	54
Item 40	71.14	92.240	.135	.691	2.17	1.167	54
Item 41	71.14	92.240	.135	.610	2.69	1.257	54
Item 42	71.14	92.240	.135	.644	1.60	.257	54
Item 43	71.14	92.240	.135	.635	1.69	.297	54

Source: Fieldwork (2021)

From Table 4.5, a total of 43 questions (composed of 43 items each) were administered to 54 respondents in order to determine the reliability of the instruments before the actual study was conducted. In the view of Pallant (2005), a reliable Cronbach's alpha coefficient often ranges between a scale of 0 and 1. According to Goforth (2015), Cronbach's alpha is a method of determining the consistency of item scales. Generally, a collective alpha value of 0.7 is usually considered to be acceptable. It means that the closer the Cronbach's alpha coefficient is to 1.0, the more this study regarded the scale of the individual questions to be internally consistent and capable of generating reliable and consistent results. George and Malley (2003) provided the following guidelines for reliability coefficients: "alpha > 0.9 (Excellent), alpha > 0.8 (Good), alpha > 0.7 (Acceptable), alpha > 0.6 (Questionable), alpha > 0.5 (Poor), and alpha 0.5 (Unacceptable)" (George & Malley, 2003; 231). Therefore, as illustrated in Table 4.5, the Cronbach's alpha value of 0.715 for all the 54 questionnaires administered by the researcher was considered by this study to be appropriate and within the benchmark for reliability of research instruments.

A scrutiny of the different Cronbach alpha values (items 1-43) showed a mean (76.7), variance (112.36) and Standard Deviation (SD) (9.14). The values for the mean and standard deviation showed the response were evenly spread across the sampled population. The Alpha values for the individual items ranged between 0.650 to 0.747. This implied that that the instruments were "appropriate" and the item scales were internally consistent, hence, were fit to be used for the actual study. The "Cronbach Alpha if item deleted" presented the scale's Cronbach's alpha reliability coefficient for internal consistency if the individual items are removed from the scale. In Table 1, the scale's Cronbach's alpha would be 0.627, if item 1 was removed from the scale. This value was then compared to the Alpha coefficient value (0.715) to find out whether any of the items could be deleted as a result of lower values which could affect the overall consistency of the scale. Using the above information, removing item 1 would result in a corresponding decrease in Cronbach's alpha from 0.715 to 0.627.

From the data, the reliability test showed that removing an individual item would not have remarkably reduced the scale of the individual items' reliability diagnostics. The corrected Cronbach's alpha coefficient of internal consistency (i.e., standardized item alpha = 0.766) is used when all the individual items have significantly scaled diagnostics. In this study, since a decrease or increase in individual item scale would not have remarkably increased or decreased in the corresponding alpha values, the study did not use the standardised item alpha value (0.766). Besides, inference from the scale means and scale variance showed the items were not differently scaled and therefore meant that they were closely related and

collected relevant information required by the study. This "coefficient is employed exclusively when the individual scale components are not scaled the same," according to Gliem and Gliem (2003).

4.10 Limitations of the study

A research study might be limited by a variety of variables, making it weak (Locke et al., 2007:16). This study collected data from a large number of people, resulting in massive data and analysis. The study was only directed to uMlalazi Local Municipality in Kwa-Zulu Natal. The study took place in two different wards, it was therefore expensive to travel between them. The elders were apprehensive about taking part in the study, stating that youth should do so, hence more youth took part. Despite this, the study was only able to explore two wards at uMlalazi Local Municipality because of time restrictions. Furthermore, not all questionnaires that were self-administered were returned. As a result, the researcher must return and wait for the respondents to react.

4.11 Delimitations of the study

Locke et al (2007) claims that delimitations are concerned with extrapolating results from a single study to the entire community. This study contained 274 participants, which is a small sample size that can never be used to represent the entire uMlalazi community. Secondly, because the survey did not ask respondents of a specific gender or race, it cannot be used to generalize for the municipality; rather, it can be used to get a sense of how people perceive uMlalazi.

Bias Elimination

The survey included data from both female and males' respondents, and it included adults of all ages. The participants were not compensated in any way for participating in the study. Furthermore, there was no cultural prejudice: any culture and race within the research area was welcome to participate.

4.12 Ethical considerations

The researcher considered several measures to make her level best in keeping ethical issues in all stages of the present study. The researcher was aware of the sensitivity of information dealing with factors affecting equitable access to the improved water supply. To protect the respondents from harm, the researcher protected respondent's identities. As UNIZULU protocol stated that the respect for the dignity and self-esteem of human participants, as well

as their safety and well-being, as well as their basic human rights, must be the priority of study involving human participants.

The ethical clearance certificate was issued by University of Zululand (UZREC 171110-030) and the consent for which gave permission to go to uMlalazi Local Municipality and collect data. Secondly, the researcher requested permission from the Municipal Speaker and ward councillors to conduct such research in those specific places respectively. Furthermore, the researcher made it apparent to the respondents that participation in the study was entirely optional, and that they had the freedom to quit at any moment for any reason. Furthermore, the respondents were assured that their privacy would be protected at all times and that whatever information they supplied would be kept private and confidential. The respondents signed a consent form, with those who were illiterate signing with an "x" and their full names, detailing their rights, the objective of the study, and the research expectations they needed to be aware of. The researcher also explained that the study had nothing to do with political power, and there are no monetary or material benefits to be gained from taking part in the study, as stated at the beginning.

4.13 Conclusion

The technique and a description of the research area were presented in this chapter. The rationale was to gain a better understanding of the study's environment and methods for collecting empirical data. It also went over the research methodology and design, which were based on quantitative and descriptive methodologies. The research philosophy and paradigm were also discussed. As the chapter demonstrated, the study was directed towards positivism epistemology. In the meantime, it outlines the population, the sample and sampling methodologies and data collection methods employed from the target respondents. The procedures for data processing and presentation of the results were also explained in the next chapter. Cronbach's alpha and a pilot study were used to assess the research instruments' reliability and validity. Finally, the chapter discussed the study's, limitations, delimitations, bias elimination, and ethical consideration. As a result, the results acquired after data collection are discussed in the next chapter.

CHAPTER FIVE: FINDINGS AND DISCUSSION

5.1 Introduction

In this chapter, the study presents, interprets and discusses the results on equitable access to water supply at uMlalazi Local Municipality. The findings are interpreted and discussed relative to the objectives and the research questions of the study. The chapter begins by presenting the demographic characteristics of the respondents, including the age, gender, household's income, and types of dwelling of the respondents. Thereafter, the findings on water as a human right, quantity of water accessed by households, quality of water used and duration of water collection are presented and discussed. Other issues covered in this chapter includes water pricing, payment for water, maintenance of facilities in the municipality and the outcome of the hypothesis test. Finally, the chapter ends with a brief conclusion which summarizes the results and findings of the study.

5.2 Demographic characteristics of the respondents

This section presents and discusses the results of the demographic characteristics of the respondents. The main issues covered are age, gender, household's income, and types of dwelling of the respondents. From Table 5.1, the study found that all the respondents were eligible adults whose ages ranged between 18 - 61+ years. Approximately, 27% of the respondents aged between 21-30, followed by those between 18-20 years (23%) and 41-50+ (19%). Approximately, 67% of the respondents were between 18 - 40 years. The findings implied that the municipality is endowed with a relatively youthful population structure. These population groups can serve as the most energetic human resource which could be utilized by the government and its partners to promote the development of the rural communities in the Municipality. The findings highlight section 27(1) of the 1996 Constitution of the Republic of South Africa, which stresses that all people, irrespective of age, have the right to access adequate food and water (Republic of South Africa, 1996). Again, the findings agree with reports by the King Cetshwayo District Municipality (2021), which found that a relatively youthful population exist in the studied area as 49% of the population are younger than 19 years.

Table 5.1: Age of the respondents

Age	Frequency	Percent
18-20	64	23
21-30	73	27
31-40	47	17
41-50	51	19
51-60	25	9
61+	14	5
Total	274	100

Source: Fieldwork (2021)

From Table 5. 2, females constituted 72% of the respondents, compared with 28% of their male counterparts. The high level of female participation in this study showed the interest women attached to issues of water in the rural areas. Although this result was expected because of the natural and domestic roles of women, implications are that women would tend to become the direct household members who are affected by water scarcity in the rural settings. The findings also meant that the views of women on water allocation and management at the community levels should be seriously taken in efforts towards improving water supply in the rural areas. Similarly, other studies found that women are often responsible for domestic chores such as cleaning, cooking, and washing. As important duty bearers often responsible for household water collection, women in the rural areas possess indispensable local knowledge and experience in household water management and utilisation. Thus, women should be critically considered as part of the water decision-makers on water in the rural areas.

Table 5.2: Gender and decisions on water collection

Water collection decision-making		
Gender	Frequency	Percent
Female	198	72
Male	76	28
Total	274	100

Source: Fieldwork (2021)

In a similar study, Yuerlita (2017) also found that women and girls play an important but largely unacknowledged roles in water management for livelihoods such as subsistence agriculture. Furthermore, women and girls are shown to bear the biggest water collection burden in water-insecure situations (Geere and Cortobius, 2017; Graham et al., 2016) in maintaining household water security for domestic use and thus should be critically considered as

important stakeholders in decision making on water (Geere and Cortobius, 2017; Graham et al., 2016).

Besides, the study interrogated the respondents on the type of incomes they earned. From Table 5. 3, the study found that 40% of the respondents relied on child support grants, 15% earned monthly salaries, 14% earned wages, 14% were unemployed and did not have any source of income, 12% relied on pension funds and 5% relied on disability grants. The findings implied that there were varied income sources for the households. A central component of water distribution involved decisions on fair pricing. Considering the income sources of the households, ensuring equity in water would mean that the duty bearers should take into consideration the varied income sources of the households in determination of fair prices for drinking water used by the households. Drawing from the ecological economics theory, this study highlighted that distribution, economic scale concerning equitable access to improved water supply (Costanza, 2008) is contested in the poor areas of uMlalazi Local Municipality. The findings of the study highlights that a high-water tariff system would likely reinforce the economic exclusion and deprivation of the unemployed household members from access to improved drinking water in the rural areas (Neo, 2009).

Table 5. 3: Types of income earned by the respondents

Types of income	Frequency	Percent
Unemployed	37	14
Salary	42	15
Wages	39	14
Child Support Grant	110	40
Elderly Pension	33	12
Disability Grant	13	5
Total	274	100

Source: Fieldwork (2021)

In a related study, the United Nations (2010) argues that accessibility to water must be related to water affordability and at the same time, equality and equity which has been seen as human rights by the United Nations General Assembly and the United Nations Human Rights Council (UN, 2010). The findings of this study also agree with Mahama's (2013) study which found income to have statistically influenced the possibility of access and use of improved water. Again, the economic status of a household was discovered by Kimenyi and Mbaku (1995) to have a positive connection with affordability of services such as water. In addition, Koskie et al. (2013) found that the type of work and income earned by the head of the household significantly influence the type of water used by their families.

The education of household members tends to have implications on their capacity to influence water allocation decisions at the rural setting. Education can shape people's opinions, empower them with knowledge and influence behaviours/ attitudes towards water systems in a community. In Table 5.4, this study found a little above half (56%) of the respondents had primary education, 16% attained non-formal education, 15% attained tertiary qualifications and 13% obtained secondary education. There were variations in terms of education levels revealed that the literacy levels of the respondents were low, with as many as 72% of the respondents having non-formal and primary education respectively.

The low education levels among the household respondents implied that there is the need for water actors such as the government and the Municipality to initiate measures for training and awareness creation on the management of household water in order to ensure equity in rural water distribution. In addition, measures to develop the knowledge of water users on water storage could be necessary to avert water scarcity in the rural parts of the municipality. Moreover, the findings highlight that well-educated households could have opportunities for employment, earn better incomes, capacity to afford water improved drinking water and healthy lifestyles. Similarly, the capacity of the households to understand complexities in water distribution and become empowered to assume important leadership roles in the rural water sector of the municipality could be improved with better education and training.

Table 5.4: Educational level of the respondents

Educational level	Frequency	Percent
Non-formal education	44	16
Primary	153	56
Secondary	36	13
Tertiary	41	15
Total	274	100

Source: Fieldwork (2021)

The findings of this study agree with Gunatilake et al (2007) and Whittington and Pattanayak, (2015) who discovered that people and communities which lack proper water services also experience poor education. Again, although SALGA (2016) strives to provide basic services to disadvantaged households, this study reveals that the enjoyment of social goods such as education, remains low in the study area. For Nnadozie (2011), black people lack access to service delivery, resulting in a predominantly black population that is ill-informed and illiterate, which could invariably affect water supply and quantities needed for human consumption and productive activities in the study community. Moreover, education levels of the rural households are not only important for improving rural sanitation and domestic hygiene of the households, but also presents the households with opportunities for career development in

the rural water sector. The 16 percent of the respondents without formal education shows that the government still needs to do more to combat illiteracy if the Sustainable Development Goals are to be met by 2030 (Hung et al., 2020). In addition, the study found that the households dwelled in different category of dwelling units (Table 5.5).

Table 5.5: Type of dwelling used by the respondents.

Type of dwelling system	Frequency	Percent
RDP Houses	68	25
Suburbs	69	25
Mud Houses	110	40
Informal Settlement	27	10
Total	274	100

Source: Fieldwork (2021)

The study found that 40% of the respondents dwelled in mud houses, 25% each dwelled in suburbs and RDP houses respectively and 10% stayed in informal settlements. The findings depicted a rural environment which is mostly characterised by mud houses.

5.3 Enabling equitable access and human rights to improve drinking water supply

In South Africa, section 27(1) of the Bill of Rights guarantees all the people of South Africa a right to access adequate food and water (Republic of South Africa, 1996). The constitution guarantees water rights because water is a resource necessary for human survival and wellbeing. Achieving water rights requires the government and the municipalities to ensure that all persons are provided with adequate, safe and improved drinking water irrespective of their socio-economic conditions or geographic locations. As illustrated by Table 5.6, the households had varied opinions and perceptions about water access as being a fundamental human right. Approximately, 33% of the household respondents agreed that lack of daily access to 20litres of water constituted a violation to their fundamental human rights, 25% strongly agreed, 10% disagreed and 33% were not sure. For those respondents who were not sure, it was an indication that they did not have adequate awareness or awareness of their rights to water access enshrined under the bill of rights of the 1996 constitution.

These findings are supported by The United Nations' Sustainable Development Goals (SDGs) that emphasize the need of adequate and equitable access to better water and sanitation, which every country is encouraged to attain by 2030 (UN, 2020). The consequences for lack of awareness implied that such households were not likely to place demands on the municipality nor their local governments even when their human rights to water were being glaringly violated. For household respondents who agreed and those who strongly agreed,

the implications are that such households were probably aware of their inalienable rights to water and probably were able to assert those rights in the municipality. More tellingly, they probably understood the importance of water in their daily lives and were thus holding their local municipality accountable for improved water provision.

Table 5.6: Limited access to 20ls of water per day is a breach to fundamental rights

Response categories	Frequency	Percent
Agree	91	33
Strongly Agree	67	25
Not Sure	90	33
Disagree	26	10
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork 2021

The findings highlight that water rights are essential socio-economic pillars for promoting growth and development of rural settlements in the municipality. Quite importantly, although they may not necessarily be financially well-off, the respondents still understood and treasured their rights to clean water. It also means that for the municipality to achieve rights to quality and adequate water, there is the need for the municipality to expand access to improved drinking water as mandated by the constitution. These findings are consistent with the findings of a research done by Ohwo and Abotutu, (2014), which found that inaccessibility to water is a violation of human rights and every household should have access to 20 litres of clean water a day, as stated by the United Nations Development Programme (UNDP, 2006). Similarly, Korçaa and Jusufib (2015) mentioned that it is critical to raise public awareness and stakeholders' understanding of the importance of providing safe drinking water to all citizens as a basic human right. Consequently, in Table 5.7, about 30% of the household respondents strongly agreed that to assert human rights to water in the municipality, each person in the municipality must have at least 50 litres of drinking water supply per day, 20% agreed, 20% disagreed, 19% strongly disagreed while 11% were not sure about the quantity of water required per person per day. These results agreed with WHO (2003) which stressed that a person must have at least 50 litres of water per day.

Table 5.7: Each person must have at least 50 litres of water per day

Response categories	Frequency	Percent
Agree	55	20
Strongly Agree	83	30
Not Sure	30	11
Disagree	54	20
Strongly Disagree	52	19
Total	274	100

Source: Fieldwork (2021)

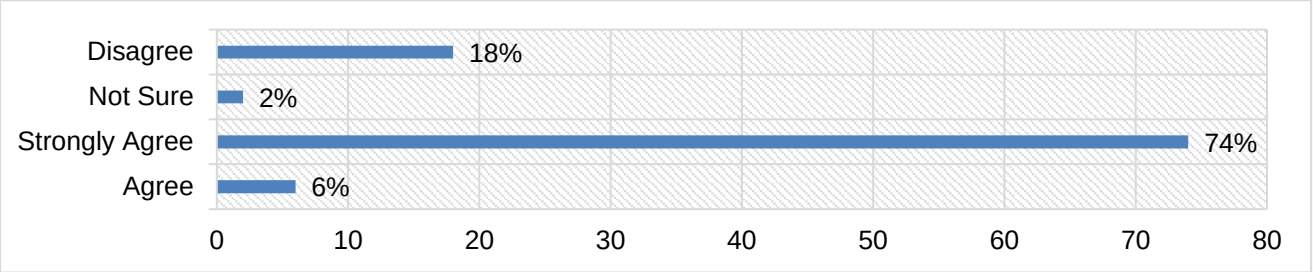
In addition, the finding supports the WHO, (2003) that every person must have at least access to 50 litres of water per day. Also, Greek (1996) affirmed that for healthy living, every person must have access to 50 litres of water per day. According to Gleick (1996), international organizations, national and local governments should adopt a basic water requirements standard for human needs of 50 litres per day and ensure access to water by all individuals, regardless of their social, political and economic status.

The findings reinforce the idea that water affects every facet of human life; socially, economically, politically and environmentally. It means that limited access or non-availability of water among the rural dwellers could become a recipe for ill-health and increase mortality among the households in the rural areas. Human life, wellbeing and productivity levels will likely be affected in the municipality with limited or non-availability of drinking water. The findings bring to the forefront the need for government and development partners to implement measures to curtail water losses and waste which could affect equity in drinking water supply in the municipality. Another area of concern which affect equitable water access is the location of drinking water sources in the municipality.

Even while improved water sources are available in many areas of developing countries, Smith and Hanson (2015) contend that they are often far away from households. As illustrated by Figure 5.1, this study found that the majority (74%) of the household respondents affirmed that improved water sources were available in the municipality, yet such sources were far away from their households, about 18% disagreed, 6% agreed and 2% were not sure. Upon further interrogation with the respondents, the findings indicate that there were diverse sources of drinking water sources in the municipality. These sources include protected dug-out-wells, pipe borne water and boreholes, however, such improved sources were not connected to the dwelling units of the households. This reinforces the importance of water for

human development. The implication of this finding is that water is one of the basic human needs, particularly for personal hygiene and food.

Figure 5.1: Improved water sources are available and yet are far away from household



Source: Fieldwork (2021)

A further probe revealed that households which were not connected to improved drinking water sources had to walk far distances in order to fetch drinking water. The practice could have adverse physical drain, and health implications on duty bearers of household water collection including women and children. The study found that about a little above half (57%) of the household respondents strongly agreed that the walking distance to drinking water sources should not be more than 30 minutes, 29% agreed, 16 were not sure and 7% disagreed (Table 5.8). Although they claim that it is very far from them, this finding is in line with the finding of Smith & Hanson (2015). In a similar study by (UNICEF and WHO, 2017), it was found that people have access to improved water resources in their locality but very far from them and must walk great distances or rely on water connections that are otherwise unreliable and inconsistent outside of their houses.

Figure: 5.2 Sample of available water sources

Source: Author (2021)

Table 5.8: Time for collecting water should not be more than 30 minutes

Response categories	Frequency	Percent
Agree	55	20
Strongly Agree	156	57
Not Sure	44	16
Disagree	19	7
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The findings implied that the economic and social activities of women could be affected as they require sufficient time to engage in domestic water collection activities. These findings are in line with the report compiled by WHO (2003) stating that the time of water collection should not exceed 30 minutes from the water source. Supported by a study done by Graham, Hirai and Kim (2016) it is noted that the total number of adults and children are impacted by water collection times of more than 30 minutes. Also, a similar study conducted by Silali and Njambi (2014) in Kenya is stressing that women and children under the age of five are more vulnerable, as they fetch water 4–5 times each day. Therefore, school attendance of children could be affected if they spend time walking several distances in order to fetch water. To reduce the burden and walking distance involved to water sources, water actors, development partners and the municipality should consider placement of water facilities on cluster basis.

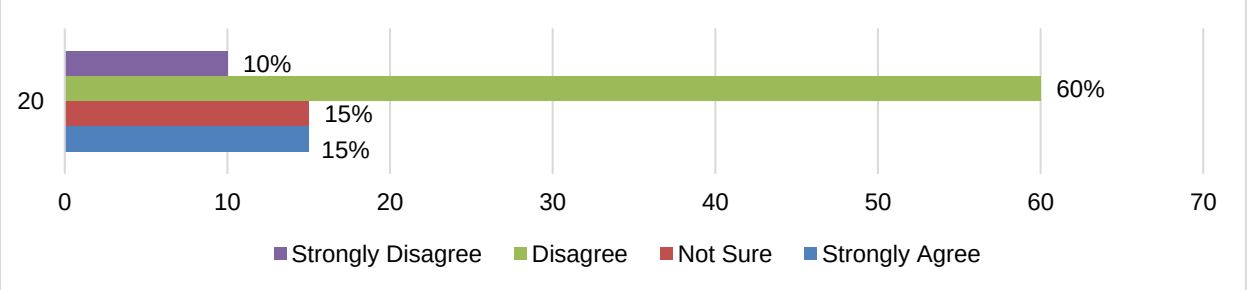
Figure 5.3: Sample of unimproved water source

Source: Author 2021

This approach will ensure that water facilities are either connected to dwelling units or they are located closer to communities, and thus become easily accessible by the households. In addition, this study interrogated the quantity of water required for meeting the domestic

household uses such as washing, cooking, drinking and basic hygiene. As illustrated by Figure 5.4, the study found that most of the respondents disagreed that a minimum of 30-50 litres of water is needed daily for meeting the domestic needs of households including washing, cooking, drinking and hygiene, about 15% strongly agreed, 15% were not sure and 10% strongly disagreed. The findings implied that either most of the households did not have between 30 - 40 litres of water per day or they were economizing the use of drinking water. Access to drinking water was probably limited for meeting the domestic water requirements of their households. From the findings, this study deduced that adequate water will be needed to ensure that the households meet their water needs. To achieve equity, there is the need for the households to have a say in the determination of water distribution at the local level. This is because, varied uses of water and the understanding households attach to water availability, access and distribution is essential to ensure that there is fairness in water allocation at the rural level. The findings affirm Bartlett's (2003) study which stresses that it takes roughly 30 to 40 litres of water per capita per day for a person to conduct the essential cleaning, cooking, and drinking to maintain basic cleanliness.

Figure 5.4: Washing, cooking, drinking and hygiene requires 30 - 40 litres of water



Source: Fieldwork (2021)

Emerging from the findings, this study brings to the forefront that a needs-based approach to water allocation is specifically encouraged if the rural households are to be accorded their rights to adequate water supply in the municipality. More revealingly, since water access is a human right, the findings of this study stressed that for universal fulfilment of the rural people's rights to improved drinking water to become a reality, there is the need for the South African government to streamline the varied use of water into water policy making, recognising the multi-scaled uses of water resources in rural settings. In Table 5.9, this idea was generally affirmed by the household respondents who strongly agreed (53%) and agreed (47%) respectively that all citizens must have equal rights to water access in the municipality. It means that fairness to water is necessary to avoid water conflicts and agitations among the rural people.

Table 5.9: All citizens must have equal access to water

Response categories	Frequency	Percent
Agree	130	47
Strongly Agree	144	57
Not Sure	0	0
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The findings demonstrate the need for government and development actors to include rural households and effectively solicit their views at all stages of water allocation to promote equality of access and sustainability at the rural level. This is because, this study has demonstrated that not all the households of the rural areas have the ability to pay for improved drinking water. These findings are in line with the study conducted by Bourblanc (2012) which found that all citizens should have access to water in the same way. As illustrated by Table 5.10, the majority of the respondents (85%) strongly agreed that not all the households can pay for the water they use, 11% agreed, 3% were not sure and 1% disagreed.

Table 5.10: Not all households have the ability to pay for water

Response categories	Frequency	Percent
Agree	30	11
Strongly Agree	233	85
Not Sure	9	3
Disagree	2	1
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

These findings are consistent with previous research by Bond, (2007) arguing that the commercialization of a resource will limit access to the poor who cannot afford these services. In addition, beyond the rural households' concerns over the ability to pay, the water tariffs and pricing plans appears to affect the willingness of the households to pay for drinking water supply in the municipality. In Table 5.11, the study found that most of the households agreed at 60% that the standardisation of water tariffs in the municipality tend to affect the households willing to pay for water, 39% strongly agreed while 1% were not sure. The findings meant that where the water tariff system becomes unfair, the rural-poor households are likely to revert to the use of unimproved water sources, being oblivious of the health implications. Lant, (2004) agreed with the findings that most inhabitants who still lack access to water services and safe

drinking water are those who have inadequate income and to develop a market for water that would make a profitable investment in delivery infrastructures. In addition, household water users are likely to rebel or refuse to pay. The block tariff system could be ideal considering the economic scale and varied income levels of the households. Again, the determination of the pricing system for water should include all households.

Table 5.11: Standardisation of water tariffs affect household's willingness to pay

Response categories	Frequency	Percent
Agree	164	60
Strongly Agree	108	39
Not Sure	2	1
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The municipality, government and development partners are thus required to ensure collective participation in fixing water pricing schemes which is recognising the varied socio-economic conditions which prevail in the rural settlements. Measure for full cost recovery would be counterproductive, particularly in a municipality domiciliated by households whose livelihoods are dependent on public grants. The findings suggest that achieving financial sustainability of rural water service provision requires that the government and development partners should introduce adequate subsidies and pro-poor water policies to ensure equity of drinking water access. Findings also agree with Pavoola and Adger, (2005) who stated that planning for long-term water availability, in order to do this, ideas from various disciplines, ranging from social sciences to natural sciences and economics, must be examined, pondered on, and used if they are deemed reliable.

5.4 Provision of free basic water to inhabitants

The provision of free and basic water is essential for survival. The FBW policy was thus introduced to guarantee improved water access to all South African citizens (Kasrils, 2000). This is because water access can reduce the spread of diseases, improve the health and well-being of households. In view of that, water in the municipality should not be viewed as economic commodity. Besides, free water access could enhance poor households' sense of dignity and freedoms, reduce the drudgery of women and children who are mostly responsible for fetching water. Nonetheless, the implementation of the FBW policy is beset with implementation gaps.

This study found that in the King Cetshwayo District, the FBW policy allows only 6 kilo litre per month and other cities like Durban initially received 9 kilo litres per month until 2017 when the policy was revised and 6kl of free basic water is now allocated to indigent households. Thus, achieving equity in water supply would require the municipalities to close the implementation gaps of the FBW policy. This study interrogated the perceptions of the households on the implementation of the FBW policy. In Table 5.12, the study found that most of the respondents strongly agreed (68%), 31% agreed and 2% were not sure of the need to close the existing gaps embedded in the implementation of the FBW policy in the municipally.

Table 5.12: Municipalities should close the gap on free basic water policy

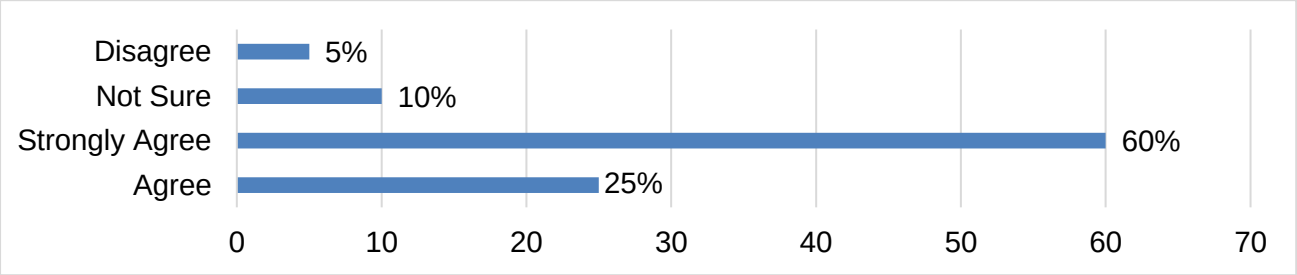
Response categories	Frequency	Percent
Agree	85	31
Strongly Agree	185	68
Not Sure	4	2
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

Wilson (2012:67) claims that public policy is effective in establishing principles and norms that ensure service delivery systems and governance initiatives are responsive to citizens' needs. According to Volkomer (2006) “public policy” might be a perspective that one articulates. It enshrines the context in which a number of future decisions will be made. The findings highlight that a fair FBW policy means less expenditure on health. This is because household members are less likely to fall ill and incur medical costs and are better able to remain economically productive. With children particularly at risk from water-related diseases, access to improved sources of water through an equitable FBW policy can result in better health, and therefore improve school attendance, with positive longer-term consequences for their lives.

A further interrogation revealed that the gaps in ensuring a fair FBW policy was due to poor maintenance of water facilities such as broken pipes that supplied water to the households as well as increasing population that led to the deepening of poverty situation among the households in the rural areas. As illustrated by Figure 5.5, about 60% of the household respondents strongly agreed, 25% agreed, 10% were not sure and 5% disagreed that maintenance and population increase accounted for the gaps in the implementation of the FBW policy in the municipality.

Figure 5.5: Facility maintenance and population increase affects FBW implementation



Source: Fieldwork (2021)

Water is transported through pipes, therefore, pipes may begin to leak as a result of prolonged use without sufficient maintenance. As a result, there will be insufficient water reaching the homes (Adedeji, Hamam, Abe, and Abu-Mahfouz, 2017). According to Renzetti and Dupont (2013), detecting leaking pipes is critical for reducing significant amounts of water withdrawals from rivers or lakes and so aids in increasing water for ecosystems. The study deduced from the findings that knowing that water is vital for agriculture and since small-scale farmers in the municipality needs equitable water access, there is the need for emphasis on improving the operation and maintenance of the rural water facilities. In addition, government funding for installation of new facilities is necessary to bridge the gaps between population increase and demands for drinking water access in rural-poor settlements. In addition, the findings highlight the need to establish networks and water committees to safeguard waste and leakages of potable water in the rural areas. Such community watchdogs are necessary to achieve efficient and equitable use while also conserving and protecting drinking water resources at the same time.

Since households know best and possess local experiences about the kind of water services which work best for them, there is the need for households to be included in all decision-making related to the implementation of the FBW policy at the local level. In Table 5.13, it is determined how participants understand the water supply ratio supplied to the households. The study was interested in knowing whether the respondents were aware of the declining ratio of un-piped to the piped households and whether the declining ratio (about 8:1 in 1967 to 2:6:1 in 2005) could be explained by increase in population which places pressure on piped water facilities in the municipality (Mahama, Anaman and Osei-Akoto,2014). The study found that 69% of the households were not sure. This percentage implied that the majority of people lacked the knowledge regarding the ratio of water supply to their households.

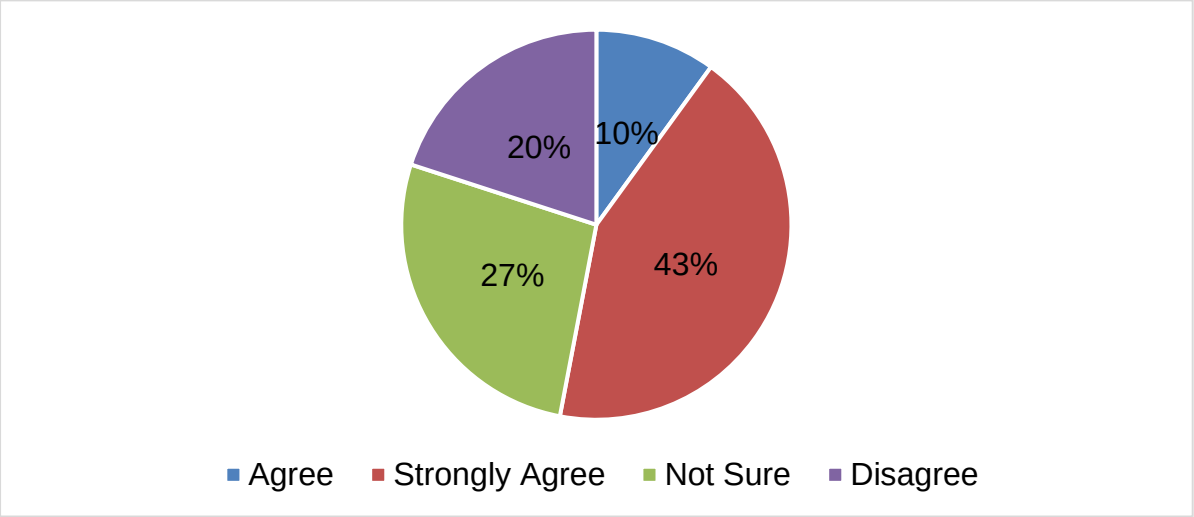
Table 5.13: Ratio of un-piped to piped households has decreased due to pressure on piped water facilities in the municipality

Response categories	Frequency	Percent
Agree	25	9
Strongly Agree	57	21
Not Sure	190	69
Disagree	2	1
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

From the findings, the respondents were unaware of the looming water supply gaps that has occurred in recent years. The finding showed that the participants do not recognise anything wrong about the pressure and the ratio of water supply simply because of poor water service delivery and the question was not relevant to their background because people who are living in rural areas confirmed that they had seen a little bit of development regarding water access. Those who strongly agreed was made up of 21% from suburbs side of the ward and those who agreed constituted 9% of the respondents. In addition, the study found that the households had access to diversified sources of water in the municipality (see Figure 5.6).

Figure 5.6: Primary sources of drinking water



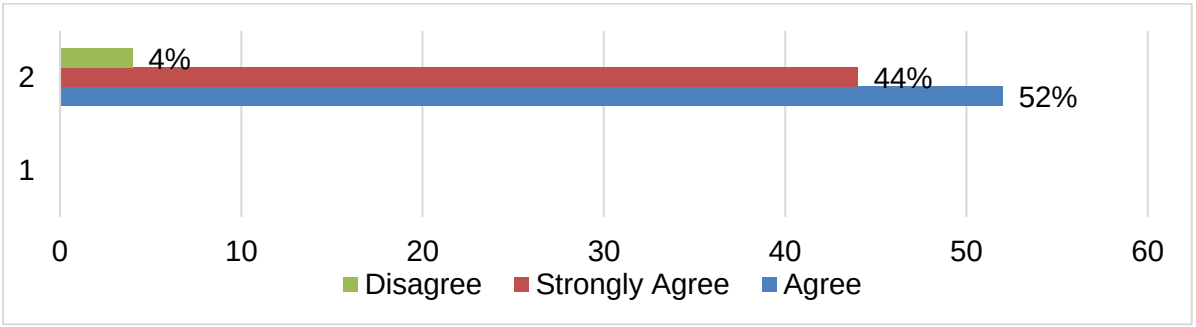
Source: Fieldwork (2021)

In Figure 5.6, about 43% of the respondents agreed that the primary sources of drinking water included boreholes, dug-out-well, rainwater and piped connection to dwelling units, 10% of the respondents agreed, 27% were not sure because they had never been exposed to other water resources while 20% disagreed. The results revealed that households believe that they can do better with these types of water sources than rely on river streams, as well as if the government can strengthen the work of water programmes. They probably understood that improved and equitable water access was also good for their health and well-being. As the

Sustainable Development Goals (SDGs) affirm a commitment to ensuring universal and equitable access to safe and affordable drinking water (United Nations, 2014), the study further interrogated the households to find out whether access to water was relevant in determining the location of dwelling units among the rich and middle-class population in the municipality (see Figure 5.7).

The findings showed that water supply is insufficient. Some of the residences are linked to the water system but do not receive water. People rely on shared water supplies, which are often unprotected. There are a limited number of job openings and economic opportunities. The respondents were asked whether rich and middle-class built their homes near government piped water. This issue was considered important because it has been observed that the rich and middle-class build their homes near piped water, allowing direct access to subsidized water from the government. It means that communities where water supply was erratic were likely not to have access to subsidized public water supply and this affected the type of water they used in the rural areas. The study found that 52% of the respondents strongly agreed that water access determined the choice and location of dwelling units among the rich and middle-class, 44% agreed, and 4% disagreed.

Figure 5.7: Equity of access to subsidized water determined the location of dwelling units



Source: Fieldwork (2021)

From Figure 5.7, the findings clearly showed that residents perceived a lack of equity between the rich and poor in access to subsidized water from government as important consideration for locating their dwelling units. This was attributed to poverty and distance from government water sources. Consequently, poor households which were located far away from public water systems were likely to be denied access to piped water. The implication is that such households were likely to use non-piped sources of water which may provide unsafe water, resulting into disparities in access to safe and improved water sources. Furthermore, in Table 5.14 about 68% of the households strongly agreed and 32% agreed that the only means for benefiting from public water supply was through the FBW supplied by government.

Figure: 5.8 sample of water sources inside dwellings/ yards

Source: Fieldwork (2021)

Table 5.14: Poor rural households only access free basic water (FBW) from the government

Response categories	Frequency	Percent
Agree	87	32
Strongly Agree	187	68
Not Sure	0	0
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The findings demonstrate that the poor households from the rural areas only received FBW from the government as part of service delivery to the communities simply because they could not afford to pay for exorbitant services. This indicates that because households cannot afford to pay for water services, they rely on the government's free basic water. The local municipality must ensure that the provision of water is equitable to all the inhabitants. According to the Water Service Act 108 of 1997, every South African is entitled to basic water supply. Therefore, every water service institution must take reasonable measures to realize these rights. Consequently, Table 5. 15 indicates that 66% of the respondents strongly agreed that water access was a human right and thus should not be determined by the ability of the households to pay for water services, 14% agreed, 9% were not sure and 11% disagreed.

Table 5.15: Water access must be a right and not determined by a household's ability to pay

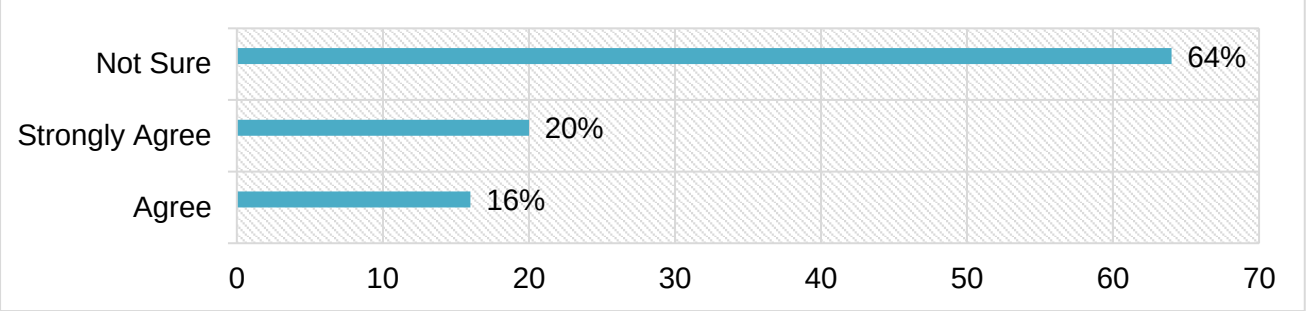
Response categories	Frequency	Percent
Agree	38	14
Strongly Agree	180	66
Not Sure	26	9
Disagree	30	11
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

For the respondents who disagreed and those who were not sure, the implications are that they probably did not know that access to water is a right guaranteed by the South African Constitution. Since such households were unaware of their fundamental human rights, it may result into failure to hold public institutions responsible for water delivery more accountable and transparent in the distribution of drinking water. The study highlighted that most households confirmed that the rights-based approach could probably enable fair distribution of water as against the prevailing condition where "ability to pay" was being used by some water actors (private vendors) in the rural areas. Although most respondents were aware of the FBW, the findings of this study showed that they were mostly unaware of the sources of funding for delivery of improved water supply and basic sanitation in the rural areas. The findings are in line with the study by Gleick et al., (2002) which postulates that water policies in South Africa were implemented with the primary goal of addressing historical imbalances caused by the apartheid era, as well as improving the poor's living conditions and ensuring that the historically disadvantaged are provided for. Also, the similar study done by Earle et al. (2005) and Coalition Against Water Privatisation (2004) agreed as they indicated that the state has the mandate to ensure the right of every citizen to be respected, particularly concerning the issue of water, not as an honour determined by the ability to pay.

The perceptions of the households on funding for water and sanitation facilities is illustrated by Figure 5.9.

Figure 5.9: Funding for improvements to water and sanitation system will come from the national government through the Municipal Infrastructure Grant (MIG)



Source: Fieldwork (2021)

The study found that most of the respondents lacked knowledge on how the local municipality was funded in order to render basic water and sanitation services within their areas. Approximately, 64% of the respondents were not sure whether MIG constitute a funding source for water and sanitation facilities in the municipality, 20% strongly agreed and 16% agreed. The findings demonstrated that only a few respondents understood that the MIG constituted a critical funding source of local governments. Therefore, it is critical for the municipality to raise awareness and implement campaigns in order to develop an understanding of the local people on funding for water and sanitation systems. Such campaigns are necessary so that the public can hold the municipality accountable for use of public funds. This could be done through radio announcements, public engagements in the planning, budgeting, and implementation of infrastructural programmes of the municipality. Similarly, it appears that the respondents believed that the MIG was an important public funding source for enabling the poor access to facilities in the rural areas (see Table 5.16).

Table 5.16: MIG is a funding arrangement with the aim of assisting the poor to gain access to infrastructure and Equitable Share Grant (ESG)

Response categories	Frequency	Percent
Agree	99	36
Strongly Agree	102	37
Not Sure	73	27
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

In Table 5.16, about 37% of the households strongly agreed, 36% agreed and 27% were not sure about the fact that the MIG was to assist the rural poor to gain access to public infrastructure through ESG. The findings illustrate that the respondents understood the aim of MIG, which is the funding for helping the poor through ESG within the local municipality. In Table 5.17, the study found that there is different support measures provided for indigents

under the ESG scheme. These include rates relief, free refuse, solid waste relief, free electricity and electricity relief. Equitable Share Grant (ESG) serves the low-income households by ensuring that services are delivered efficiently or through local revenue collection. It is important to develop knowledge of households on public funding schemes for water and sanitation. Mechanisms for public engagement and solicitation for inputs of the households on the use of public funds are necessary to promote trust and generate social capital necessary for inclusive development of localities in the municipality. The finding agrees with Nastiti, (2017) study, which propounded that each year, the government provides capital money to institutions, as well as municipal infrastructure grants (MIG) and equitable share grants (ESG) to low-income households, in order to ensure that services are supplied efficiently. Similarly, Municipalities receive the Local Government Equitable Share (LGES) to offer free basic services to poor families, such as the implementation of a free basic water policy and sanitation, as well as to fund basic municipal administration expenditures. Municipalities have complete discretion over how they spend LGES (Selebalo, and Webster, 2018).

Table 5.17: Indigents Support with Equitable Share Allocation

DETAILS	Original Budget Year (R)	Adjusted Budget (R)	Budget Year 2021/2022 (R)	Budget Year 2022/2023 (R)	Budget Year 2023/2024 (R)
Rates relief	111 439 950	149 398 350	123 038 340	129 557 060	120 622 081
Free refuse	1 976 620	1 976 620	2 079 240	2 170 730	2 268 410
Solid waste relief	5 303 840	5 303 840	5 558 420	5 825 230	6 087 370
Free electricity	5 212 550	5 212 550	5 445 000	5 989 500	6 588 450
Electricity relief	10 651 750	10 651 750	11 163 030	11 698 850	12 225 300

Source: uMlalazi Local Municipality (2021)

This is important because from the findings, most of the households (64%) consisting of (32% who agreed and 32% who strongly agreed that the national, provincial, and local municipalities were entitled to ESG as critical funding source for the provision of basic water and sanitation services to South Africans (see Table 5.18). According to the "old" Water Act 54 of 1956, there has been a significant shift in policy, objectives, and goals. This Act made it illegal for non-democratic governments to use a centralisation strategy in which the government made all decisions. The most comprehensive water legislation based on equitable water allocation has been identified as the New Water Act 36 of 1998, (Hope, 2006, p. 168). It is a democratic society, therefore, the Act allows for public engagement in water resource management. It

also encourages the creation of new regional and local entities, such as agencies and catchments, to better manage water resources (Harpe, 1998).

Table 5.18: National, provincial and localities are entitled to equitable share of revenue raised nationally

Response categories	Frequency	Percent
Agree	88	32
Strongly Agree	87	32
Not Sure	90	33
Disagree	8	3
Strongly Disagree	1	1
Total	274	100

Source: Fieldwork (2021)

About 33% of the respondents were not sure, 3% disagreed and 1% strongly disagreed about the capacity of ESG to bride revenue, infrastructure, and service delivery gaps at the national, provincial, and local levels. From the findings, the study deduced that most of the households had knowledge about their entitlement to the allocation of infrastructure and basic services in the municipality. It was further deduced that, where the municipalities lack funding capacities, services delivery are likely to be severely compromised. Nonetheless, holding their municipality accountable was probably challenging for respondents who were not sure and those who disagreed about their entitlement to ESG at the national, and local levels. Again, in terms of the Division of Revenue Act (DRA), 36% of the respondents were not sure that the Act takes into consideration the functions assigned to each sphere of government and the capacity of each level of government to pay for their functions, about 31% strongly agreed, 26% agreed and 8% disagreed (see Table 5.19).

Table 5.19: Division of Revenue Act takes into account the functions and capacity of each sphere of government to pay for these functions

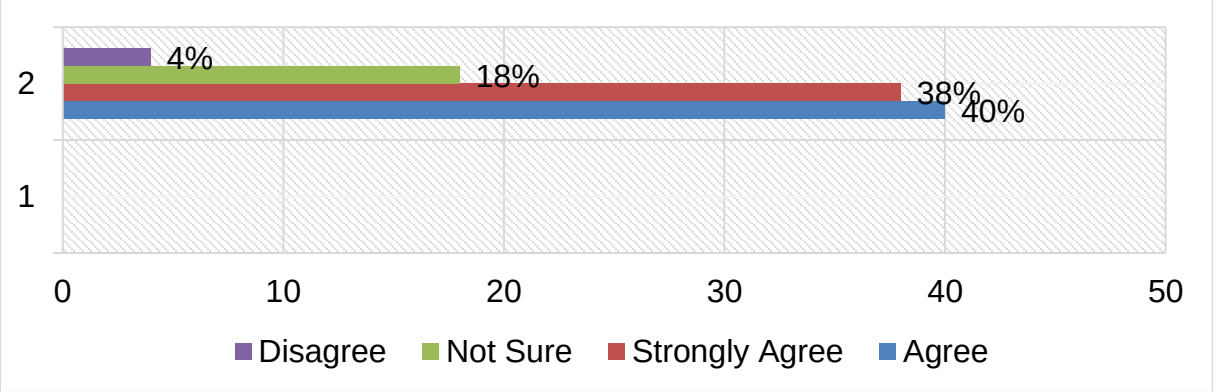
Response categories	Frequency	Percent
Agree	70	26
Strongly Agree	85	31
Not Sure	98	36
Disagree	21	8
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The results showed that the respondents understood that the allocations from the national government's share of revenue to provinces, local governments or municipalities, the conditions under which those allocations may be made and ensuring an equitable revenue

distribution among them. Those who understood the funding allocation processes were probably participating in holding the municipality accountable for funding allocation. It means that equity in funding allocation towards essential services such as water service and facilities is critical to guarantee the rights of localities to improved drinking water. As illustrated by Figure 5.7, the capacity of the municipality to improve service delivery could be enhanced if public funding is equitably distributed. About 40% of the respondents agreed that a fair share of funding (unconditional grants) between the tiers of government was fundamental for enabling the municipality to improve service delivery quality to poor households. The findings affirmed that grants and subsidies are essential for rural municipalities to invest in the provision of drinking water. Findings agree with SIWI, (2014) who stated that The Division of Revenue should distributes equitable percentages of government funds from the National, provincial, and local levels. For poor families to enjoy free access to basic water and sanitation, it imperative to keep on ensuring their financial sustainability while respecting their constitutional right to water. Again from Figure 5.10, about 38% of the household respondents agreed, 18% were not sure and 4% disagreed. The implication is that, sufficiently unconditional grants, are necessary for the municipality to install new water facilities, operate and maintain broken-down facilities and undertake periodic test of the quality of water, the household users consumed. The municipality will also be able to afford basic administrative and governance capacities and thus, able to effectively perform its roles of effectively servicing the needs of the localities.

Figure 5.10: Equitable share is the financial allocation fundamental for enabling the municipality to provide basic services to poor households.



Source: Fieldwork (2021)

While rural population increase and household water demands is also likely to rise, there is the need for constant funding to match demand with supply and avoid water deficits. More importantly, equitable funding allocation will enable the extension of water supply to deprive areas of the municipality. This is against the backdrop of the findings presented in Table 5.20 which illustrates that about 61% of the household water users strongly agreed that water and

sanitation are basic needs and thus, must be provided at no cost to poor families. Meanwhile, about 30% agreed, 6% were not sure and 3% disagreed that poor families should benefit from basic needs (water and sanitation) at no cost.

Table 5.20: Access to basic water and sanitation must be provided at no cost to poor families

Response categories	Frequency	Percent
Agree	82	30
Strongly Agree	168	61
Not Sure	16	6
Disagree	8	3
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

Against the backdrop of the apartheid regime where black populations were racially segregated in the delivery of basic services, the transition to democracy envisioned a South Africa where everyone will have access to basic services like water and sanitation. Findings are in line with the South African Water Act of 1997 which establishes the rules for regulating the functions of water service providers in the country who provides water and sanitation. The Act's primary goal was to collaborate with the water institutions while also ensuring the country's long-term water supply. However, the denial of water to poor families as a result of funding gaps is thus against the 1994 constitution of the Republic of South Africa. The municipality should thus develop measures to ensure fair, sustainable and reliable access to water by poor families as an expression of the democratic rights of the most marginalized sections of the country. Again, from Table 5.21, about 69% of the respondents were not sure that each municipality should decide whether free basic water should be made available to everyone or only to the poor, 26% agreed, 2% strongly agreed and 1% strongly disagreed.

Table 5.21: Each municipality decides if free basic water is made available to everyone or only to the poor community

Response categories	Frequency	Percent
Agree	71	26
Strongly Agree	6	2
Not Sure	189	69
Disagree	6	2
Strongly Disagree	2	1
Total	274	100

Source: Fieldwork (2021)

The findings mean that perhaps most of the households lacked knowledge that local municipalities promote equitable resource distribution among its areas in order to ensure adequate levels of municipal services. Free water access is essential for food and nutrition security, men, women, boys and girls with better access to water have lower chances for undernourishment (FAO, 2013 and Mehta,2013). The findings bring to the fore the outcome of Agenda 21 of the United Nations which stressed that countries should remain committed to progressive realization of access to safe and affordable drinking water for all (Momtaz,1996). In the South African context, the findings of this study stressed that water is an inevitable resource necessary for poverty eradication, rural empowerment and the protection of human health. In addition, ensuring equity in water access requires that drinking water should be available, while measures be taken to avoid waste and pollution (Nilsson, 2017). From Table 5.22, the study found that all the household (100%) respondents confirmed (with 71% who strongly agreed and 29% who agreed) that South Africa loses water through leakage pipes and inadequate infrastructure.

Table 5.22: South Africa loses a lot of water through leaking pipes and inadequate infrastructure

Response categories	Frequency	Percent
Agree	78	29
Strongly Agree	196	71
Not Sure	0	0
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The finding means that to achieve water security and equity in water supply, efforts must be made towards the avoidance of losses in the production, distribution, transportation and storage chain of drinking water in the municipality. Attention should be given to maintenance and improved storage devices including polytanks, underground storage tanks, and other containers which could avoid water leakages. A carefully planned operation and maintenance plan and human resource capacities should be made available to ensure that burst pipes are swiftly repaired. This is because, in Table 5.23, most of the respondents strongly agreed (63%) that the inability of the municipality to deal with the issues of maintenance and operational challenges resulted in water losses and compromised quality of water, 29% agreed and 8% disagreed. Qualified experts such as engineers, water administrations, and water quality laboratory experts are necessary for installation, management and quality delivery of water to rural people. Government and the municipality should make these human

resources and logistics (spare parts) easily available and affordable to rural locations. This will improve monitoring and supervisory role of the municipal staff and also enhance their capacity to early detect burst and warn-out facilities for replacement in order to avoid pollution and leakages. This is in line with Nomvula Mokonyane, Minister of Water and Sanitation Affairs, who mentioned water loss difficulties, saying that her administration is well aware of municipalities' incapacity to cope with issues of maintenance and operational challenges that result in water loss and compromises water security (DWS, 2015).

Table 5.23: Inability of the municipality to deal with O&M challenges result in water loss and compromises household water quality

Response categories	Frequency	Percent
Agree	79	29
Strongly Agree	173	63
Not Sure	22	8
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

A leaking water point has the potential of compromising water quality but also reducing availability of water and the cost of drinking water. This result, supported by the households, indicates that the local municipality has a lot of work in terms of improving its maintenance culture in order to avoid water losses, achieve long-term service delivery and equitable water resource distribution. This is because for most of the respondents (85% agreed), improving access to water services is likely to reduce the time spent on water collection and gives more time for other productive activities.

Table 5.24: Improved access to water services has reduced the time spent and has given more time for productive activities.

Response categories	Frequency	Percent
Agree	21	8
Strongly Agree	232	85
Not Sure	21	7
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

Meanwhile, 8% agreed and 7% were not sure about the implication of improving water service delivery in the district (see Table 5.24). The results highlighted that house connection is not only convenient for women and children, but it also has the capacity to reduces the time spent

in collecting water and devoting more time for other productive ventures. Since water is important for survival, it is expected that measures be introduced by government, the municipality and development partners to speed and quality in water service delivery. As illustrated by Table 5.25, poor rural households tend to receive limited quantity of water for free and this appear not to be sufficient for their households. About 71% of the respondents strongly agreed that they were not fully benefiting from the free water supplied through stand piped systems.

Table 5.25: Poor inhabitants in rural areas who receive a limited quantity of water for free through standpipes do not benefit fully

Response categories	Frequency	Percent
Agree	63	23
Strongly Agree	195	71
Not Sure	16	6
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The findings indicate that most of the households that used standpipes were not satisfied with the limited quantity of water they received. As depicted by Table 5.26, evidence from this study suggest that the 61% (composed of 32% who agreed and 29% who strongly agreed) that the households were required to pay for water over and above the free water supply threshold. The findings agree with earlier studies conducted by Kumweda (2006), Matose (2013) Arlosoroff (1998), and Jacobs and Wegelin, (2013) which found that households are treated like customers who must pay for water-related costs and service delivery.

Figure :5.11 Sample of dry communal stand pipe

Source: Author (2021)

From Figure 5.11, when the water taps run dry, those who are not served by the municipality's water trucks are compelled to obtain water from rivers and streams, while others purchase water from the municipality and others are provided for free by the municipality's water trucks. The constraint however is that the water trucks are not adequate and do not service all households, and so only those wards with active councillors tend to receive municipal water while those without councillors are likely to be denied access to water.

Table 5.26: Required to pay for water above the free supply threshold

Response categories	Frequency	Percent
Agree	88	32
Strongly Agree	80	29
Not Sure	78	29
Disagree	25	9
Strongly Disagree	3	1
Total	274	100

Source: Fieldwork (2021)

The findings showed that even though the FBW guaranteed free access to basic water, households who used water beyond the 6kls threshold were required to pay for the excess use of the water they collected. The implication is that households that are poor and yet with relatively higher water demand and consumption patterns were likely to pay more for water. Since most of the rural households were unemployed and basically relied on government grants, paying for potable water would be a near impossibility and thus, may be denied access to sufficient water. In Table 5.27, house membership ranged from 3 - 10+

Table 5.27: Composition of household members

Number of household members	Frequency	Percent
3	48	17
5	48	17
8	85	31
10	78	29
More than 10	15	6
Total	274	100

Source: Fieldwork (2021)

The findings showed that 31% of the respondents had eight household members, 29% had ten household members, 17% each had five and three members respectively and 6% had more than ten household members. The pattern of the household composition means that there should be more water distribution per household to sufficiently meet their domestic, consumptive, productive and hygiene needs. The basic water allocations per home are insufficient, and the quota is distributed per household rather than per people. As a result, while this policy was intended to assist poorer homes, which tend to have more members and hence drink more water, it instead benefits wealthier households, which tend to be smaller and use less water (Water and Sanitation, 2003). However, as Table 5. 28 revealed, the poorest of the households (26% agreed) with more members and who were unable to pay for water services were disconnected from the water they consumed.

Table 5.28: Poor households are eventually disconnected due to the inability to pay for water

Response categories	Frequency	Percent
Agree	72	26
Strongly Agree	26	10
Not Sure	129	47
Disagree	35	13
Strongly Disagree	12	4
Total	274	100

Source: Fieldwork (2021)

The findings further showed that about 47% of the respondents were not sure whether their disconnection was associated with their inability to pay, 10% of the respondents strongly agreed, 13% disagreed and 4% strongly disagreed that the disconnection of service delivered to them was due to their inability to pay for the water they utilized. Similar to this study, the literature reveals that inadequate water availability is a serious problem for poor people (Gleik, 2000; Gleik, 2008; Gleik, 2002; Matose, 2013; Kumwenda, 2006). The findings implied that perhaps a little below half of the households never encountered disconnection problems because they did not have taps or water meters in their yards and still depended on surface water sources.

5.4 Economic scale and Water supply in the uMlalazi Local Municipality

In rural communities, water is not only used for consumption but, is used to support the domestic economy. Water is equally a vital resource for agriculture which is the backbone of the rural economy of the municipality. It means that the non-availability of water would inevitably affect rural economic activities such as small-scale farming and micro-businesses in the municipality. Irrigation systems and fishing, food production and food security becomes possible with the availability of water. Again, rural industries like masonry, brick laying and domestic animal raising depends on water for building and for flourishing animal husbandry respectively. Thus, where water becomes a shortage in supply, the socio-economic livelihoods and health of rural households become severely affected. It means that in the municipality, water is not only utilized for domestic purposes but also for productive uses. Productive uses include activities that enable the rural dwellers to grow a wide range of agricultural produce, from homestead vegetables and fruits to subsistence crops, livestock rearing and running of micro-enterprises, like hairdressing and food vending, all of which required sufficient water to thrive. In Table 5.29, the study presents the perception of the respondents on the size of the local economy and whether it was big enough to support the municipality to increase water subsidies to poor households.

Table 5.29: Size of the economy of King Cetshwayo is big enough to allow the municipality to increase the subsidy of poor households

Response categories	Frequency	Percent
Agree	86	31
Strongly Agree	131	48
Not Sure	57	21
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The study found that 48% of the respondents strongly agree that the size of the domestic economy was big enough to allow for the introduction of water subsidies and 31% agreed that indeed King Cetshwayo can make a huge difference regarding subsidy increase. On the other hand, 21% of the households were not sure whether the municipality was capable of introducing water subsidies for the poor households. The respondents who were not sure were perhaps not aware of the financial capacity of the municipality to support free riders of water use in the municipality. In Table 5.30, it was apparent that most of the households' respondents strongly disagreed (62%) that households in the municipality had access to piped water within the dwelling units. These findings contrast with King Cetshwayo District statement about piped water within the dwelling.

Table 5.30: Households in uMlalazi municipality have access to pipe water within the dwelling

Response categories	Frequency	Percent
Agree	33	12
Strongly Agree	0	0
Not Sure	71	26
Disagree	0	0
Strongly Disagree	170	62
Total	274	100

Source: Fieldwork (2021)

Meanwhile, 26% of the households were not sure and 12% agreed that most households had water connected to their dwelling units, the rest of the respondents argued against this statement. According to the findings, 26% of the households were unaware of their homes' access to piped water connection as claimed by the uMlalazi Local Municipality. Those who supported or confirmed that they have water connection to their homes may be among the households who had access to water inside their home yards. In Table 5. 31, most of the

households still depended on surface water sources such as rivers, lakes, and lagoons as their main sources of drinking water supply in the municipality.

Table 5.31: Main concern is that households still depend on surface water as their main source of water supply.

Response categories	Frequency	Percent
Agree	202	74
Strongly Agree	59	22
Not Sure	13	5
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

Approximately, 74% of the respondents agreed that most of the households relied on surface water for drinking and for productive purposes, 22% strongly agreed while 5% were not sure that the households still depended on unsafe water sources. The findings suggest that water supply is a main concern among the households in the rural communities. This is perhaps that water touches every aspect of their lives; social, economic, and domestic activities. In terms of power to intervene in the water situation, the study found that the households were mostly aware that King Cetshwayo District as the Water Service Authority in the municipality had the mandate to intervene to resolve the water situation being experienced by the households. The findings support Osundare (2020) who found that households continue to rely on unimproved water sources as stated. Again, Allouche (2016) mentioned that water is scarce for certain sectors like agriculture. Kahinda (2007) also confirmed that rivers carry water-borne diseases, such as water-washed diseases transmitted by vectors reproducing in water, river and stream water can be dangerous to drink.

Table 5.32: King Cetshwayo District as a Water Service Authority of uMlalazi Municipality has the obligation to intervene on how to improve water sources and water quality

Response categories	Frequency	Percent
Agree	48	17
Strongly Agree	226	83
Not Sure	0	0
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

In Table 5.32, most of the respondents (83%) strongly agreed and 17%) agreed that the King Cetshwayo District had the obligation to improve the water source and quality issues confronting the households in the municipality. The findings showed that households view improved water supply and water quality as crucial within the communities. Local governments should collaborate to effect change in the dwindling access and quality of water used by the households as it can have adverse effects on the health of the residents. In Table 5.33, it appeared that the Municipality was however committed towards eradication of barriers to water access. Findings are in line with uMlalazi Local Municipality, (2021) that KCDM developed a new strategy aiming to eliminate backlogs by providing water with a volume of 5 litres per capita per day to at least 90% of the backlog population within 1000 m walking distance, and water with a volume of at least 100 litres per capita per day to at least 35% of the backlog population with the RDP level of service.

T**able 5.33: Municipality is committed to eradicating backlogs in water access**

Response categories	Frequency	Percent
Agree	134	49
Strongly Agree	65	24
Not Sure	75	27
Disagree	0	0
Strongly Disagree	0	0
Total	274	100

Source: Fieldwork (2021)

The study found that about 49% of the respondents agreed that despite lacking in logistical and funding support, the municipality was still committed towards the eradication of the barriers which impeded equitable access to water, 24% strongly agreed and 27% were not sure. The findings mean that the households were still in anticipation of better water parity in water excess. They were expecting new development within their local municipalities

concerning the eradication of blockages which infringed on their rights to fair, accessible and quality of water. Nonetheless, the respondents who were not sure was an indication that perhaps those people had lost faith in the municipality and thus were unsure of the prospect for improved water delivery in their communities.

5.4.1 Hypothesis test results and implications

The null hypothesis of the study was that there is no relationship between the economic scale and the distribution of water services. This was against an alternative hypothesis which assumed that there is a significant relationship between the economic scale and distribution of water services in the uMlalazi Local Municipality. From Table 5.34, the finds showed that the chi-square values for the variables were; size of economy (chi-square = 30.445[a], df = 2, p-value = 0.00 and n= 274); access to pipe water within dwelling (chi-square = 109.540[a], df = 2, p-value = 0.00 and n = 274); dependence on surface water (chi-square = 212.723[a], df = 1, p-value = 0.00 and n = 274), water quality (chi-square = 115.635[b], df = 2, p-value = 0.00 and n = 274), decreased water supply (chi-square = 12.314[a], df=2, p-value = .002 and n = 274) and commitment to eradicate backlogs (chi-square = 30.445[a], df= 2, p-value = 0.00 and n = 274).

Table 5.34: Relationship between economic scale and distribution of water services

	Test variables					
Test Statistics	Size of economy	Access to pipe water within dwelling	Dependence on surface water	Water quality	Decreased water supply	Commitment to eradicate backlogs
Chi-Square	30.445[a]	109.540[a]	212.723[a]	115.635[b]	12.314[a]	30.445[a]
Df	2	2	2	1	2	2
Asymp. Sig.	.000	.000	.000	.000	.002	.000

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 91,3.

b. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 137,0.
Source: Fieldwork (2021). Note, n =274

In Table 5.34, the study found statistically significant relationships between the economic scale and water service delivery. Since the chi-square value of 0.000 is less than the alpha level (0.05), we fail to accept the null hypothesis, rather the alternative hypothesis. It means that in the uMlalazi Local Municipality, the size of the local economy, access to pipe water within dwelling, dependence on surface water, water quality, decreased water supply and commitment to eradicate backlogs in the area are significantly related with water services

delivered to the rural households. Therefore, the quality of water services is likely to improve if the municipality implement measures to overcome service delivery blockages, increase water supply, improve the quality of water, reduce the continuous reliance on surface water and connect water to the dwelling units of the households.
The scale of the economy must be addressed in order to ensure an equal distribution of water services (Costanza, 1998). As in 2015, the Sustainable Development Goals were introduced to replace the MDGs development framework, setting an ambitious goal: by 2030 to achieve equitable access to affordable and safe drinking water for all. (UN, 2015). This agrees with principles of ecological economics, natural capita and basic human need regarding equitable supply.

5.5 Conclusion

This chapter reveals that households water users tend to suffer where municipalities become inefficient in service delivery. The findings highlight that the provision of water for rural communities faces challenges, ranging from the lack of capacity, funding, logistics and skills within the municipalities. The study shows that some interventions like the Water Service Act and Free Basic Water policy have been implemented to address service delivery gaps and achieve equity and human rights to water. However, a worsening situation still exist. These obstacles delay the process of providing services to communities and must thus be addressed in their planning. Additionally, the study acknowledged that water problems had adverse implications on the health and well-being of the local people. Unreliable water access makes the households susceptible to disease outbreaks, arising from their continued consumption of unimproved water. The study concludes that the water distribution system is insufficient and require modifications in order to improve access to water within the local municipality. The quality of water services remains ineffective, highlighting the need for the municipality to implement measures to overcome service delivery blockages, increase water supply, improve the quality of water, reduce the continuous reliance on surface water and connect water to the dwelling units of the households.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the summary of findings, conclusion and recommendations of the study in line with the objectives.

6.2 Summary of main findings

According to the findings, equitable water delivery is a challenge in the uMlalazi Local Municipality. As a result, unimproved water sources such as rivers and groundwater are still used by local populations. The studies also revealed that the location, income, and size of the families all influenced their ability to acquire water. This indicates that the characteristics such as household wealth, location, and size have an impact on equitable water supply.

The study further established that household water taps in uMlalazi is marked by a lack of accessibility and poor service quality in terms of sporadic availability. The researcher established that available water sources are far away from their households and they still walk more than 200m to have access to the water sources. In addition, the investigation discovered that free basic water was infrequently provided. The uMlalazi Local Municipality has a low economic scale due to low-income levels and the majority of the population's continuous reliance on MIG and Equitable Share to cover their basic needs. However, the city of uMhlathuze should act by cross-subsidizing uMlalazi in order to improve people's livelihoods.

6.3 Factors which influence equitable access to improved water supply in the uMlalazi Local Municipality

The finding of the study revealed that major factors influencing the equitable access to improve water supply is the size of the household, income, location of dwelling units and ability to pay for water. Most of the households do not have piped water connected to dwelling units, hence, the communities walk long distances in order to fetch water from unsafe sources. The few improved piped water facilities were outdated and broken down. Another key finding of the study was that the respondents admitted that they do not have access to 50 litres of water per day and per person. Also, the findings revealed that some people have access to improved water resources. Furthermore, the study found that access to free basic water was occasionally provided. The uMlalazi Local Municipality has a low economic scale due to the low-income status, and the continued dependence of the bulk of the population on MIG and

Equitable Share to meet their basic necessities. In order to enhance people's livelihoods, the city of uMhlathuze should act by cross-subsidizing uMlalazi.

6.4 Enabling equitable access and human rights to improve drinking water supply

In South Africa, section 27(1) of the Bill of Rights guarantees all the people of South Africa the right to access adequate food and water. The constitution guarantees water rights because water is a resource necessary for human survival and wellbeing. Achieving water equity requires the government and the municipality to ensure that all persons are provided with adequate, safe and improved drinking water irrespective of their socio-economic conditions or geographic locations. In addition, the households had varied opinions and perceptions about water equity as being a fundamental human right. The household respondents perceived that the lack of daily access to 20litres of water constituted a violation to their fundamental human rights. However, most of them were not aware of their rights to water access as enshrined under the Bill of Rights of the 1996 constitution. The consequences for lack of awareness are that such households were not likely to place demands on the municipality nor their local governments even when their rights to water were being glaringly violated.

The findings highlight that water equity is an essential socio-economic pillar for promoting growth and development of rural settlements in the municipality. Quite importantly, although they may not necessarily be financially well-off, the households still treasured their rights to clean water. It also means that for the municipality to achieve rights to quality and adequate water, there is the need for the municipality to expand access to improved drinking water as mandated by the constitution.

6.5 Economic scale and Water supply in the uMlalazi Municipality

Water is used not only for consumption in rural communities, but also to support the domestic economy. Water is also a critical resource for agriculture, which is the municipality's rural economy's backbone. It indicates that a lack of water will definitely influence rural economic activity in the municipality, such as small-scale farming and micro-businesses. With the availability of water, irrigation systems, fishing, food production, and food security become possible. Again, rural businesses such as masonry, bricklaying, and domestic animal husbandry rely on water for construction and animal husbandry, respectively. As a result, when water becomes scarce, rural households' socioeconomic lives and health are severely harmed. It signifies that water is used not only for home reasons but also for substantial

productive purposes in the municipality. The study found that the size of the domestic economy was big enough to allow for the introduction of water subsidies. King Cetshwayo can make a difference regarding subsidy increase. The primary sources of drinking water included boreholes, dug-out-well, rainwater and piped connection to dwelling units. The data revealed that households believe they can do better with these types of water sources than rely on river streams, as well as if the government can strengthen the work of water programmes. Kufa, (2014) mentioned that uneven water access can be produced by natural phenomena, but it can also be created by human error and intent.

6.6 Hypothesis test

The study discovered statistically significant association between economic scale and the supply of water services. It indicates that in the uMlalazi Local Municipality, the size of the local economy, access to piped water within the home, reliance on surface water, water quality, decreasing water supply, and commitment to eliminate backlogs in the area are all linked to water services provided to rural families. As a result, if the municipality takes steps to address service delivery bottlenecks, increase water supply, enhance water quality, minimize reliance on surface water, and link water to residents, the quality of water services will certainly improve.

6.7 Implication of the study

The study has been able to establish the importance of access to good water as part of human values and human life. The study identifies the role governments and other relevant stake holders can play in providing access to good water to the people and the need for the government to provide free basic water supply to the people in their respective locations.

The provision of free and basic water is essential for survival. The FBW policy was thus introduced to guarantee improved water access to all South African citizens. This is because water access can reduce the spread of diseases; improve the health and well-being of households. In view of this, water in the municipality should not be viewed as an economic commodity. Besides, free water access could enhance poor households' sense of dignity and freedoms to reduce the drudgery of women and children who are mostly responsible for fetching water. Nonetheless, the implementation of the FBW policy is beset with implementation gaps.

The finding revealed that water affects every facet of human life; socially, economically, politically and environmentally. It means that limited access or non-availability of water among

the rural dwellers could become a recipe for ill-health and increase mortality among the households in the rural areas. Human life, wellbeing and productivity levels will likely to be affected in the municipality with limited or non-availability of drinking water, this study deduced that adequate water will be needed to ensure that the households meet their water needs. To achieve equity, there is the need for the households to have a say in the determination of water distribution at the local level. This is because, varied uses of water and the understanding of household's attachment to water availability, access and distribution is essential to ensure that there is fairness in water allocation at the rural level.

More revealingly, since water access is a human right, the findings of this study stressed that for universal fulfilment of the rural people's rights to improved drinking water to become a reality, there is the need for the South African government to streamline the varied use of water into water policy making, recognising the multi-scaled uses of water resources in rural settings.

6.8 Recommendations

Based on the findings of this study, the following recommendations are hereby offered:

1. The municipality's initiative to provide free basic water should be expanded to provide water to the most disadvantaged households. Also, stand pipes should be observed and repaired so they continue to serve as sources of water for the rural households.
2. In order to monitor the concerns of water rights and equity, the local government and the district municipality should have access to all ward data and water sources.
3. To reduce the burden of women and girls travelling long distances to obtain water, each family should be equipped with water tanks. Equal rights for men and women are essential. If gender equality is practiced in the rural water sector.
4. Government's direct involvement in participation, cooperation, coordination and developing a culture of empowerment should bring better water services for the local community of uMlalazi.

6.9 Contribution to knowledge

This study examines and determine the factors that influence equitable access to improved water supply in uMlalazi, a social setting which remained unexplored. The study is a useful reference material for researchers conducting similar research on accessibility to water. The study provides data that can assist policy-makers in taking decisions related to access to water, equity and human rights to water in South Africa. The study employed quantitative

methods and joined the debate concerning the theory of ecological economics as related to access to water. The scale of the economy and treating water as a natural capital are some of the key theoretical contributions to knowledge that this study brings in ecological economics debates. The thermodynamics of water service delivery which is linked to the continuous availability of the electricity as a source of power in purification and treatment plants is also another unique theoretical contribution to knowledge. The weaknesses of the implementation of the Free Basic Water Policy of the South African Government illustrates that this developing country is still a long way in achieving the progressive realisation of the right to water. The study acknowledges attempts made through the FBWP, and contributes that universal access to water should not be limited to an implementation of a project and including the small number of people or households who are regarded as indigents and other criteria used to limit universal access to water.

6.10 Suggestion for further studies

The following areas are suggested for further studies:

1. There is the need for a study on equal access to water in rural areas. Rural areas appear to be overlooked in the water sector development. Therefore, further studies on the same or similar subject matter can be repeated in other provinces and to help policy makers.
2. More research should be conducted on the equitable water supply, and share with national department and be available for community at large.

6.11 Conclusion

The study highlighted that inequitable water supply affect households. Rural households continue to struggle with urban-biased water systems, with rural households still relying on rivers and standpipes for water rather than storing it in their yards. Water delivery in rural areas is negatively impacted by these spatial challenges. As a result of this problem, rural communities have been left out of the quality water reticulation system. This study concludes that despite the several efforts and intervention such as the Water Act, the Bill of rights, IWRM and FBW policies which have been made to address water constrains, the post-apartheid South Africa is still beset with several challenges of enabling water access to all persons. Water delivery difficulties continue to persist particularly in rural areas. At the uMlalazi Local Municipality, the communities bear the brunt of its separate municipalities' poor service delivery in terms of water supply. The people of uMlalazi Local Municipality area have little choice but to walk long distances to fetch water from unsafe sources that could potentially

cause diseases. While the infrastructure is in place, there are either no or broken water sources to feed the system, resulting in the entire supply system failing to satisfy the community's daily water demand. The WSA that serves this town is currently encountering a number of obstacles in carrying out its activities and meeting the constitutional duty of delivering sustainable water services. As a result, they under-budget for the true expenses of maintaining and extending their services. Poverty is one of the issues raised in this study as most of inhabitants rely on government funding for water.

Furthermore, a lack of capacity and expertise is a contributing factor in many local municipalities. This is because it makes the WSA's ineffective and unable to handle public funds and maintain proper accounting procedures. Governments grants, in the end do not accomplish the goals for which they were designed. Furthermore, the majority of rural villages are situated in locations with no reliable bulk water supply. Drawing water from far flung rivers is consequently costly, as it necessitates the construction of infrastructure to pump, clean, transport and reticulation of water.

The study conclude that income and location of the households are factors that influence equitable water supply, households cannot access the quantity they desire and the cost is high. However, tap water would have been the best option for water supply to the households because of its good quality and easy to access. The infrastructure is there but not maintained. As a result, standpipes have been placed, boreholes have been excavated, and reservoirs have been built in most settlements, but there is no water in the system. Ground water on the other hand is easily accessible in satisfactory quantity, but its accessibility is also limited due to its poor quality (chemically and biologically). This means that the water cannot be used without further treatment. To sum up, this chapter has provided a summary of the objectives that were set to be achieved. Furthermore, it has provided suggestions and recommendations from the gaps discovered in equitable water access, identified areas for further research.

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exists 12 years. *The inhabitants own their houses and do not pay rent. The average household size is*, pp.5-6.

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APPENDIX A: PERMISSION LETTER

UNIVERSITY OF ZULULAND

P.O. Box 124

Kwa-Dlangezwa

3886

30 March 2021

UMlalazi Municipality

The speaker of Council/ Cllr.M.E. Diamini

P.O. Box 37

Eshowe

3815

REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY AT WARDS 17 AND 18 WITHIN UMLALAZI LOCAL MUNICIPALITY.

My name is Ntokozo H. Bhengu. I am a registered Master's student at the University of Zululand. My research topic is Factors Influencing Equitable Access to Improved Water Supply in uMlalazi Municipality ward 17 and 18. My focus area will be Free basic water supply within the uMlalazi area in wards 17 and 18. Data will be collected through structured questionnaires with individual interaction. The information gathered will strictly be for research purposes and it has nothing to do with political and social power and proper research ethics will adhere to all times. The findings and recommendations will be presented to uMlalazi ward 17 and 18 communities as a way of giving back to them.

Your approval in this regard will be greatly appreciated.

Yours Sincerely

Miss Ntokozo Herdwirg Bhengu

E-mail: BhenguH@unizulu.ac.za

Cell: 063 250 4879

THE SPEAKER
COUNCILLOR M.E DLAMINI
UMLALAZI MUNICIPALITY
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CELL: 083 498 8891

UNIVERSITY OF ZULULAND

FACULTY OF ARTS

For the degree of

Master of Arts in Development Studies

In the field of

Development Studies

With the title:

Factors Influencing Equitable Access to Improved Water Supply in uMlalazi Local Municipality

Candidate: Ntokozo Herdwirg Bhengu

Student-number: 201512191

Supervisor

Dr. I.S. Nojiyeza

Date of submission: December 2021

Note to respondents:

- I need your assistance with my research project, which is titled "Factors Influencing Equitable Access to Improved Water Supply in the uMlalazi Local Municipality."
- Although I would appreciate it if you could assist me, you are not obligated to participate in this study.
- Your name will be **known only to the** researcher; hence, any information supplied will not reveal your identity.

Appendix A: PROJECT INFORMATION AND INFORMED CONSENT

Receive my greetings

My name is Ntokozo Bhengu and I am a post graduate student at the University of Zululand. I am doing a research based on equitable access to water supply. I need your assistance in completing this project. However, participation is voluntary and should you decide to participate, you may withdraw at any stage during this project.

How to respond to questionnaires?

- Please cross next to your chosen answer
- Please answer the questions as truthfully as you can
- If you do not feel comfortable answering a question, you can indicate that you do not want to answer. For questions that you answer, your responses will be kept confidential

Thanking you in advance for your time and participation.

INFORMED CONSENT

I, the undersigned…….....(ID is optional ……) of …… (Physical address).

I have read the details of the project, or have listened to the oral explanation thereof, and declare that I understand it. I have had the opportunity to discuss relevant aspects with the researcher and declare that I voluntarily participate in the project. I hereby give consent to participate in the project.

Signature of the participant ……
Signed at …… on ……..

Witness

Name……..Name…….
Signature…… Signature ……
Signed at …….. Signed at…….
Contact telephone number ……

Characteristics of respondents

Please answer the following questions by crossing or ticking next to the correct answer.

1.1. Please state your age

Under 20 years	
21-30 years	
31-40 years	
41-50 years	
51-60 years	
61+	

Gender

Female	
Male	

Types of income

Salary	
Wages	
Child support grant/	
Elderly pension	

Types of Dwelling

RDP Houses	
Suburbs	
Mud houses	
Informal Settlements	
Flats	

Questions to respondents

Importance of equitable access to improved water supply

1.1. A person not having at least 20 litres of clean water per day has her or his fundamental rights violated.

Agree	**Strongly agree**	**Not sure**	**Disagree**	**Strongly disagree**

1.2. Each person must have at least 50 litres of water per day.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

1.3. Improved water sources are available and yet are far away from household.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

1.4. Time for collecting water should not be more than 30 minutes.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

1.5. For a person to do the washing cooking, drinking to ensure basic hygiene requires about 30-40 litres of water per day.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

1.6. All citizens must have equal access to water.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

1.7. Not all people have the ability to pay for water.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

1.8. Willingness to pay and standardisation to the pricing plans does not benefit all household.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2. **Provision of free basic water to inhabitants**

2.1. Poor maintenance of water available resources such as broken pipes that supply water to the households as well as increasing population could be some of the factors that may lead to a deepening of poverty situation in many areas.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.2. As free basic water policy of King Cetshwayo District allows only 6 kilo litre per month and other cities like Durban receive 9 kilo litre per month, therefore municipalities have the responsibility to close this gap.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.3. The ratio of un-piped to the piped households has decreased from about 8:1 in 1967 to 2,6:1 in 2005 due to pressure on piped water facilities in municipalities.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.4. Improved water supply includes boreholes, wells, rain water and piped connection located into the neighbour's house and piped connection on premises or their plots.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.5. It has been observed that rich and middle – class have built their homes near piped water, allowing direct access to subsidised water from the government.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.6. Poor people from rural areas only receive free basic water (FBW) from the government as part of service delivery to the communities simply because they cannot afford to pay for their services.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.7. Access to water must be a right not an honour determined by a household's ability to pay.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.8. The funding for improvements to water and sanitation system will come from the national government through the Municipal Infrastructure Grant (MIG).

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9. MIG is funding arrangement with the aim of assisting the poor to gain access to infrastructure and Equitable Share Grant (ESG).

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.1. Equitable Share Grant serves the low-income households by ensuring that services are delivered efficiently or through local revenue collection or equitable shares.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.2. National, Provincial and Local is entitled to an equitable share of revenue raised nationally to enable it to provide basic services and perform the functions allocated to it.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.3. The Division of Revenue Act takes into account the functions assigned to each sphere and the capacity of each government to pay for these functions through own receipts and revenue.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.4. Equitable share is the financial allocation in the form of an unconditional grant that enable municipalities to provide basic services to poor households.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.5. Equitable share enables municipalities with limited resources to afford basic administrative and governance capacity and perform core municipal functions.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.6. Access to basic water and sanitation must be provided at no cost to poor families in respecting the constitutional rights to water while maintaining financial sustainability.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.7. Each municipality decides if free basic water is made available to everyone or only to the poor community.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.8. South Africa loses a lot of water through leaking pipes and inadequate infrastructure.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.9.9. Inability by the municipalities of dealing with the issues of maintenance and operational challenges results in the loss and compromised quality of water.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.10. The improved access to water services has reduced the time spent and has given more time for productive activities.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.11. The rich and poor can enjoy access to water while government assist to pay for their services.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.12. Poor inhabitants in rural areas who receive a limited amount of water for free through standpipes do not benefit fully.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.13. You are required to pay for water that is used over and above the free supply.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.14. How many people in your family?

Please cross or tick next to the correct answer.

3	5	8	10	More

2.15. Some of the households are more than 8, more allocation needs to be given in line with equitable distribution outlined in Water Service Act of 1998.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

2.16. Poorest of the households are eventually disconnected due to the inability to pay for water.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

Economic scale and Water supply

3. The economic size of the economy of King Cetshwayo is big enough to allow the municipality to increase the subsidy of poor households.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

3.2. uMlalazi municipality has 7154 (15,2%) households that have access to pipe water within the dwelling.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

3.3**.** Thirteen thousand three hundred and fifty-one (13 351) (28,4%) have access to water inside the yards and the main concern is that almost 13% of households are still depending on the rivers and streams as their main source of water supply.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

3.4**.** King Cetshwayo District as Water Service Authority of uMlalazi Municipality has the obligation to intervene on how to improve water sources and water quality.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

3.5. Water supply has decreased from 81% to approximately 34% between 2001 to 2018.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

3.6. Municipality is committed to eradicate backlogs with the new strategy to provide water with the volume 5l/capita/day at least to 90% of the backlog population within 1000m walking distance and, to provide water at least 100l, capita/day to 35% of the backlog population with the RDP level of service.

Agree	Strongly agree	Not sure	Disagree	Strongly disagree

THE END THANK YOU!!!!!!

UNIVERSITY OF ZULULAND

FACULTY OF ARTS

For the degree of

Master of Arts in Development Studies

In the field of

Development Studies

With the title:

Factors Influencing Equitable Access to Improved Water Supply in uMlalazi Local Municipality

Candidate: Ntokozo Herdwirg Bhengu

Student-number: 201512191

Supervisor

Dr. I.S. Nojiyeza

Date of submission: December 2021

Okulindeleke kubaphenduli:

- Ngicela usizo lakho ngocwaningo engilwenzayo elimayelana nokungagculiseki zezabelo zamanzi emakhaya.
- Ngifisisa ukuqinisekisa ukuthi noma ungisiza **AKUYONA IMPONQO** ukuthi wenze njalo kodwa isicelo.
- Imininingwane yakho **IZOKWAZIWA OWENZA UCWANINGO KUPHELA**.

Ngiyabingelela

Igama lami ngingu Ntokozo Bhengu owenza iziqu zebanga eliphezulu eNyuvesi YakwaZulu. Ngenza uphenyo mayelana nezinselelo ezingumthelela wokungabelwa amanzi ngokungagculisi emakhaya. Ngicela usizo ngokuthola ulwazi olufanele oluzophumelelisa loluncwaningo. Kepha ukuzibandakanya kusekuthandeni komuntu, akekho ophoqiwe kanti futhi unelungelo lokuhoxa noma kuyinini.

INDLELA EZOLANDELWA

- Ucwaningo luzothatha isikhathi esibalelwa emasontweni amane, okuyinga eyodwa. Labo abazimbandakanyayo bazocelwa ukuba bagcwalise amapheshana anemibuzo.
- Ngicela ukuthi ufake loluphawu (**X**) eduze nempendulo oyikhethayo
- Ngicela uphendule ngokwethembeka

Ngiyabonga kakhulu.

IMVUME OYIQONDAYO

Mina, lo osayinde ngezansi……
Inombolo kamazisi (ayiphoqelekile) ……..
Ohlala……..……(Ikheli lendlu).

Ngiyifundile imininingwane ngocwaningo noma ngiyizwile incazelo yalo futhi ngiyavuma ukuthi ngiyayiqonda. Ngibenalo ithuba lokubamba izingxoxo ezimayelana nemibandela ethile kanye nocwaningo ngakho-ke ngiyazibophezela ngokungaphoqiwe ukusiza kulolu cwaningo. Ngiyavuma ukuthi ngizoba yingxenye yocwaningo.

Isandla sokusayina salowo ozimbandakanyayo……..

Isayinwe endaweni yase ……ngomhla ka-…….

Ofakazi

Igama……. Igama……...

Ukusayina…… Ukusayina……...

Indawo yase……. Indawo yase……

Ucingo engitholakala kulo …….

APPENDIX C : QUESTIONNAIRE

1. Isilinganiso seminyaka yakho

Ongaphansi kweminyaka engu 20	
21-30 iminyaka	
31-40 iminyaka	
41-50 iminyaka	
51-60 iminyaka	
61+ nangaphezulu	

1.1. Ubulili

Ngingowesifazane	
Ngingowesilisa	

1.2. Izinhlobo zomholo

Uhola ngempela nyanga	
Uhola ngesonto/kwamabili	
Isibonelelo sezingane	
Isibonelelo sabadala	
Isiboneleleo sabakhubazekile	

1.3. Izinhlobo zezakhiwo zezindlu enihlalakuzo

Indlu yomxhaso	
Indlu Kanokusho	
Indlu yodaka	
Imijondolo	
Eflethini	

1. Umuntu ongatholi amanzi angamalitha okungenani awu 20 ahlanzekile ngosuku ilungelo lakhe liphazamisekile.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

1.1. Umuntu ngamunye kumele ngabe uthola amanzi anganga malitha awu 50 okungenani ngosuku.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

1.2. Izikhungo zamanzi ahlanzekile ezikhona ziqhelile kunasemakhaya.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

1.4. Isikhathi sokuyokha amanzi akufanele seqe kwimizuzu engaphezu kwewu 30.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

1.5. Umuntu kumele athole amalitha asuka ku 30-40 wamanzi ukuhlanza izingubo kanye nezitsha nokuqinisekisa inhlanzeko.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

1.6. Akuyena wonke umuntu ongakwazi ukukhokhela amanzi.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

1.7. Ukuzinikela nezinga lohlelo lwezimali azenelisi bonke abantu.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

1.8. Zonke izakhamuzi kumele zithole isabelo samanzi ngokulingana.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2. Izabelo zesibonelelo zamanzi emakhaya.

2.1. Ukunganakekelwa kahle kwezukhungo zamanzi ezikhona njengamapayipi avuzayo ahambisa amanzi kubahlali nokunyuka kwesibalo sabantu,kungaba esinye sezizathu ukuthi sigcine sihlupheka ezindaweni eziningi ezisemakhaya.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.2. Umgomo wezamanzi wase King Cetshwayo District uvumela amalitha 6kl ngenyanga kanti ezinye izindawo njengase Thekwini zithola amalitha angango 9 kl, ngenyanga. Ngakhoke umasipala unesibophezelo sokuba avale leli gebe.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.3. Isabelo samanzi angahambi ngamapayipi kuya kwahamba ngamapayipi kuzakhamuzi ehlile ngamazinga asuka ku 8:1 ngo 1967 kuya 2,6:1 ngo 2005 ngenxa yokunganakekelwa kahle kwamapayipi ngumaspala.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.4. Amanzi ahlanzekile afaka amapitsi, amanzi enmvula kanye nahamba ngamapayipi emakhaya nakomakhelwane.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.5. Kubonakele ukuthi izicebi Kanye nabangaswele kangako imizi yabo iba seduzane nezindawo abathola khona kalula amanzi kahulumeni.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.6. Abantu abahlwempu bathola amanzi esibonelelo sikahulumeni ngohlelo loMasipala ngoba bengakwazi kukhokhela usizo lwabo.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.7. Ukuthola amanzi kufanele kube yilungelo lakho hhayi ngoba ungakwazi ukuthi uwakhokhekele.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.8. Izimali ukuthuthukiswa kwezamanzi nezendle ziphuma kuHulumeni ngohlelo lwe Municipal Infrastructure Grant (MIG)

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9. Municipal Infrastructure Grant loluhlelo lwezimali lwenzelwa ukusiza abantu abaswele ngokuthi bathole izinsiza komaspala basekhaya nangohlelo lwe Equitable Share Grant (ESG).

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.1. Equitable Share Grant (ESG) lolu uhlelo olusisa izakhamuzi ezihola imali encane ukuba nabo bakwazi ukuhlomula ngokushesha komasipala basemakhaya ngokukoleka intela kuze sithole ukulingana sonke.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.2. Hulumeni wezwe lonke,izifundazwe kanye nowasekhaya banegunya kwizabelo zezimali ezisungulelwe ukusisa ngezinzisa zikahulumeni ngikwezinhlelo zakhona.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.3. Umthetho wezokwahlukaniswa kwamafa kahulumeni uzibophezele ngokuletha usizo olwahlukene emiphakathini ngokwezinhlelo ezibekiwe.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.4. Ukwabelana ngezabelo zezimali komasipala kubiza ukuthi kungabi namigomo nemibandela makusizwa noma kuzohlomula abampofu.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.5. Equitable share inikeza omasipala igunya lokusebensiza izinsiza kusebenza abanazo ukwenza izimfanelo ngokohlelo lomasipala.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.6. ukutholakala kwamanzi Kanye nezindlu zangasese kumele kutholakale kalula ngaphandle kokukhokhelwa ngokomthetho oshicilelwe eMzantsi neAfrika kube kunakekelwa ezezimali.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.7. Umasipala ngamunye uwenza izinqumo ngokuthi isibonelelo samanzi sitholwa nguwowonke umuntu noma ngabasweleyo.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.8. Mzantsi Afrika ulahlekelwa amanzi amaningi ngenxa yokuvuzelwa ngamapayipi amanzi nokunganakekelwa kwawo.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.9.9. ukungaphumeleli kahle komasipala ekunakekelweni nosekuxazululeni izinqinamba abahlangabezana nazo kuholele ekutheni kubenzima ukuthola amanzi ahlanzekile.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.10. Ukwehla kwesikhathi sokuyokha amanzi kwenza izinto zibelula nokuqhubeka neminye imisebenzi eya phambili.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.11. Abadla izambane likapondo kanye nabaswele bangathokozela amanzi ehlanzekile ngokusizwa uhulumeni ukukhokhela ingxenye yamanzi.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.12. izikhamuzi zasemakhaya eziswele azihlomuli ngokwenele ukuthola isibonelelo samanzi.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.13. Umuntu ulindeleke ukuthi awakhokhele amanzi uma eseqe isibalo sesibonelelo esibekiwe.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.14. Bangaki abantu abahlala kulomdeni.

Ngicela ufake uphawu “x” maqondana nebhokisi elifanele.

3	5	8	10	more

2.15. Isibalo seminye imindeni singaphuzulu kwesibalo sabantu abayisishagalombili isibalo samanzi kumele sithi xaxa njengokubeka kwe Water Service Act of 1998.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

2.16. Izakhamuzi eziswele zigcina zinqanyulelwa ukusebenza kwamanzi ngesimo sokungakwazi ukuwakhokhela.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

3. Umnotho nesabelo samanzi

3.1. Umnotho wakaMasipala wase King Cetshwayo mukhulu ngokwanele ukuthi unganyusa isibonelelo komaspala basekhaya ukusiza abaswele.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

3.2. uMasipala waseMlalazi unezakhamuzi ezibalelwa ku 7154 (15,2%) ezithola amanzi ahamba ngamapayipi emakhaya abo

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

3.3. Izakhamuzi ezibalelwa ku 13 351(28,4%) ezinamzi kampompi egcekeni emakhaya kunokukhathazeka ngokuthi 13% wezakhamuzi zisakha amanzi emifuleni evulelekile njengesizinda sabo.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

3.4. KCD njenge WSA yase uMlalazi inesibophezelo sokungenelela ekuthuthukisweni kwezinhlelo zokutholakala kwamanzi ahlanzekile.

Ngiyavuma kakhulu	Ngiyavuma	Ngiyaphika kakhulu	Ngiyaphika	Anginasiqiniseko

3.5. Phakathi konyaka ka 2001 kuya koka 2018 lathi ukwehla izinga lokuphakela amanzi emakhaya.

Ngiyavuma	Ngivuma kakhulu	Anginasiqiniseko	Ngiyaphika	Ngiphika kakhulu

3.6. Masipala uzibophezele ngokuthi wehlise izinga noma uvale igebe lezabelo zamanzi ngokohlelo lukahulumeni okungenani ngo 5l/capita/ ngosuku noma okungenani ngo 90% kwizakhamuzi ezisalele ngemumnva abahamba ibanga 1000m ubude nabo bahlomule ngamanzi okungenani kube 100 L, capita/ngosuku kuya 35% wezakhamuzi ngohlelo lwe RDP.

Ngiyavuma	**Ngivuma kakhulu**	**Anginasiqiniseko**	**Ngiyaphika**	**Ngiphika kakhulu**

ISIPHETHO NGIYABONGA!!!!!!!!

APPENDIX D:UMLALAZI INDIGENT REGISTER

CAL MUNICIPALITY NT
REGISTER

NO.	Municipal Account Number	OWNER	APPLICANT	RELATIONSHIP WITH THE OWNER	Gender	Marital Status	Emp Status	ID NUMBER	APPLICANTS ID NUMBER	TEL / CELL NUMBER	Total Income per Household	ERF No	Ward No	Stand / Hse No	Address	AREA
1	150410	BAMFORD DM	ERIN A. FYNN		F	M	UN	6707260115088	6507230174086	0734040911	R 2 000	01504	07	1504	CLIVIA STREET	MPUSHINI PARK
2	150800	SOLOMON MS	OWNER		M	M	P	5310085218087		0766620322	R 3500	01508	07	1508	CLIVIA STREET	MPUSHINI PARK
3	151300	NAICKER D	OWNER		M	M	P	5212055183087		0828423060	R 3 560	01513	07	1513	CLIVIA STREET	MPUSHINI PARK
4	152100	KANAVATHIE	OWNER		M	W	P	5109110579087		0712345889	R 1 780	01521	07	1521	CLIVIA STREET	MPUSHINI PARK
5	152200	PADAYACHI G	OWNER		M	M	P	4508305111088		0354740008	R 3 955	01522	07	1522	CLIVIA STREET	MPUSHINI PARK
6	152400	WUDRAJ R	OWNER		F	D	P	5707200071087		0631246099	R 1 780	01524	07	1524	CLIVIA STREET	MPUSHINI PARK
7	152600	MAKHOBA P	JENNIFER MAKHOBA	DAUGHTER	F	S	UN	4409165523084	7510240273087	0721355981	R 2160	01526	07	1526	CLIVIA STREET	MPUSHINI PARK
8	152700	PILLAY M	SAROJ PILLAY		F	S	UN	5410025237054	7109150105080	0747628128	R 300	01527	07	1527	CLIVIA STREET	MPUSHINI PARK
9	153010	GOVENDER N	OWNER		F	D	UN	6708080168084		0635116127	R 2 000	01530	07	1530	CLIVIA STREET	MPUSHINI PARK
10	153301	MTHIMKHULU TW	NDUMISO N. BIYELA	SON	M	S	UN	6412125842089	9412225665080	0839462414		01533	07	1533	CYCAD STREET	MPUSHINI PARK
11	154400	NGUBANE (MHLANGA) LB	HLENGIWE N. MAGWAZA		F	S	E	6807210321081	8404230982080	0710909721	R 3 420	01544	07	1544	CYCAD STREET	MPUSHINI PARK
12	154600	PETER S	OWNER		M	W	P	5405255145084		0835975243	R 1 780	01546	07	1546	CYCAD STREET	MPUSHINI PARK
13	155100	DAVID MM	OWNER		M	S	UN	6906030762084		0793031258	R 1 200	01551	07	1551	CYCAD STREET	MPUSHINI PARK
14	155700	NAICKER K	OWNER		M	M	P	5803285108082		0782187474	R 3 560	01557	07	1557	CYCAD STREET	MPUSHINI PARK
15	156000	PILLAY T	CO-OWNER		F	D	UN	6905220775088		0734223058	R 0	01560	07	1560	CLIVIA STREET	MPUSHINI PARK
16	156610	PILLAY RM	OWNER		F	W	UN	7201190050085		0738307622	R 2 000	01566	07	1566	FIDDLEWOOD STREET	MPUSHINI PARK
17	157300	SAMINATHAM M	OWNER		F	W	P	5811140204087		0848297813	R 1 780	01573	07	1573	FIDDLEWOOD STREET	MPUSHINI PARK
18	157500	MURUGAN S	OWNER		M	M	P	5402035173080		0724073506	R 3 560	01575	07	1575	FIDDLEWOOD STREET	MPUSHINI PARK
19	157600	GOVENDER G	OWNER		F	W	P	5306080165083		0798049174	R 1 780	01576	07	1576	FIDDLEWOOD STREET	MPUSHINI PARK
20	158800	PILLAY N	OWNER		F	W	P	5408170689087		0785366085	R 1 780	01588	07	1588	FIDDLEWOOD STREET	MPUSHINI PARK
21	159300	MOODLEY A	OWNER		F	W	P	4311100149084		0837291060	R 1 780	01593	07	1593	FIDDLEWOOD STREET	MPUSHINI PARK
22	159600	NAICKER K	OWNER		M	S	E	5708100252082		0780522598	R 2 650	01596	07	1596	FIDDLEWOOD CRESCENT	MPUSHINI PARK
23	160000	PADAYACHEE SM	OWNER		M	M	P	5609055120086		0636003466	R 1 780	01600	07	1600	CLIVIA STREET	MPUSHINI PARK
24	160500	GOVENDER V	OWNER		F	S	P	5103010122080		0765625123	R 1 780	01605	07	1605	OUTSPAN STREET	MPUSHINI PARK
25	160900	MOHOMED A	CO-OWNER		F	M	UN	7507030253089		0791609319	R 2 000	01609	07	1607	CYCAD STREET	MPUSHINI PARK
26	161200	PILLAY T	OWNER		F	S	UN	7103010315088		0784301782	R 3 000	01612	07	1612	CYCAD STREET	MPUSHINI PARK
27	161620	MURUGAN R	OWNER		F	S	P	5311240781084		0633409549	R 1 780	01616	07	1616	CLIVIA STREET	MPUSHINI PARK
28	162900	CHETTY S	OWNER		M	M	P	4506015096086		0736323543	R 3 400	01629	07	1629	CYCAD STREET	MPUSHINI PARK
29	163000	GOVENDER M	OWNER		F	W	P	5610170778089		0732287383	R 1 780	01630	07	1630	CYCAD STREET	MPUSHINI PARK
30	163200	MURUGAN R	OWNER		M	W	P	5708245200087		0836836648	R 3 300	01632	07	1632	OUTSPAN STREET	MPUSHINI PARK
31	172900	NTULI MS	OWNER		F	M	P	5102050621084		07366885263	R 2 681	01729	11	1729	GREEN TWINSPOT	NORWOOD PARK
32	175100	ZULU PK (MLAMBO)	SIBUSISO Z. MLAMBO		M	M	UN	6810310469081	9202255554084	0810937542	R 0	01751	11	1751	GREEN TWINSPOT	NORWOOD PARK
33	181100	MKHIZE (XULU)	OWNER		F	M	UN	7106240679082		0731986007	R 1 600	01811	11	1811	RORKE STEET	SUNNYDALE
34	181800	QWABE NR	OWNER		F	S	P	4907030539086		0780434888	R 1 700	01818	11	1818	RORKE STEET	SUNNYDALE
35	182000	BHENGU MD	NKULULEKO M. SHOBEDE		M	S	UN	5308255694087	8812295738082	0767783824	R 600	01820	11	1820	FYNN STREET	SUNNYDALE
36	183000	MADLALA N	OWNER		M	M	SE	7005175360082		0720944705	R 2 500	01830	11	1830	RORKE STEET	SUNNYDALE
37	183100	MAGWAZA M	OWNER		M	S	UN	6909065776086		0724831211	R 0	01831	11	1831	RORKE STEET	SUNNYDALE
38	183310	MAKHOBA PL	OWNER		M	S	UN	8805145348086		0782758843	R 300	01833	11	1833	RORKE STEET	SUNNYDALE
39	183400	SMTH K E/LATE	FELICIA J. GREVE	DAUGHTER	F	S	UN	540621516908	8510070033089	0611353712	R420	01834	11	1834	RORKE STEET	SUNNYDALE
40	183600	LANDERS IA	OWNER		M	S	P	5106035036086		0827778767	R 1 780	01836	11	1836	RORKE STEET	SUNNYDALE
41	184100	NTULI ST E/LATE	NTOMBI M. MHLONGO	APPLICANT BOUGHT THE HOUSE	F	S	UN	7703180741086	7210140416080	0820862063	R 800	01841	11	1841	RORKE STEET	SUNNYDALE
42	184300	NTULI KI	PATIENCE N. HADEBE	APPLICANT BOUGHT THE HOUSE	F	S	UN	7410245626084	6804080714081	0723436995	R 800	01843	11	1843	RORKE STEET	SUNNYDALE
43	185300	MAKHUNGA BA	OWNER		F	S	P	3811220324088		0732357032	R 1780	01853	11	1853	MOORE ROAD	SUNNYDALE
44	185700	CLIFFORD HJEE	OWNER		M	S	P	4910125109088		0736463894	R 1700	01857	11	1857	FYNN STREET	SUNNYDALE
45	185800	ADONIS LM	TRAMAINE M. ADONIS		M	S	UN	5903075172080	9004185197087	0724603006	R 600	01858	11	1858	MOORE ROAD	SUNNYDALE
46	186420	BIYELA PDS	NTOMBIYENKOSI S. SIBIYA		F	M	UN	7303200777088	7303200777088	0637944301	R 920	01864	11	1864	MOORE ROAD	SUNNYDALE
47	186500	FYNN PM	OWNER		F	W	P	4005240045087		0824942783	R 2 500	01865	11	1865	FYNN STREET	SUNNYDALE
48	187000	BELCHER EC	OWNER		F	S	P	4711070187081		0835284827	R 1 700	01870	11	1870	FYNN STREET	SUNNYDALE
49	187400	BOWLER AF	OWNER		F	C	P	4003010054088		0603174313	R 1 800	01874	11	1874	MOORE ROAD	SUNNYDALE
50	187600	WERNER (BEZUINHOUT)	OWNER		F	M	P	5406300093089		0839438546	R 3 400	01876	11	1876	MOORE ROAD	SUNNYDALE
51	188300	HORSLEY LM	OWNER		F	S	UN	6207200153083		0726833734	R 420	01883	11	1883	WILLIAMSON STREET	SUNNYDALE
52	188400	MARAIS TD	OWNER		F	S	UN	6201040240085		0719461074	R 1 230	01884	11	1884	WILLIAMSON STREET	SUNNYDALE
53	188700	SAMUELS MS	OWNER		F	W	P	4310260392088		0832456729	R 1 780	01887	11	1887	WILLIAMSON STREET	SUNNYDALE
54	189000	SAMUELS W	OWNER		M	S	UN	6811035147085		0838221197	R 3 500	01890	11	1890	WILLIAMSON STREET	SUNNYDALE
55	189401	ZONDO MG E/LATE	NOKUKHANYA L. KHANYILE	DAUGHTER	F	S	UN	7406030552089	9501230122085	0659876465	R 0	01894	11	1894	WILLIAMSON STREET	SUNNYDALE
56	189600	SPENCER ER	OWNER		M	S	P	6111085008083		0782046679	R 2 250	01896	11	1896	RORKE STEET	SUNNYDALE
57	190100	JOHNS TK	OWNER		M	S	P	5808035030080		0710451705	R 1 780	01901	11	1901	FYNN STREET	SUNNYDALE
58	190400	MKHIZE TD	OWNER		F	S	P	5307130238086		0829592032	R 1 780	01904	11	1904	MARAIS STREET	SUNNYDALE
59	191300	GOODWIN MN	OWNER		F	S	P	5612200791082		0826816679	R 2 180	01913	11	1913	MARAIS STREET	SUNNYDALE
60	192000	SIBIYA ZE (MAGWAZA)	OWNER		F	M	UN	7011250533080		0719104715	R 420	01920	11	1920	MARAIS STREET	SUNNYDALE
61	192500	ANDERSON EB	OWNER		M	D	P	6009010153083		0842481771	R 1 780	01925	11	1925	FYNN STREET	SUNNYDALE
62	192700	GREGORY TL	OWNER		F	S	P	7012280358084		0726218575	R 1 700	01927	11	1927	FYNN STREET	SUNNYDALE
63	192800	MHLONGO TT	OWNER		F	S	UN	6709100329085		0717135518	R 400	01928	11	1928	FYNN STREET	SUNNYDALE
64	193200	RAMIAH MJ	OWNER		F	M	P	6401050066081		0839637920	R 2 080	01932	11	1932	FYNN STREET	SUNNYDALE
65	193300	SMITH LR	OWNER		F	W	P	4009190114089		0647420702	R 1 780	01933	11	1933	CHARLES HORSLEY	SUNNYDALE
66	193400	CHATEAU SC	OWNER		F	S	UN	6506130012081		0795661135	R 250	01934	11	1934	FYNN STREET	SUNNYDALE
67	193600	MARAIS MC	OWNER		F	S	UN	5907180160088		0788295702	R 1 120	01936	11	1936	FYNN STREET	SUNNYDALE
68	194100	MAGWAZA C	OWNER		M	M	P	5810195728081		0615260208	R 2 110	01941	11	1941	MARAIS STREET	SUNNYDALE
69	194300	SAMUELS RW E/LATE	DHULARIE CHETTY	LIFE PARTNER	M	S	UN	4804125147083	5909170049081	0815905719	R 1 000	01943	11	1943	MARAIS STREET	SUNNYDALE
70	194400	MAGWAZA FZ	LINDOKUHLE F. MAGWAZA	SON	F	S	UN	7009140526082	8806015890082	0765159089	R 500	01944	11	1944	MARAIS STREET	SUNNYDALE
71	195000	SPENCER I	OWNER		F	S	P	4112060022083		0796640884	R 1 780	01950	11	1950	MARAIS STREET	SUNNYDALE
72	195100	ZULU MW	OWNER		F	W	P	510922006986		0733712347	R 2 190	01951	11	1951	MARAIS STREET	SUNNYDALE
73	195300	BHENGU SF	OWNER		F	S	P	5308100947086		0722867381	R 1 780	01953	11	1953	MARAIS STREET	SUNNYDALE
74	195400	ZUMA PE	OWNER		F	S	P	5311110250087		0606264086	R 2 520	01954	11	1954	MARAIS STREET	SUNNYDALE
75	195600	MAKHOBA NG	DWANA MKHIZE	MOTHER	F	S	P	7310160878084	4708200184087	0798147081	R 1 780	01956	11	1956	MARAIS STREET	SUNNYDALE
76	196100	MPUNGOSE V	OWNER		F	S	P	4209300279083		0635775671	R 2 330	01961	11	1961	MARAIS STREET	SUNNYDALE
77	196600	CELE PT	OWNER		F	D	UN	6404040596080		0718303776	R 1 000	01966	11	1966	MARAIS STREET	SUNNYDALE
78	199000	GREGORY GM	OWNER		M	D	P	6202245157082		0737487622	R 1 780	01990	11	1990	DUNN STREET	SUNNYDALE
79	199801	MATOBELA FG	OWNER		F	W	UN	6001060777085		0784747726	R 980	01998	11	1998	DUNN STREET	SUNNYDALE
80	202700	NDLOVU ZO	OWNER		F	S	P	5111270296080		0783441443	R 2 110	02027	11	2027	BELCHER STREET	SUNNYDALE
81	203502	STALMEERSTER	MOVED OUT		F	S	UN	7211220132084		0835187785	R 800	02035	11	2035	FYNN STREET	SUNNYDALE
82	203600	FILAND DP	FESTUS G. FILAND		M	S	UN	7001045112084	7207175213085	0727828625	R 1 780	02036	11	2036	FYNN STREET	SUNNYDALE
83	205010	BAMFORD DC	ANSTEY M. BAMFORD	FATHER	M	S	P	6606175248085	4708155144086	0785879291	R 1 780	02050	11	2050	DUNN STREET	SUNNYDALE
84	205410	NSELE I M	OWNER		M	S	UN	7505045412088		0829564319	R 800	02054	11	2054	DUNN STREET	SUNNYDALE
85	205610	CELE GS	OWNER		F	D	P	5010260646082		0724647531	R 2 930	02056	11	2056	DUNN STREET	SUNNYDALE
86	205910	ROMA LC	OWNER		M	S	P	5104265025085		0825414817	R 1 780	02059	11	2059	DUNN STREET	SUNNYDALE
87	207000	CLIFFORD LHH	OWNER		F	M	P	4711010065082		0608327188	R 1 780	02070	11	2070	FYNN STREET	SUNNYDALE
88	207600	ADONIS A PB	OWNER		M	M	UN	6605085229086		0834750809	R 0	02076	11	2076	BELCHER STREET	SUNNYDALE
89	207900	HORSLEY TA	OWNER		F	S	P	4311180044080		0837450716	R 1 700	02079	11	2079	LEWIS STREET	SUNNYDALE
90	209000	BIYELA DG	OWNER		F	S	UN	7009040519088		0828471440	R 410	02090	11	2090	FYNN STREET	SUNNYDALE
91	209810	KHUMALO LT	OWNER		F	M	UN	6311180638087		0783271016	R 1 700	02098	11	2098	FYNN STREET	SUNNYDALE
92	209910	MTHETHWA PG	OWNER		F	S	UN	8601091083086		0847900214	R 910	02099	11	2099	FYNN STREET	SUNNYDALE
93	210400	ADONIS MMC	OWNER		F	S	P	5508220133083		0724603006	R 1 780	02104	11	2104	FYNN STREET	SUNNYDALE
94	246100	MATHABA LT E/LATE	NOMPILO C. MATHABA		F	S	UN	7204260717088	9004230616081	0783231452	R 1000	02461	11	2461	KHILANE GWALA STR	SUNNYDALE
95	246200	MASUKU KP	OWNER		F	S	UN	7111100943081		0727728989	R 500	02462	11	2462	KHILANE GWALA STR	SUNNYDALE
96	246300	MBATHA MV	OWNER		M	S	UN	7106165731082		0665796024	R 150	02463	11	2463	KHILANE GWALA STR	SUNNYDALE
97	246400	XULU TZ	OWNER		F	S	UN	7005230456081		0793886065	R 500	02464	11	2464	KHILANE GWALA STR	SUNNYDALE
98	246700	ZONDI NM E/LATE	PATRICIA N. ZONDI		F	S	UN	7506170577083	8204061536082	0818095754	R 820	02467	11	2467	KHILANE GWALA STR	SUNNYDALE
99	247000	VILAKAZI NF	OWNER		F	S	UN	7611240682085		0731030280	R 410	02470	11	2470	KHILANE GWALA STR	SUNNYDALE
100	247100	XULU MC	OWNER		M	S	UN	7610045310082		0761382618	R 150	02471	11	2471	KHILANE GWALA STR	SUNNYDALE
101	247200	BUTHELEZI PZ	OWNER		F	S	UN	6707240284087		0749695434	R 500	02472	11	2472	KHILANE GWALA STR	SUNNYDALE
102	247400	MDUNGE TN	OWNER		F	S	UN	7406060862085		0712852881	R 410	02474	11	2474	KHILANE GWALA STR	SUNNYDALE
103	247500	MPANZA F	OWNER		F	S	UN	6801040790086		0724616005	R 2600	02475	11	2475	KHILANE GWALA STR	SUNNYDALE
104	247700	XOTYANA N	OWNER		F	S	UN	6208090941082		0606904872	R 910	02477	11	2477	KHILANE GWALA STR	SUNNYDALE
105	247800	MAJOLA MG	OWNER		F	S	P	4110280174080		0768209538	R 1780	02478	11	2478	KHILANE GWALA STR	SUNNYDALE
106	247901	BIYELA MK	OWNER		F	S	UN	6008030437088		0729390850	R 2 200	02479	11	2479	KHILANE GWALA STR	SUNNYDALE
107	248200	DUBE NJ	OWNER		F	S	UN	6303190617086		0788183966	R 1 230	02482	11	2482	KHILANE GWALA STR	SUNNYDALE
108	248300	MTHEMBU J	OWNER		M	S	P	5710095892088		0647332160	R 3 560	02483	11	2483	KHILANE GWALA STR	SUNNYDALE
109	248400	MTHEMBU BP	OWNER		M	S	P	4802155187086		0712146886	R 1 780	02484	11	2484	KHILANE GWALA STR	SUNNYDALE
110	248600	NONDABA NA	OWNER		F	S	UN	7602121049080		0714684639	R 800	02486	11	2486	KHILANE GWALA STR	SUNNYDALE
111	248800	NXUMALO SC	OWNER		M	S	UN	7908035587085		0631613492	R 500	02488	11	2488	KHILANE GWALA STR	SUNNYDALE
112	249000	MTSHALI TB	OWNER		F	M	UN	6806080796083		0606801268	R 1 150	02490	11	2490	KHILANE GWALA STR	SUNNYDALE
113	249100	NDLOVU FN	ZANDILE T. NDLOVU		F	S	UN	5905051053083	6105230507080	0764687056	R 1 230	02491	11	2491	KHILANE GWALA STR	SUNNYDALE
114	249500	MHLONGO NC	WAMKELO P. MHLONGO	SON	M	S	UN	6203180807087	9905066225088	0647671397	R 1 110	02495	11	2495	KHILANE GWALA STR	SUNNYDALE
115	249600	PHUNGULA N	OWNER		F	S	E	6102100671088		0825071415	R 3 420	02496	11	2496	SOGNDAL STREET	SUNNYDALE
116	249700	MKHIZE NM	OWNER		F	S	UN	6008140416089		0820995932	R 920	02497	11	2497	SOGNDAL STREET	SUNNYDALE
117	249800	MKHIZE B	OWNER		F	S	E	6712020739086		0631764269	R 3 267	02498	11	2498	SOGNDAL STREET	SUNNYDALE
118	249900	DUMISA PCS	OWNER		F	S	UN	7102020664089		0722157653	R 820	02499	11	2499	SOGNDAL STREET	SUNNYDALE
119	250100	NTETHA NS	OWNER		F	S	E	8009141091085		0787719133	R 3 678	02501	11	2501	SOGNDAL STREET	SUNNYDALE
120	250200	CHONCO C	OWNER		F	S	P	6806101563082		0608023683	R 1 780	02502	11	2502	SOGNDAL STREET	SUNNYDALE
121	250400	MDLALOSE NR	OWNER		F	S	UN	8211020703083		0737860633	R 1 000	02504	11	2504	SOGNDAL STREET	SUNNYDALE
122	250500	BIYELA GL	OWNER		F	S	UN	7411281008088		0726127280	R 850	02505	11	2505	SOGNDAL STREET	SUNNYDALE
123	250800	SHOBEDE NN	OWNER		F	S	UN	7307040754089		0760810259	R 1 000	02508	11	2508	SOGNDAL STREET	SUNNYDALE
124	251000	NTOMBELA VR	OWNER		M	S	UN	7209025955089		0721419066	R 200	02510	11	2510	SOGNDAL STREET	SUNNYDALE
125	251100	DLAMINI T	OWNER		F	M	P	4202220308082		0722697840	R 1 780	02511	11	2511	SOGNDAL STREET	SUNNYDALE
126	251300	MHLONGO TJ	OWNER		M	S	UN	6906215664089		0834378442	R 2 000	02513	11	2513	SOGNDAL STREET	SUNNYDALE
127	251400	DLUDLA SH	OWNER		M	S	UN	5910245675082		0718983116	R 2 000	02514	11	2514	KHILANE GWALA STR	SUNNYDALE
128	251800	BHENGU DD	OWNER		F	M	UN	6112020390081		0719436291	R 2 230	02518	11	2518	KHILANE GWALA STR	SUNNYDALE
129	251900	NKWANYANA T	OWNER		F	S	UN	6201270763087		0828144954	R 600	02519	11	2519	KHILANE GWALA STR	SUNNYDALE
130	252200	MAHOYE MM	OWNER		F	S	P	6011190604083		0648108639	R 2 930	02522	11	2522	KHILANE GWALA STR	SUNNYDALE
131	252603	SHANGE CB	OWNER		F	S	E	620702033808		0722513126	R 1 000	02526	11	2526	KHILANE GWALA STR	SUNNYDALE
132	252700	SHOBEDE BN	BATHOKOZILE SHOBEDE	GRANDDAUGHTER	M	S	UN	4002165476088	9804061231086	0824270163	R 600	02527	11	2527	KHILANE GWALA STR	SUNNYDALE
133	253300	MTHETHWO NM	OWNER		F	S	P	4209140376081		0798025832	R 1 780	02533	11	2533	KHILANE GWALA STR	SUNNYDALE
134	253400	SHANGE ZC	OWNER		F	S	UN	5908100864080		0822985199	R 200	02534	11	2534	KHILANE GWALA STR	SUNNYDALE
135	253500	MAGWAZA H	NOKUPHIWA DLUDLA	DAUGHTER	F	S	UN	8107061178088	9909021362085	0843514221	R 600	02535	11	2535	KHILANE GWALA STR	SUNNYDALE
136	253700	NGEMA SL	OWNER		F	S	P	5106170594089		0720461613	R 2 120	02537	11	2537	KHILANE GWALA STR	SUNNYDALE
137	253800	NENE JT	OWNER		F	S	UN	7501200808087		0722721846	R 840	02538	11	2538	KHILANE GWALA STR	SUNNYDALE
138	253900	MKHIZE BL	OWNER		F	S	P	4701220169089		0812593841	R 1 780	02539	11	2539	KHILANE GWALA STR	SUNNYDALE
139	254000	MAKHATHINI GG	OWNER		F	S	P	5612251255086		0729803462	R 2 500	02540	11	2540	HUGH LEE STREET	SUNNYDALE
140	254100	ZULU NB	OWNER		F	S	UN	6201010413084		0838151513	R 600	02541	11	2541	HUGH LEE STREET	SUNNYDALE
141	254200	SITHOLE GN	OWNER		F	D	UN	7403100458081		0743525333	R 1 000	02542	11	2542	HUGH LEE STREET	SUNNYDALE
142	254300	NGONYAMA MA E/LATE	HLONIPHILE T. GAZU		F	C	UN	7108245536085	7501240389080	0783512820	R 400	02543	11	2543	HUGH LEE STREET	SUNNYDALE
143	254400	NGOBESE BJ	OWNER		F	S	UN	6211150411087			R 1 700	02544	11	2544	HUGH LEE STREET	SUNNYDALE
144	254500	NXUMALO MB	OWNER		M	M	UN	7703056501085		0722148511	R 1 260	02545	11	2545	HUGH LEE STREET	SUNNYDALE
145	254600	NXUMALO NT	THANDANANI M. NXUMALO	BROTHER	M	S	E	7208285568087	9109265892083	0764643423	R 1 500	02546	11	2546	HUGH LEE STREET	SUNNYDALE
146	254700	MAGWAZA MP	PHILANI P. BUTHELEZI		M	S	UN	5710305517087	8312045780088	0627574910	R 1 500	02547	11	2547	HUGH LEE STREET	SUNNYDALE
147	254800	MAGWAZA MB	SIMPHIWE MAGWAZA	SON	M	S	UN	9208106106081	9208106106081	0732426640	R 2 500	02548	11	2548	HUGH LEE STREET	SUNNYDALE
148	255000	MAGWAZA MX	OWNER		M	S	UN	8308245968085		0837235342	R 0	02550	11	2550	HUGH LEE STREET	SUNNYDALE
149	255200	MGWABA SJ	NOBUHLE P. MGWABA		F	S	UN	6604165974083	7709290999084	0763324218	R 2 000	02552	11	2552	HUGH LEE STREET	SUNNYDALE
150	255600	VILAKAZI S	OWNER		M	M	UN	6904150595087		0636755962	R 1 200	02556	11	2556	HUGH LEE STREET	SUNNYDALE
151	255700	NCUBE NN	OWNER		F	S	UN	7610151009080		0797274712	R 1230	02557	11	2557	HUGH LEE STREET	SUNNYDALE
152	255900	BHENGU BM	OWNER		M	M	UN	6501016998081		0762597451	R 800	02559	11	2559	HUGH LEE STREET	SUNNYDALE
153	256000	MWANDLA MM	OWNER		M	M	UN	7905045441089		0660345101	R 1 000	02560	11	2560	HUGH LEE STREET	SUNNYDALE
154	256100	LUSHOZI N	OWNER		F	M	P	5307240754089			R 1 780	02561	11	2561	HUGH LEE STREET	SUNNYDALE
155	256300	BUTHELEZI KO	OWNER		F	S	UN	6510070728086		0712068620	R 410	02563	11	2563	HUGH LEE STREET	SUNNYDALE
156	256400	NCANANA VC	OWNER		M	S	UN	8201245860081		0712401908	R 1 000	02564	11	2564	HUGH LEE STREET	SUNNYDALE
157	256500	MSOMI JN	OWNER		M	S	UN	7305057126084		0718983116	R 400	02565	11	2565	HUGH LEE STREET	SUNNYDALE
158	256600	MHLONGO NT	OWNER		F	S	UN	7109060673086		0760982969	R 410	02566	11	2566	HUGH LEE STREET	SUNNYDALE
159	256800	MASUKU SN E/LATE	ZANDILE P. BUTHELEZI		F	S	UN	7501091024083	8505180480089	0834049417	R 800	02568	11	2568	HUGH LEE STREET	SUNNYDALE
160	256900	DLAMINI AS	OWNER		M	S	SE	7406035427089		0738000937	R 2 500	02569	11	2569	HUGH LEE STREET	SUNNYDALE
161	257000	DLUDLA B	OWNER		M	S	P	6812106021084		0789727932	R 2 110	02570	11	2570	HUGH LEE STREET	SUNNYDALE
162	257400	NTULI NT	SANELE NTULI		M	S	UN	7903090844083	9505066087080	0712500364	R 800	02574	11	2574	HUGH LEE STREET	SUNNYDALE
163	257500	PHAKATHI ZM	SIZAKELE Z. ZUMA	SISTER	F	S	UN	6301140656089	7006021260088	0796149597	R 2 460	02575	11	2575	HUGH LEE STREET	SUNNYDALE
164	257800	NSIBANDE DE	OWNER		F	M	UN	4908220645089		0724120003	R 2 520	02578	11	2578	HUGH LEE STREET	SUNNYDALE
165	257900	DLUDLA TS	OWNER		F	S	UN	7803170423081		0825830405	R 820	02579	11	2579	HUGH LEE STREET	SUNNYDALE
166	258100	MHLONGO BV	OWNER		F	S	UN	6702060736084		0725014470	R 800	02581	11	2581	HUGH LEE STREET	SUNNYDALE

167	258500	BHENGU MP	GALANTILE Z. BHENGU	GRANDDAUGHTER	F	S	E	4001120240084	7405031198082	0660325242	R 1 590	02585	11	2585	HUGH LEE STREET	SUNNYDALE
168	258600	NGCOBO ME	OWNER		M	S	UN	7112095681082		0713140968	R 1 480	02586	11	2586	HUGH LEE STREET	SUNNYDALE
169	258700	MTHIMKHULU KZ	OWNER		F	S	UN	6901150459082		0768195992	R 420	02587	11	2587	HUGH LEE STREET	SUNNYDALE
170	258800	GUMEDE ON	OWNER		F	S	UN	6801120853085		0835333243	R 1700	02588	11	2588	HUGH LEE STREET	SUNNYDALE
171	259000	DUBE GM	ZAMA P. DLAMINI		F	S	UN	7603037431081	7607140401089	0727782985	R 1 840	02590	11	2590	HUGH LEE STREET	SUNNYDALE
172	259100	DLUDLA T	OWNER		F	S	UN	6905130450087		0727931077	R 1 320	02591	11	2591	HUGH LEE STREET	SUNNYDALE
173	259200	NGOBESE M	OWNER		F	S	UN	8203180641088		0842079181	R 800	02592	11	2592	HUGH LEE STREET	SUNNYDALE
174	259300	MPUNGOSE PL	OWNER		F	S	UN	7210100718087		0769196328	R 1 230	02593	11	2593	HUGH LEE STREET	SUNNYDALE
175	259400	MASWADI N	OWNER		F	S	E	7107040869089		0723721970	R 2 960	02594	11	2594	HUGH LEE STREET	SUNNYDALE
176	259500	MHLONGO FB	OWNER		F	S	UN	6807240545089		0764553065	R 900	02595	11	2595	HUGH LEE STREET	SUNNYDALE
177	259600	LUTHULI QN	OWNER		F	S	E	7207100783087		0794587400	R 2 574	02596	11	2596	HUGH LEE STREET	SUNNYDALE
178	259700	THUSI NA	MBALI P. NKWANYANA	SISTER	F	S	UN	8710140772084	8805240830087	0797515326	R 500	02597	11	2597	HUGH LEE STREET	SUNNYDALE
179	259800	ZULU MB	OWNER		M	S	UN	7407065299083		0716448461	R 1 200	02598	11	2598	HUGH LEE STREET	SUNNYDALE
180	260200	LUTHULI SC	OWNER		M	S	P	4509125229084		0720924449	R 3 340	02602	11	2602	KHILANE GWALA STR	SUNNYDALE
181	260600	MSOMI JW	OWNER		M	M	E	7212255601084		0722341135	R 2 000	02606	11	2606	HUGH LEE STREET	SUNNYDALE
182	261400	NZUZA PV	OWNER		F	S	UN	7403040708082		0738501454	R 430	02614	11	2614	HUGH LEE STREET	SUNNYDALE
183	261700	MKHIZE BS	OWNER		F	S	UN	7302050712085		0729403904	R 1200	02617	11	2617	HORNBILL STREET	SUNNYDALE
184	262100	NDWANDWE SG	OWNER		M	S	UN	6401165584081		0715586320	R 800	02621	11	2621	INKOSI BI ZULU STREET	SUNNYDALE
185	262200	SIBISI ZK	OWNER		M	S	UN	7412065904088		0763828654	R 800	02622	11	2622	INKOSI BI ZULU STREET	SUNNYDALE
186	262300	MTHIMKHULU NC	OWNER		F	S	UN	8410051198086		0826850905	R 410	02623	11	2623	INKOSI BI ZULU STREET	SUNNYDALE
187	262400	SHANGE MM	OWNER		M	S	UN	8207035947087		0799921410	R 150	02624	11	2624	HORNBILL STREET	SUNNYDALE
188	262600	QWABE M	OWNER		M	S	UN	8306026216088		0636283351	R 500	02626	11	2626	INKOSI BI ZULU STREET	SUNNYDALE
189	262700	SIMELANE SM	OWNER		F	S	UN	6201290664083		0791893746	R 820	02627	11	2627	INKOSI BI ZULU STREET	SUNNYDALE
190	262800	SHANDU FS	FEZEKA S. SHANDU	DAUGHTER	F	S	UN	8412050988087	0107271085089	0646000515	R 500	02628	11	2628	INKOSI BI ZULU STREET	SUNNYDALE
191	263200	MPUNGOSE KL	OWNER		F	M	P	4706070658081		0635642006	R 3 040	02632	11	2632	INKOSI BI ZULU STREET	SUNNYDALE
192	263500	MAHAYE SK	OWNER		F	S	UN	6707050780083		0762304326	R 820	02635	11	2635	HORNBILL STREET	SUNNYDALE
193	263700	NTSHANGASE KM	OWNER		M	S	UN	7204175378083		0729249974	R 600	02637	11	2637	HORNBILL STREET	SUNNYDALE
194	263800	MTHIMKHULU BN	OWNER		F	S	UN	7111270816083		0729252289	R 420	02638	11	2638	HORNBILL STREET	SUNNYDALE
195	264400	MPUNGOSE VE	MARGARET N. MPUNGOSE		F	M	UN	6602185365084	7209280385089	0768766819	R 720	02644	11	2644	HORNBILL STREET	SUNNYDALE
196	264500	NGUBANE LM	OWNER		M	S	SE	8501065362088		0631635763	R 2 250	02645	11	2645	INKOSI BI ZULU STREET	SUNNYDALE
197	264700	MAHAYE TM	OWNER		F	S	UN	6502075300086		0797176702	R 500	02647	11	2647	INKOSI BI ZULU STREET	SUNNYDALE
198	264800	SHANDU PM	OWNER		M	S	UN	6607265547089		0794095182	R 350	02648	11	2648	INKOSI BI ZULU STREET	SUNNYDALE
199	265000	MPUNGOSE NH	OWNER		F	S	UN	7611010953088		0761623748	R 820	02650	11	2650	INKOSI BI ZULU STREET	SUNNYDALE
200	265200	MTHEMBU B	OWNER		F	S	P	7105040441081		0793844902	R 1 800	02652	11	2652	INKOSI BI ZULU STREET	SUNNYDALE
201	265300	KHANYILE V	OWNER	ID COPY	M	S	UN	6609255556088		0633815745	R 2 130	02653	11	2653	INKOSI BI ZULU STREET	SUNNYDALE
202	265500	ZUNGU N	OWNER		F	S	UN	8010010951086		0795555686	R 1 600	02655	11	2655	INKOSI BI ZULU STREET	SUNNYDALE
203	265600	NTSHANGASE MP	OWNER		M	M	UN	6802025907080		0786210633	R 1 400	02656	11	2656	INKOSI BI ZULU STREET	SUNNYDALE
204	265700	NENE MM	LUNGISANI MAKHATHINI		M	S	UN	7909240579081	9703206076085	0827542478	R 800	02657	11	2657	INKOSI BI ZULU STREET	SUNNYDALE
205	266700	NTANZI IF	OWNER		F	S	E	7706150414089		0761335977	R 850	02667	11	2667	SCHREUDER STREET	SUNNYDALE
206	266900	MKHIZE B	OWNER		F	S	P	5208180274080		0606168616	R 2 110	02669	11	2669	SCHREUDER STREET	SUNNYDALE
207	267000	CELE KZ	OWNER		F	S	UN	8308140889089		0792491490	R 1 200	02670	11	2670	SCHREUDER STREET	SUNNYDALE
208	267100	MPUNGOSE P	OWNER		F	M	E	661160300081		0825828524	R 2 700	02671	11	2671	SCHREUDER STREET	SUNNYDALE
209	267200	SIBIYA MM	OWNER		M	M	P	56110556087		0736228679	R 3 340	02672	11	2672	ZAMIMPILO STREET	SUNNYDALE
210	267600	MARAIS J	TRESA D. MARAIS	MOTHER	F	S	UN	7910300276089	6201040240085	0719461074	R 840	02676	11	2676	ZAMIMPILO STREET	SUNNYDALE
211	267900	ZULU SW	ZANELE ZULU		F	S	P	7606175488086	7203160356088	0608906297	R 2 000	02679	11	2679	ZAMIMPILO STREET	SUNNYDALE
212	268000	NKALA BP	OWNER		M	S	UN	8509305859086		0634876960	R 1 500	02680	11	2680	SALBERG STREET	SUNNYDALE
213	269000	MKHWANAZI NE	OWNER		F	M	UN	7501090321084		0630045305	R 820	02690	11	2690	BISHOP BIYASE STREET	SUNNYDALE
214	269100	KOEKEMOER AJGL	SUSANA HYBREG C. KOEKEMOER	WIFE	F	W	P	3707155067009	3804120091089		R 1780	02691	11	2691	BISHOP BIYASE STREET	SUNNYDALE
215	269500	ECKERSLEY BS	OWNER		F	S	UN	7406200171082		0783449578	R 1 900	02695	11	2695	BISHOP BIYASE STREET	SUNNYDALE
216	269800	ZUNGU SB	OWNER		F	S	P	5212210360083		0780601860	R 1 780	02698	11	2698	BISHOP BIYASE STREET	SUNNYDALE
217	270800	MAGWAZA NA	OWNER		F	S	UN	7403100562080		0724057741	R 410	02708	11	2708	SOGNDAL STREET	SUNNYDALE
218	270900	NTANZI PP	OWNER		M	S	UN	7609235423085		0624257761	R 800	02709	11	2709	SOGNDAL STREET	SUNNYDALE
219	271100	DLAMINI NP	OWNER		F	S	UN	7507250606081		0782428997	R 200	02711	11	2711	SOGNDAL STREET	SUNNYDALE
220	271200	NTANZI S	OWNER		M	S	UN	8206126526081			R 300	02712	11	2712	SOGNDAL STREET	SUNNYDALE
221	271600	MTHIMKHULU N	OWNER		M	S	E	8303176095081		0721546707	R 1 700	02716	11	2716	SOGNDAL STREET	SUNNYDALE
222	271700	DLUDLA MM	OWNER		M	M	UN	660205577084		0787800198	R 2 807	02717	11	2717	SOGNDAL STREET	SUNNYDALE
223	271900	MHLONGO KK	OWNER		F	S	P	5402150291089		0764771399	R 2 110	02719	11	2719	SOGNDAL STREET	SUNNYDALE
224	272000	NDLOVU NZ	OWNER		F	S	UN	8506071191082		0661803996	R 410	02720	11	2720	SOGNDAL STREET	SUNNYDALE
225	272100	MTHEMBU LS	ZANELE Z. SIKHAKHANE	WIFE	M	S	UN	8307215912081	8102030897082	0767352160	R 840	02721	11	2721	SOGNDAL STREET	SUNNYDALE
226	272600	NGEMA NZ	OWNER		F	W	UN	8409180771086		0789233319	R 1 200	02726	11	2726	SOGNDAL STREET	SUNNYDALE
227	272700	DLAMINI DZ	ZODWA F. ZULU	DAUGHTER	F	S	UN	6811111606087	8505041202086	0792383093	R 2 100	02727	11	2727	BISHOP BIYASE STREET	SUNNYDALE
228	273000	GAZU ZC	OWNER		F	S	UN	8004101284085		0646189289	R 840	02730	11	2730	SOGNDAL STREET	SUNNYDALE
229	273100	MKHIZE N	OWNER		F	S	P	5104290252084		0842170299	R 1 780	02731	11	2731	SOGNDAL STREET	SUNNYDALE
230	273500	MDLALOSE DB	OWNER		F	S	UN	7012251286082		0835200250	R 900	02735	11	2735	SOGNDAL STREET	SUNNYDALE
231	273700	MAGWAZA T	OWNER		F	S	P	5203270232080		0834645434	R 2 520	02737	11	2737	SOGNDAL STREET	SUNNYDALE
232	273900	GUMEDE JB	OWNER		F	S	P	4412180142088		0711443806	R 2 110	02739	11	2739	SOGNDAL STREET	SUNNYDALE
233	274200	NDIMANDE NN	OWNER		F	M	UN	8311060816082		0768721840	R 1 640	02742	11	2742	SOGNDAL STREET	SUNNYDALE
234	274300	NTULI LA	OWNER		F	M	UN	6007030819089		0794837973	R 1 000	02743	11	2743	SOGNDAL STREET	SUNNYDALE
235	275100	NTULI N	OWNER		F	M	P	5908155882086		0829339100	R 1 800	02751	11	2751	SOGNDAL STREET	SUNNYDALE
236	275200	KHUMALO ZV	OWNER		M	S	UN	7806145420082		0722874594	R 700	02752	11	2752	SOGNDAL STREET	SUNNYDALE
237	275300	MTHETHWA S	OWNER		M	W	UN	7908055471087		0762564881	R 800	02753	11	2753	SOGNDAL STREET	SUNNYDALE
238	275400	NTULI BM	OWNER		F	S	UN	7011270827082		0796238550	R 410	02754	11	2754	SOGNDAL STREET	SUNNYDALE
239	275500	NTANZI T	OWNER		F	S	UN	6000800823084		0793762170	R 820	02755	11	2755	SOGNDAL STREET	SUNNYDALE
240	275600	MAJOZI NS	OWNER		F	S	UN	7812241186080		0793524152	R 1 260	02756	11	2756	SOGNDAL STREET	SUNNYDALE
241	275700	MTHETHWA GG	OWNER		M	M	UN	6406205830089		0825459652	R 800	02757	11	2757	INKOSI BI ZULU STREET	SUNNYDALE
242	275900	GANTSA PZ	OWNER		M	M	P	6511255792087		0829590621	R 2 700	02759	11	2759	SOGNDAL STREET	SUNNYDALE
243	276000	NGEMA PZ	OWNER		F	S	UN	7908270456087		0723874988	R 420	02760	11	2760	SOGNDAL STREET	SUNNYDALE
244	276100	NGOBESE SD	OWNER		F	S	UN	8401290836081		0646173682	R 1 640	02761	11	2761	SOGNDAL STREET	SUNNYDALE
245	276400	NGCOBO N	OWNER	NO PROOF OF INCOME	F	S	P	6505160774081		0712701653	R 1 780	02764	11	2764	BISHOP BIYASE STREET	SUNNYDALE
246	276700	NXUMALO TD	OWNER		F	S	UN	6404110557087		0725671204	R 800	02767	11	2767	BISHOP BIYASE STREET	SUNNYDALE
247	276900	THWALA BP	OWNER		M	S	P	5702025974086			R 1 780	02769	11	2769	SOGNDAL STREET	SUNNYDALE
248	277000	MTHETHWA BH	OWNER		F	S	P	3901080423086		0791239505	R 1 780	02770	11	2770	BISHOP BIYASE STREET	SUNNYDALE
249	277100	BIYELA XP	OWNER		F	S	UN	8203151450089		0793297175	R 410	02771	11	2771	BISHOP BIYASE STREET	SUNNYDALE
250	277200	NTULI MK	OWNER		F	S	P	5809270880080		0663252253	R 1 780	02772	11	2772	BISHOP BIYASE STREET	SUNNYDALE
251	277500	MAJOLA SC	OWNER		F	S	UN	8004020849083		0720556731	R 800	02775	11	2775	BISHOP BIYASE STREET	SUNNYDALE
252	277600	DLUDLA MG	OWNER		F	S	UN	6810230651081		0799671144	R 820	02776	11	2776	BISHOP BIYASE STREET	SUNNYDALE
253	277700	NDLOVU NB	OWNER		F	S	UN	7305010357081		0726029338	R 2 190	02777	11	2777	BISHOP BIYASE STREET	SUNNYDALE
254	277800	NDLOVU BN	NELISIWE N. NDLOVU	OWNER IS IN PRISON	M	M	E	8211055577089	6205070858088	0723067055	R 2 000	02778	11	2778	BISHOP BIYASE STREET	SUNNYDALE
255	277900	NDLOVU FN	OWNER		F	S	UN	6808281269084		0637580718	R 3 230	02779	11	2779	BISHOP BIYASE STREET	SUNNYDALE
256	278100	KHUMALO CZ	OWNER		F	S	UN	6501070579082		0825020240	R 820	02781	11	2781	BISHOP BIYASE STREET	SUNNYDALE
257	278600	MTHETHWA EZ	BONGIWE G. NTULI	DAUGHTER	F	S	UN	4001011384090	N/A	0767770526	R 700	02786	11	2786	BISHOP BIYASE STREET	SUNNYDALE
258	278800	KHANYILE N	OWNER		F	S	UN	6910200893083		0765038043	R 1 000	02788	11	2788	BISHOP BIYASE STREET	SUNNYDALE
259	279000	KHANYILE BM	OWNER		M	S	UN	7406166626087		0713574912	R 1 500	02790	11	2790	MELOKUHLE STREET	SUNNYDALE
260	279200	MPUNGOSE SC	OWNER		M	S	UN	7101045796082		0829366294	R 2 500	02792	11	2792	MELOKUHLE STREET	SUNNYDALE
261	279500	THUSI S	OWNER		F	S	UN	8407300445086		0798607398	R 1 640	02795	11	2795	MELOKUHLE STREET	SUNNYDALE
262	279600	GAMEDE AM	OWNER		F	S	E	7105190411082		0729815475	R 2 420	02796	11	2796	MELOKUHLE STREET	SUNNYDALE
263	280000	MDUNGE H	OWNER		F	S	UN	7207010754087		0769874163	R 300	02800	11	2800	MELOKUHLE STREET	SUNNYDALE
264	280100	KHUZWAYO TB	OWNER		F	S	UN	6511050888080		0796348184	R 500	02801	11	2801	NANDI STREET	SUNNYDALE
265	280500	KHUMALO ZA	OWNER		F	S	UN	7008240749081		0728321818	R 820	02805	11	2805	NANDI STREET	SUNNYDALE
266	280800	NAIDOO T	OWNER		M	M	UN	7612075304084		0726711439	R 1 420	02808	11	2808	NANDI STREET	SUNNYDALE
267	280900	COCHRANE L	OWNER		F	D	P	5412230161087		0748022041	R 1 780	02809	11	2809	NANDI STREET	SUNNYDALE
268	281200	MENDLULA KP	OWNER		M	S	UN	6905165630082		0603340222	R 1 230	02812	11	2812	NANDI STREET	SUNNYDALE
269	281600	MKHIZE K	OWNER		M	M	UN	7206195569088		0733223191	R 1 500	02816	11	2816	BISHOP BIYASE STREET	SUNNYDALE
270	281700	ZULU RB	OWNER		F	M	UN	6204030771085		0747815692	R 1 780	02817	11	2817	BISHOP BIYASE STREET	SUNNYDALE
271	281900	THUSI CN	OWNER		F	M	UN	7808230535089		082359243	R 1 230	02819	11	2819	MELOKUHLE STREET	SUNNYDALE
272	282000	NTOMBELA TV	OWNER		F	S	UN	7604270393087		0729767173	R 410	02820	11	2820	MELOKUHLE STREET	SUNNYDALE
273	282200	MAGWAZA ZS	OWNER		F	S	E	7311060314089		0722379821	R 1 200	02822	11	2822	NANDI STREET	SUNNYDALE
274	282300	SIBISI JJ	NOMPILO N. NGCOBO	DAUGHTER	F	S	UN	6510300536085	9112130597085	0720270104	R 1 000	02823	11	2823	NANDI STREET	SUNNYDALE
275	282400	NGONYAMA VC	OWNER		F	S	P	4903190541087			R 1 780	02824	11	2824	NANDI STREET	SUNNYDALE
276	282500	MAHAYE BL	OWNER		F	M	P	4605050541087		0618535195	R 3 560	02825	11	2825	NANDI STREET	SUNNYDALE
277	283100	ZUMA VC	BONAKELE G. ZUMA	DAUGHTER	F	S	UN	6507075671089	9208231140088	0768677589	R 500	02831	11	2831	MELOKUHLE STREET	SUNNYDALE
278	283200	GOQO H	NTOBEKO W.S. GOQO	SON	F	S	SE	790930672081	8706145592089	0712727139	R 2 000	02832	11	2832	MELOKUHLE STREET	SUNNYDALE
279	283600	SILVA ES	NOTHANDO SILVA	DAUGHTER	M	S	P	6706225485081	9610151029086	0735892566	R 1 780	02836	11	2836	MELOKUHLE STREET	SUNNYDALE
280	283900	DLAMINI PS	OWNER		F	S	UN	6808041083080		0768152176	R 1 500	02839	11	2839	MELOKUHLE STREET	SUNNYDALE
281	284000	ZIKHALI KJ	OWNER		F	S	UN	7304260817084		0711656030	R 410	02840	11	2840	MELOKUHLE STREET	SUNNYDALE
282	284600	NDLOVU BG	OWNER		F	S	UN	6311140652087		0833893924	R 0	02846	11	2846	MELOKUHLE STREET	SUNNYDALE
283	284700	SPENCER CR	OWNER		F	S	UN	7102100422085		0832170041	R 2 110	02847	11	0847	NANDI STREET	SUNNYDALE
284	284800	ZULU HHS	OWNER		F	S	SE	7706100497085		0721586660	R 2 280	02848	11	2848	NANDI STREET	SUNNYDALE
285	285000	NDLOVU TT	MARTIN L. NDLOVU	BROTHER	F	S	UN	7309091331080	7508065996089	0783441443	R 100	02850	11	2850	MELOKUHLE STREET	SUNNYDALE
286	285100	BUTHELEZI KN	OWNER		F	S	UN	7904230871085		0827086582	R 800	02851	11	2851	MELOKUHLE STREET	SUNNYDALE
287	285200	BUTHELEZI MA	OWNER		M	M	P	55081552820087		0633210795	R 2 500	02852	11	2852	NANDI STREET	SUNNYDALE
288	285300	ZINCUME AN	OWNER		F	S	UN	6310101916085		0840953638	R 200	02853	11	2853	NANDI STREET	SUNNYDALE
289	285400	FAKUDE PN	OWNER		F	S	UN	6809060337084		0715892593	R 2 100	02854	11	2854	MELOKUHLE STREET	SUNNYDALE
290	285500	MATTHYS SG	OWNER		F	S	E	8009140247084		07111033905	R 3 500	02855	11	2855	NANDI STREET	SUNNYDALE
291	285600	MGWABA VM	OWNER		M	S	SE	7606115884089		0823562037	R 1800	02856	11	2856	NANDI STREET	SUNNYDALE
292	285900	MHLONGO VS	CO-OWNER		F	S	UN	7010130001086		0798155650	R 600	02859	11	2859	MELOKUHLE STREET	SUNNYDALE
293	286100	DUNN SE	OWNER	SCHOOL REPORTS	F	S	UN	8410270187084		0656371755	R 1 230	02861	11	2861	MELOKUHLE STREET	SUNNYDALE
294	1050500	PILLAY M	OWNER		F	W	P	5108070163080		0760661263	R 1 780	01428	07	1428	MILKWOOD STREET	MPUSHINI PARK
295	1051700	GOVENDER VG	OWNER		M	M	P	5309015155088		0730278566	R 3 560	01429	07	1429	MILKWOOD STREET	MPUSHINI PARK
296	1104501	DUNN DR	OWNER		F	S	P	5812070011088		0833616262	R 1 780	00282	11	0282	KANGELA STREET	ESHOWE
297	1115500	MEYER PR	OWNER		M	M	P	5604065015087			R 3 560	01486	11	1486	STEPHEN OFFER STREET	ESHOWE
298	1147000	GOVENDER M	OWNER		M	M	P	5610115137086		0826290016	R 3 200	01098	11	1098	MYERS STREET	ESHOWE
299	1154300	MADLALA MH	SIFISO S. MADLALA	SON	M	S	UN	3806195188088	7308115446080	0820990266	R 0	00269	11	0269	KANGELA STREET	ESHOWE
300	1205000	ZULU GJ	OWNER		F	W	P	4508060569082		0833196893	R 2 566	01203	11	1203	PEARSON STREET	ESHOWE
301	1239501	BIYELA FPZ	NDUMISO M. BIYELA		M	S	UN	6109265644081	9102065867082	0728801791	R 1 000	01208	11	1208	CLARK STREET	ESHOWE
302	1246601	BOTHMA GH	OWNER		M	S	P	3708315020086		0354741959	R 1 780	00271	11	0271	HAVELOCK STREET	ESHOWE
303	1250640	NGWANE MSZ	OWNER		M	S	UN	8608035436081		0664373641	R 500	01683	11	1683	WEBER STREET	ESHOWE
304	1350000	SHERRARD TES	OWNER		M	A	P	4310165039081		0834501575	R 1 780	00377	11	0377	LEIGH AVENUE	ESHOWE
305	1351400	MUCOQUE CZ	OWNER		F	M	P	5712210731084		0738152717	R 1 780	00359	11	0359	LEIGH AVENUE	ESHOWE
306	1411000	ELLIS JM	OWNER		F	S	P	3706290004083								
307	1430510	MUNGWE PN	OWNER		F	W	UN	6808200649085		0763870017	R 1 300	01131	11	1131	MARTIN ROAD	ESHOWE
308	1749001	MTSHALI BN	MZIKAYISE A. ZUNGU		M	M	UN	7212070330083	7408285697080	0724611164	R 200	00519	11	0519	JOHN ROSS HIGHWAY	ESHOWE
309	1806515	SIKHAKHANE RS	OWNER		M	S	P	6201017571082		0767557567	R 1 780	00495	11	0495	MAIN STREET	ESHOWE
310	1903101	NTOMBELA TM	SEBENZILE MSIMANGO	MOTHER	F	S	P	7506185409082	5512010746088	0810995471	R 1 780	00480	11	0480	WINDHAM STREET	ESHOWE
311	1904501	WHITE JE	OWNER		F	S	P	4103080076084		0354745750	R 1 780	00466	11	0466	MAIN STREET	ESHOWE
312	1936000	KHUMALO DE	NOMBUSO P. MHLONGO	GRANDDAUGHTER	F	S	UN	4605020343085	8710220354084	0765965647	R 1 260	01170	11	1170	WINDHAM STREET	ESHOWE
313	2024010	WYNNE E	OWNER		F	M	P	5501100304080		0785346177	R 1 780	00827	11	0827	CHARLES HORSELY	ESHOWE
314	2028000	ADONIS PM	OWNER		F	W	P	4306160070089		0847832001	R 1 780	00735	11	0735	CHARLES HORSELY	ESHOWE
315	2039500	SMITH I	OWNER		F	W	P	3705250076081		0729879217	R 1 780	00843	11	0843	SALBERG ROAD	ESHOWE
316	2043000	GREGORY E	OWNER		F	W	P	3803210032086		0834901833	R 1 780	01031	11	1031	SALBERG ROAD	ESHOWE
317	2048020	BUTHELEZI B	CO-OWNER		F	M	P	5703080995081		0607459579	R 3 560	00720	11	0720	SALBERG ROAD	ESHOWE
318	2050000	NTULI BM	CO-OWNER		F	W	P	4512255525081		0720307973	R 1 780	00723	11	0723	SALBERG ROAD	ESHOWE
319	2051500	HORSELY MG	OWNER		M	S	P	4805155111089		0827525325	R 1 780	01307	11	1307	SALBERG ROAD	ESHOWE
320	2055300	DUBAZANE SD	OWNER		F	M	P	5608100936082		0825135387	R 1 780	01391	11	1391	LEWIS STREET	ESHOWE
321	2056800	NGOBESE R	LAETITIA S. CELE	DAUGHTER	F	S	UN	4007150257088	7205190423085	0782328587	R 1 000	01353	11	1353	MARION ROAD	ESHOWE
322	4014090	DOESEB VS	OWNER		F	D	UN	5508130359083		0845187849		00140	18	00140	LOWER STATION ROAD	MTUNZINI
323	6000073	MOODLEY B	CO-OWNER		F	W	P	5209060228089		0844748359	R 1 780	00070	18	0070	OFFER STREET	GINGINDLOVU
324	6000155	MOODLEY R	OWNER		M	M	P	5809255186081		0845843209	R 1 780	00175	18	0175	ACACIA	GINGINDLOVU
325	6000203	WILSON IG	OWNER		F	D	P	5205310001086		0741118608	R 1 780	00269	18	0269	BLUE BUCK	GINGINDLOVU
326	6000215	BOTHA DA	OWNER		F	S	P	5102090627083		0833407519	R 1 780	00325	18	0325	SPRINGBUK AVENUE	GINGINDLOVU
327	6000217	KUPPAN CJ	SHAMLALL KUPPAN		F	W	P	5106045223087	7004020093089	0782520376	R 1 780	00327	18	0327	SPRINGBUK AVENUE	GINGINDLOVU
328	6000218	MOOPEN J	SALATCHEE VARTHARAJLOO NAICKER		F	W	UN	5007150166080	7009120090083	0785346844	R 0	00328	18	0328	SPRINGBUK AVENUE	GINGINDLOVU
329	6000220	PILLAY T	RANAKI PILLAY		F	D	UN	6406295233087	6605310081088	0833346694	R	00337	18	0337	BUSHBUCK ROAD	GINGINDLOVU
330	6000223	THOLASY P	OWNER		F	S	P	6310230111087		0738868927	R 1 780	00340	18	0340	BUSHBUCK ROAD	GINGINDLOVU
331	6000225	NAIDOO NR	SUBRAMONEY CHETTY		M	S	P	7.50305E+12	5011025086085	0794618043	R 1 780	00342	18	0342	BUSHBUCK ROAD	GINGINDLOVU
332	6000230	NAIDOO B	OWNER		M	S	P	4803205608089		0834729905	R 1 780	00347	18	0347	SPRINGBUK AVENUE	GINGINDLOVU
333	6000232	BALARAMAN B	MUNIMAL BALARAMAN		F	S	P		5410260191081	0740968469	R 1 780	00349	18	0349	SPRINGBUK AVENUE	GINGINDLOVU
334	6000237	PERUMAL S	SAVITHREE PERUMAL	WIFE	F	S	P	4712315007084	6003160205082	072564900	R 1 780	00353	18	0353	BUSHBUCK ROAD	GINGINDLOVU
335	6000238	ADHEELUTCHMEE A	OWNER		F	S	P	4210050087080		0353371369	R 1 780	00354	18	0354	BUSHBUCK ROAD	GINGINDLOVU
336	6000241	MOODLEY M	YOUGAVATHEE M.N. MOODLEY		F	W	P	5203305117082	5909010166087	0833575585	R 1 780	00357	18	0357	BUSHBUCK ROAD	GINGINDLOVU
337	6000242	MOODLEY M	OWNER		M	S	P	560625188086		0353370044	R 1 780	00358	18	0358	BUSHBUCK ROAD	GINGINDLOVU
338	6000243	CHETTY K	OWNER		M	M	P	4611105183081		0631183734	R 3 560	00359	18	0359	BUSHBUCK ROAD	GINGINDLOVU
339	6000254	GOVENDER M	CO-OWNER		F	W	P	4810010174082		0732017673	R 1 780	00368	18	0368	SPRINGBUK AVENUE	GINGINDLOVU
340	6000259	MOODLEY M	CO-OWNER		F	W	P	6108120630087		0638432453	R 1 780	00373	18	0373	SPRINGBUK AVENUE	GINGINDLOVU
341	6000260	NAIDOO M	SHANBOGUMMMAL SINGH		F	W	P	1107035074089	3910110296081	0731229932	R 1 780	00374	18	0374	SPRINGBUK AVENUE	GINGINDLOVU
342	6000264	MOONSAMY D	RAMU G. MOONSAMY		M	M	UN	5601200165082	7801305240081	0781829774	R 800	00377	18	0377	NYALA ROAD	GINGINDLOVU
343	6000265	GOVENDER S	OWNER		M	M	P	5604065233086		0834392741	R 1 780	00378	18	0378	NYALA ROAD	GINGINDLOVU
344	6000270	KISSOON R	ROMILLA KISSOON		F	W	P	5810285122088	6208080311080	0353370118	R 1 780	00382	18	0382	NYALA ROAD	GINGINDLOVU
345	6000271	NAIDOO DR	OWNER		M	S	UN	6404015282088		0782456248	R	00383	18	0383	BUSHBUCK ROAD	GINGINDLOVU
346	6000272	JAMES M	OWNER		F	S	P	4401100108089		0644880261	R 1 780	00384	18	0384	BUSHBUCK ROAD	GINGINDLOVU
347	6000274	PILLAY T	OWNER		F	W	P	4211060285086			R 1 780	00386	18	0386	BUSHBUCK ROAD	GINGINDLOVU
348	6000276	GOVENDER M	OWNER		M	M	P	4504155120089		0747166916	R 3 560	00388	18	0388	BUSHBUCK ROAD	GINGINDLOVU
349	6000286	MOODLEY D	OWNER		F	W	P	5608160172081		0760521527	R 1 780	00404	18	0404	NYALA ROAD	GINGINDLOVU

350	6000287	NAICKER KA	OWNER		M	M	P	5806215122081		0825811788	R 3 560	00405	18	0405	BUSHBUCK ROAD	GINGINDLOVU
351	6000296	SINGH P	OWNER		M	W	P	5106035177088		0833552524	R 1 780	00415	18	0415	KUDU ROAD	GINGINDLOVU
352	6000322	NAIDOO B	OWNER		M	S	P	4905015114081		0353371213	R 1 780	00456	18	0456	GEMSBOK ROAD	GINGINDLOVU
353	6000324	GOVINDSAMY S	OWNER		M	M	UN	6005035177085		0713836512	R 420	00458	18	0458	GEMSBOK ROAD	GINGINDLOVU
354	6000330	GOUNDEN R	SANDRA PERUMAL		F	W	UN		6701110177083	0738888104	R 0	00466	18	0466	IMPALA ROAD	GINGINDLOVU
355	6000331	REDDY S	VELIMAH REDDY		F	W	P	5107015133083	5312180040085	0789573574	R 1 780	00467	18	0467	INYALA ROAD	GINGINDLOVU
356	6000332	RAJAKUMAR LR	CO-OWNER		F	W	UN	6102170693087		0353370063	R 0	00468	18	0468	GEMSBOK ROAD	GINGINDLOVU
357	6000333	CASSIM A	RAJWANTHI CASSIM	WIFE	F	W	P	5711195242083	5809160193081	0844131424	R 1 780	00469	18	0469	KUDU ROAD	GINGINDLOVU
358	6000342	GOVENDER P	OWNER		M	W	P	5412065133086		0797016205	R 1 780	00477	18	0477	KUDU ROAD	GINGINDLOVU
359	6000343	GOVENDER M	OWNER		F	W	P	5104050221089		0353370022	R 1 780	00478	18	0478	KUDU ROAD	GINGINDLOVU
360	6000347	GOVENDER RP	GOVENDER P	SON	M	M	UN	3805105117088	6601055248081	0787079517	R 0	00487	18	0487	KUDU ROAD	GINGINDLOVU
361	6000355	GOVENDER S	OWNER		M	M	P	5612145128085		0847794800	R 1 780	00487	18	0487	BLESBOK ROAD	GINGINDLOVU

362	6000356	MOOPEN G	OWNER		F	W	P	4010220081082		0790483771	R 1 780	00488	18	0488	BLESBOK ROAD	GINGINDLOVU
363	6000357	SHEIK S	OWNER		F	W	UN	6004050148085		0833201797	R 2 800	00490	18	0490	BLESBOK ROAD	GINGINDLOVU
364	6000360	MOOPEN K	OWNER		F	S	P	4705250110087		0794191076	R 1 780	00493	18	0493	BLESBOK ROAD	GINGINDLOVU
365	6000573	CHETTY V	VELLIAMAH CHETTY		F	W	P	4701245571087	5708200882085		R 3 300	00573	18	0573	BUSHBUCK ROAD	GINGINDLOVU
366	6000582	MOODLEY M	OWNER		F	W	UN	4902025081087		0735284536	R 0	00582	18	0582	SPRINGBUK AVENUE	GINGINDLOVU
367	6000583	GOVENDER S	OWNER		F	W	P	5004160832082		0735284536	R 1 780	00583	18	0583	SPRINGBUK AVENUE	GINGINDLOVU
368	6000588	GOVENDER N	MUNIAMAH GOVENDER		F	W	E	7310245253089	7101240166081	0735180207	R 3 465	00588	18	0588	NYALA ROAD	GINGINDLOVU
369	6000590	BANARASI M	CO-OWNER		F	W	E	8103290118086		0826383000	R 3 230	00590	18	0590	BUSHBUCK ROAD	GINGINDLOVU
370	6000597	BHULAI K	GIYAWATHE BISRAM		F	S	UN	4611230546087	6810170136085	0829249366	R 0	00597	18	0597	BUSHBUCK ROAD	GINGINDLOVU
371	6000605	MSANE DG	OWNER		F	D	P	5301020841083		0721778268	R 1 780	00605	18	0605	GEMSBOK ROAD	GINGINDLOVU
372	6000607	RAMRAL I	CO-OWNER		F	S	P	4709155681085		0764656947	R 1 780	00607	18	0607	GEMSBOK ROAD	GINGINDLOVU
373	6000610	KAMIA A	CO-OWNER		F	W	P	5110100143082		0847417572	R 1 780	00610	18	0610	GEMSBOK ROAD	GINGINDLOVU
374	6000613	GOPAUL G	OWNER		F	W	P	3911155091080		0846087386	R 1 820	00613	18	0613	GEMSBOK ROAD	GINGINDLOVU
375	6000623	GOVINDSAMY M	MOONIAMAH GOVINSAMY		F	W	P		4104020320087	0353371015	R 1 780	00623	18	0623	IMPALA ROAD	GINGINDLOVU
376	6000624	PILLAY P	PARAMALLI PILLAY	WIFE	F	W	UN	6502200178084	6502200178084	0715330722	R 1 500	00624	18	0624	KUDU ROAD	GINGINDLOVU
377	6000628	CHETTY V	OWNER		M	S	P	4701315531086		0737912207	R 1 780	00628	18	0628	BLESBOK ROAD	GINGINDLOVU
378	6000639	SEWNATH SR	OWNER		M	W	P	4310265102086		0353371345	R 1 780	00639	18	0639	STEENBOK ROAD	GINGINDLOVU
379	6000640	RUDMAN M	GOVINDAMMAH RUDMAN		F	S	E		6307300210088	0733335326	R 2 500	00640	18	0640	STEENBOK ROAD	GINGINDLOVU
380	6004701	PILLAY N	OWNER		F	W	UN	7402095255080		0735664909	R 0	00051	18	0051	FOXON STREET	GINGINDLOVU
381	6060901	NDLELA B	OWNER		F	W	P	5607260816084		0763089622	R 1 780	00609	18	0609	GEMSBOK ROAD	GINGINDLOVU
382	7002300	HULLEY C	LAWRENCE M. MADONSELA		M	S	UN	4612275509089	7401015932083	0603086822	R 1 780	00023	12	0023	BISHOP STREET	KING DINIZULU SURBUR
383	7002400	HULLEY C	OWNER		M	S	P	4612275509089		0646689406	R 1 780	00024	12	0024	BISHOP STREET	KING DINIZULU SURBUR
384	7003101	NTOMBELA ES	GRIFFITHS V. NTOMBELA		M	S	UN	5503110599089	7702045611088	0646289147	R 700	00031	12	0031	BISHOP STREET	KING DINIZULU SURBUR
385	7003301	QWABE M	MUZIWENDODA L. QWABE		M	S	UN	3601245221083	8301056592086	0673035305	R 420	00033	12	0033	BISHOP STREET	KING DINIZULU SURBUR
386	7003400	NTULI NM	ELIZABETH B. NTULI		F	S	P	5309095231080	5611270474082	0810941398	R 1 780	00034	12	0034	BISHOP STREET	KING DINIZULU SURBUR
387	7003600	NZAMA H	NTETHELELO B. SHANGE	GRANDSON	M	S	UN		8708245741087	0647907233	R 500	00036	12	0036	BISHOP STREET	KING DINIZULU SURBUR
388	7003800	XULU BF	BADELISILE G. XULU		F	M	UN	6008125269081	6611270282088	0765985694	R 500	00038	12	0038	BISHOP STREET	KING DINIZULU SURBUR
389	7004200	DUBAZANA NM	SIPHELELE P. MHLONGO		F	S	UN	1002125080080	8309291488085	0606791280	R 0	00042	12	0042	UBAMBISWANO STREET	KING DINIZULU SURBUR
390	7004300	ZULU EK	OWNER		F	S	P	4906110757089		0823440153	R 1 780	00043	12	0043	UBAMBISWANO STREET	KING DINIZULU SURBUR
391	7004700	SHEZI A	MARIA N. SHEZI		F	S	UN	0602025055081	6502040393083	0729288407	R 0	00047	12	0047	UBAMBISWANO STREET	KING DINIZULU SURBUR
392	7005000	NDLOVU P	GOODMAN S. NDLOVU		M	S	UN	2712300119086	6005245804086	0791523876	R 1 900	00050	12	0050	UBAMBISWANO STREET	KING DINIZULU SURBUR
393	7005400	NZUZA MP	CYPRIAN S. NZUZA		M	S	UN	4605250472083	6209205842082	0839236001	R 1 000	00054	12	0054	UBAMBISWANO STREET	KING DINIZULU SURBUR
394	7006400	NTSHANGASE SC	OWNER		F	S	P	3812110265084		0848963381	R 2 220	00064	12	0064	UBAMBISWANO STREET	KING DINIZULU SURBUR
395	7006500	DLUDLA NA	NOBUHLE D. DLUDLA		F	S	UN	6312280602080	6312280602080		R 800	00065	12	0065	UBAMBISWANO STREET	KING DINIZULU SURBUR
396	7007301	MABANGA BJ	NESTER S. KHUMALO		F	S	UN	4703075583083	5601250350089	0731435716	R 840	00073	12	0073	UBAMBISWANO STREET	KING DINIZULU SURBUR
397	7007500	NYAWO TJ	THABISILE J. NYAWO		F	S	P	3606025119083	7508200875081	0783180837	R 2 620	00075	12	0075	UBAMBISWANO STREET	KING DINIZULU SURBUR
398	7008100	LANGA MD	NTOMBOLOZI M. LANGA		F	S	P	4603315178084	4902190534084		R 1 780	00081	12	0081	UBAMBISWANO STREET	KING DINIZULU SURBUR
399	7008302	MAKHATHINI PJ	CAROLINE P. MAKHATHINI		F	S	UN	4511200382085	7610300566089	0604654941	R 1 680	00083	12	0083	UBAMBISWANO STREET	KING DINIZULU SURBUR
400	7008700	ZUNGU C	OWNER		F	S	P	4209180379086		0787206968	R 1 780	00087	12	0087	THEMBENI STREET	KING DINIZULU SURBUR
401	7008900	SHOBA C	OWNER		M	S	P	4103185158084			R 1 880	00089	12	0089	THEMBENI STREET	KING DINIZULU SURBUR
402	7009300	BIYELA G	PHUMZILE A. LUTHULI		F	S	UN	4004305382085	8805220986081	0826029309	R 720	00093	12	0093	THEMBENI STREET	KING DINIZULU SURBUR
403	7009500	NDLOVU NFC	OWNER		M	S	UN	8603285786086		0725873483	R 1 300	00095	12	0095	THEMBENI STREET	KING DINIZULU SURBUR
404	7009600	NKWANYANA MG	OWNER		M	M	UN	6809255629089		0726627665	R 440	00096	12	0096	THEMBENI STREET	KING DINIZULU SURBUR
405	7010101	NGEMA TE	OWNER		F	S	P	440210273082		0711846387	R 1 780	00101	12	0101	THEMBENI STREET	KING DINIZULU SURBUR
406	7010200	SHANDU S.	BIZENI D. SHANDU	WIFE	F	M	P	4409050312080	4409050312080	0727254792	R 1 780	00102	12	0102	THEMBENI STREET	KING DINIZULU SURBUR
407	7010700	NTULI ME	OWNER		F	S	P	5008270610080		0722087909	R 2 200	00107	12	0107	THEMBENI STREET	KING DINIZULU SURBUR
408	7011100	MPUNGOSE TV	OWNER		F	S	P	5105150532085		0781660991	R 1 132	00111	12	0111	THEMBENI STREET	KING DINIZULU SURBUR
409	7011200	NGEMA ME	THOKOZILE NGEMA		F	S	P	4210310097085	4210310097085		R 1 850	00112	12	0112	THEMBENI STREET	KING DINIZULU SURBUR
410	7011600	MPUNGOSE MA	SIPHIWE F. MPUNGOSE		F	W	P	3101025130082	4912180308084	0728948171	R 1 780	00116	12	0116	THEMBENI STREET	KING DINIZULU SURBUR
411	7011701	MBATHA MS	BABAZILE E. MBATHA		F	W	P	4107015555088	4709100231085	0769027940	R 2 900	00117	12	0117	THEMBENI STREET	KING DINIZULU SURBUR
412	7012000	ZULU MN	NOSIPHO M. MSOMI	GRANDDAUGHTER	F	S	UN	3312250243082	9702160573087	0768981942	R 500	00120	12	0120	THEMBENI STREET	KING DINIZULU SURBUR
413	7012300	BIYELA J	LUCY BIYELA		F	W	P	3906145049081	4101220281085	0790847511	R 3 400	00123	12	0123	THEMBENI STREET	KING DINIZULU SURBUR
414	7012500	MBATHA SR	OWNER		F	S	P	4312210316084		0799249003	R 1 780	00125	12	0125	THEMBENI STREET	KING DINIZULU SURBUR
415	7013101	KHANYILE SG	FIKILE D. KHANYILE		F	S	UN	3508210192083	7008300498082	0637475180	R 800	00131	12	0131	THEMBENI STREET	KING DINIZULU SURBUR
416	7013300	MADLOPHA AM	OWNER		M	S	P	5703285302083		0822882354	R 1 780	00133	12	0133	THEMBENI STREET	KING DINIZULU SURBUR
417	7013702	BIYELA TS	OWNER		F	S	P	5107090464080		0606727620	R 1 780	00137	12	0137	THEMBENI STREET	KING DINIZULU SURBUR
418	7013801	NDAWONDE BE	OWNER		M	M	P	5008025292085			R 3 560	00138	12	0138	THEMBENI STREET	KING DINIZULU SURBUR
419	7014510	NKWANYANA ME	OWNER		M	S	UN	8811105862082		0725564419	R 1 200	00145	12	0145	INKOSI NDWANDWE STREET	KING DINIZULU SURBUR
420	7015101	MBATHA MJ	OWNER		M	M	P	37121255200088		0832400958	R 1 780	00151	12	0151	NDWANDWE STREET	KING DINIZULU SURBUR
421	7015201	SIKHAKHANE NT	OWNER		F	W	P	4901011098089		0647474647	R 1 780	00152	12	0152	INKOSI NDWANDWE STREET	KING DINIZULU SURBUR
422	7015500	MPANZA PB	OWNER		M	M	P	5512195201081		0791608745	R 3 560	00155	12	0155	INKOSI NDWANDWE STREET	KING DINIZULU SURBUR
423	7016000	MANDLA L	FRANCISCA Z. MWANDLA		M	S	UN	2607285118089	5911100760084	0638467952	R 500	00160	12	0160	MSEBENI STREET	KING DINIZULU SURBUR
424	7016101	BUTHELEZI BG	OWNER		F	S	P	4906110327081		0814008708	R 1 780	00161	12	0161	MSEBENI STREET	KING DINIZULU SURBUR
425	7016200	LINDA MJ	DUMA G. LINDA		M	M	P	3612195160089	4509140405081	0792678792	R 1 780	00162	12	0162	MSEBENI STREET	KING DINIZULU SURBUR
426	7017400	MEYIWA R	OWNER		M	S	P	5201105800089		0795200261	R 1 780	00174	12	0174	MSEBENI STREET	KING DINIZULU SURBUR
427	7017500	NXUMALO LH	SITHEMBISO NXUMALO		M	S	UN	4401205435080	7105045459088	0791805997	R 900	00175	12	0175	MSEBENI STREET	KING DINIZULU SURBUR
428	7018700	NGCOBO JN	OWNER		F	S	UN	6310030401084		0736910968	R 0	00187	12	0187	NONDABA STREET	KING DINIZULU SURBUR
429	7018901	MANQELE M	SIPHO J. MANQELE		M	S	UN	4006130347084	6807125399081	0725455724	R 400	00189	12	0189	NONDABA STREET	KING DINIZULU SURBUR
430	7019100	KHANYILE M	BUSEPHI A. KHANYILE		F	S	P	2907015176088		0733545908	R 1 780	00191	12	0191	NONDABA STREET	KING DINIZULU SURBUR
431	7019200	SHOBEDE VM	OWNER		M	S	UN	6306195424085		0781285857	R 1 300	00192	12	0192	NONDABA STREET	KING DINIZULU SURBUR
432	7019500	BIYELA ST	OWNER		F	S	P	4006290378085		0661454203	R 1 780	00195	12	0195	NONDABA STREET	KING DINIZULU SURBUR
433	7019600	MTHEMBU NM	OWNER		F	S	P	5204130754081		0829476465	R 2 620	00196	12	0196	NONDABA STREET	KING DINIZULU SURBUR
434	7019700	MTHEMBU BE	OWNER		M	M	P	4811285367088		0725152662	R 3 560	00197	12	0197	UWASI STREET	KING DINIZULU SURBUR
435	7020100	DUBE MM	OWNER		M	M	P	3001155179086		0727272468	R 1 780	00201	12	0201	UWASI STREET	KING DINIZULU SURBUR
436	7020303	NZUZA J	JOSEPH'S ATTACHMENTS		M	S	E	6103065301083		0721765563	R 2 136	00203	12	0203	UWASI STREET	KING DINIZULU SURBUR
437	7022000	MBOKAZI DR	OWNER		F	M	P	4410020313083		0729468795	R 1 780	00220	12	0220	MSEBENI STREET	KING DINIZULU SURBUR
438	7022101	KHATI JG	NOMVELO M. MHLONGO	GRANDDAUGHTER	F	S	UN	3512150256080	9808100359089	0824227218	R 0	00221	12	0221	UWASI STREET	KING DINIZULU SURBUR
439	7022300	NGXONGO LM	OWNER		M	M	P	4705295248082		0721090608	R 1 780	00223	12	0223	UWASI STREET	KING DINIZULU SURBUR
440	7022400	MAHAYE TM	OWNER		F	S	P	4407220468089		0826696426	R 1 780	00224	12	0224	UWASI STREET	KING DINIZULU SURBUR
441	7022501	MKHWANAZI E	OWNER		F	W	P	2712140158088		0723123295	R 2 430	00225	12	0225	UWASI STREET	KING DINIZULU SURBUR
442	7022600	MAGWAZA M	NTOBEKO A. MAGWAZA		F	S	UN	1402055144080	8806206585087	0712407446	R 500	00226	12	0226	UWASI STREET	KING DINIZULU SURBUR
443	7022800	MCHUNU M	NTOMBIFUTHI J. MCHUNU		F	W	P	3502255156087	4809290301084	0733258548	R 1 780	00228	12	0228	UWASI STREET	KING DINIZULU SURBUR
444	7023400	SHABANE G	NOMCEBO M. SHABANE		F	S	UN	3405150271086	8609100785088	0763141115	R 840	00234	12	0234	UWASI STREET	KING DINIZULU SURBUR
445	7024200	JALI TT	OWNER		F	S	P	4607030505083		0823529949	R 2 185	00242	12	0242	INKOSI NDWANDWE STREET	KING DINIZULU SURBUR
446	7024300	MBULI MJ	SANDILE J. MBULI		F	S	UN	7008105439083	6905150465080	0646987898	R 1 320	00243	12	0243	NDWANDWE STREET	KING DINIZULU SURBUR
447	7024800	THUSI K	LINDOKUHLE N. THUSI		M	S	UN	4402025586086	9910070335089	0728892421	R 400	00248	12	0248	UBAMBISWANO STREET	KING DINIZULU SURBUR
448	7025102	ZULU G	OWNER		F	S	P	4411190150081		0782158915	R 1 780	00251	12	0251	NDLELA STREET	KING DINIZULU SURBUR
449	7026000	NXUMALO NA	OWNER		M	M	P	3905285297088		0727755250	R 1 800	00260	12	0260	INKOSI NDWANDWE STREET	KING DINIZULU SURBUR
450	7026300	GUMEDE JS	PRISCILLA S. MKHIZE	GRANDDAUGHTER	F	S	UN	AFFIDAVIT ATTAC	8508231058086	0719933784	R 1 230	00263	12	0263	NDLELA STREET	KING DINIZULU SURBUR
451	7026500	MNGOMEZULU MA	OWNER	OWNER'SB PROOF OF INCOME	F	M	P	4911205242088		0827233740	R 2 200	00265	12	0265	NDLELA STREET	KING DINIZULU SURBUR
452	7026801	SHANGE S	NELISIWE P.Z. SHANGE		F	S	UN	3304110125088	6207280769089	0767114194	R 700	00268	12	0268	NDLELA STREET	KING DINIZULU SURBUR
453	7027200	MCHUNU FR	SISANA R. MCHUNU		F	W	UN	3910185241087	6112300619084	0728784731	R 1 290	00272	12	0272	NDLELA STREET	KING DINIZULU SURBUR
454	7027600	MBUYAZI HF	WISEMANI D.M. MBUYAZI	SON	M	S	UN		7910075592082	0635969162	R 500	00276	12	0276	NDLELA STREET	KING DINIZULU SURBUR
455	7028100	KHUMALO TA	SIPHO D. KHUMALO		M	S	GA	4904035581080	7403095803085	0837200505	R 1 000	00281	12	0281	NDLELA STREET	KING DINIZULU SURBUR
456	7028200	NTULI BM	DUMISANI B. NTULI		M	S	UN	2512165112089	7306036109084	0782724209	R 500	00282	12	0282	INKOSI NDWANDWE STREET	KING DINIZULU SURBUR
457	7028801	KUNENE GS	SIYABONGA N. KUNENE	SON	M	S	UN	4806160316085	7211055554089	0718260761	R 0	00288	12	0288	INKOSI NDWANDWE STREET	KING DINIZULU SURBUR
458	7031001	JALI TT	CO-OWNER		F	W	UN	5608010842081		0790931099	R 500	00310	12	0310	MPANZA STREET	KING DINIZULU SURBUR
459	7031101	NZUZA WN	OWNER		F	S	UN	6301070310087		0792225159	R 1 000	00311	12	0311	MPANZA STREET	KING DINIZULU SURBUR
460	7031201	MTHEMBU DN	OWNER		F	S	P	5007040536088		0726089613	R 2 600	00312	12	0312	MPANZA STREET	KING DINIZULU SURBUR
461	7032901	SIBIYA S	ZWELINYE MHLONGO		M	M	P	3210160147080	5808025282089	0785145231	R 1 780	00329	12	0329	MKHIWANE STREET	KING DINIZULU SURBUR
462	7033101	NDLOVU MA	OWNER		M	W	P	2401035105087		0718184186	R 1 000	00331	12	0331	MKHIWANE STREET	KING DINIZULU SURBUR
463	7033500	MTHEMBU B	SICELO MTHEMBU	SON	M	S	UN	4411285431081	7309065565085	0793974702	R 400	00335	12	0335	MKHIWANE STREET	KING DINIZULU SURBUR
464	7033601	KHUMALO AT	LINDIWE T. NGEMA		F	S	E	4006170425089	7008290293089	0784345064	R 1 500	00336	12	0336	MKHIWANE STREET	KING DINIZULU SURBUR
465	7034100	SANGWENI SRS	OWNER		M	S	P	6302155759081		0665286771	R 3 560	00341	12	0341	MKHIWANE STREET	KING DINIZULU SURBUR
466	7034400	THWALA SG	NTOMBIKAYISE B. THWALA		F	S	UN	5301290678082	7808290869089	0783796602	R 840	00344	12	0344	MKHIWANE STREET	KING DINIZULU SURBUR
467	7035200	MASHABA TA	OWNER		F	W	P	5512010694080		0711987936	R 1 780	00352	12	0352	UMDONI STREET	KING DINIZULU SURBUR
468	7035301	NTOMBELA PTW	OWNER		F	W	P	6004220392084		0603448162	R 2210	00353	12	0353	UMDONI STREET	KING DINIZULU SURBUR
469	7035700	HADEBE S	ANDILE A. HADEBE		M	M	UN	4210095381084	9408285556086	0799541548	R 500	00357	12	0357	NDLELA STREET	KING DINIZULU SURBUR
470	7035900	MZIMELA SL	ZINHLE L. MSWELI	GRANDDAUGHTER	F	S	UN	4711110606082	9201160966086	0734093034	R 1 200	00359	12	0359	UMDONI STREET	KING DINIZULU SURBUR
471	7036601	GUMEDE T	BHEKI S. GUMEDE	SON	M	S	UN	3404120283081	7005155758081		R 500	00366	12	0366	UMDONI STREET	KING DINIZULU SURBUR
472	7036900	KHOZA SE	FETHI FUTHI N.M. KHOZA		F	W	P	4606185411089	5003040284084	0767827318	R 3 000	00369	12	0369	NGEMA STREET	KING DINIZULU SURBUR
473	7037101	MBAMBO MB	MARGARET T.D. MSWELI		F	M	P	4903235630085	5502080723083	0725441948	R 2 600	00371	12	0371	NGEMA STREET	KING DINIZULU SURBUR
474	7037200	NDLOVU NE	OWNER		M	M	P	3207015423088		0794305718	R 1 780	00372	12	0372	NGEMA STREET	KING DINIZULU SURBUR
475	7037300	CHEESEMAN PL	OWNER		F	W	P	4104300116080		0726776535	R 1 780	00373	12	0373	NGEMA STREET	KING DINIZULU SURBUR
476	7037900	KHUMALO GGZ	OWNER		M	S	UN	6801055514082		0822665458	R 600	00379	12	0379	CHURCH STREET	KING DINIZULU SURBUR
477	7039000	NZAMA AN	BONGEKILE L. NZAMA	WIFE	F	M	UN	5902085252080	6004130671080	0723405100	R 800	00390	12	0390	NGEMA STREET	KING DINIZULU SURBUR
478	7039100	ZULU N	ZONDENI ZULU		F	S	P	2501025289088	3604070462086		R 1 780	00391	12	0391	NGEMA STREET	KING DINIZULU SURBUR
479	7039300	GUMEDE M	OWNER		F	M	P	4106040289085		0737345053	R 1 800	00392	12	0393	NDLELA STREET	KING DINIZULU SURBUR
480	7040301	KHANYILE B	OWNER		F	W	P	4110050195083		0730259580	R 1 780	00403	12	0403	MENZIWA STREET	KING DINIZULU SURBUR
481	7040600	MAZIBUKO MS	ZIPHOZONKE C.D. MAZIBUKO		M	S	UN	4110145397082	6801045501082	0719645222	R 0	00406	12	0406	MENZIWA STREET	KING DINIZULU SURBUR
482	7040900	ZULU F	NOTHANDO Z. MADLOPHA		F	S	E	3201210148087	8109221382089	0788242144	R 700	00409	12	0409	MENZIWA STREET	KING DINIZULU SURBUR
483	7041102	LINDA SM	OWNER		M	M	UN	6601145345087		0609492887	R 2 200	00411	12	0411	MENZIWA STREET	KING DINIZULU SURBUR
484	7041200	NDLOVU MW	DORIS D. KHUMALO		F	S	UN	3206175222082	6209260793089	0836945752	R 600	00412	12	0412	MENZIWA STREET	KING DINIZULU SURBUR
485	7041300	ZULU SB	OWNER		F	W	P	4101040293082		0762391833	R 2 453	00413	12	0413	CHURCH STREET	KING DINIZULU SURBUR
486	7041401	NTULI TA	OWNER		F	W	P	4703210236084		0787247649	R 1 780	00414	12	0414	MENZIWA STREET	KING DINIZULU SURBUR
487	7042001	MAPHUMULO SJ	OWNER		F	S	P	5311060748080		0827096055	R 1 780	00420	12	0420	NDLELA STREET	KING DINIZULU SURBUR
488	7042200	GUMEDE JS	MBUSO H.E. GUMEDE		M	S	P	2012155118089	5207025765088	0836218113	R 1 780	00422	12	0422	NDLELA STREET	KING DINIZULU SURBUR
489	7042300	BIYELA M	ZAMAGEDA N. ZUNGU		F	S	UN	3309055168084	9806260427084	0710007357	R 0	00423	12	0423	NDLELA STREET	KING DINIZULU SURBUR
490	7042400	MHLONGO TS	OWNER		F	S	P	4602200456084		0737824017	R 2916	00424	12	0424	NDLELA STREET	KING DINIZULU SURBUR
491	7042700	CELE M	NKOSINGIPHILE S. CELE	DAUGHTER	F	S	UN	3112165110081	8405030726080	0781523735	R 500	00427	12	0427	NDLELA STREET	KING DINIZULU SURBUR
492	7042800	HUGHES KI	CYNTHIA M. HUGHES	DAUGHTER	F	M	UN	4306100478087	7404150663083	0827229456	R 840	00428	12	0428	NDLELA STREET	KING DINIZULU SURBUR
493	7043501	GUMEDE B	REGINALD GUMEDE		M	S	UN	3201011830081	8102205989086	0714616197	R 800	00435	12	0435	NDLELA STREET	KING DINIZULU SURBUR
494	7043901	DLAMINI LA	NOMVULA N. DLAMINI		F	M	E	3211055125082	5609230843081	0820773042	R 1 932	00439	12	0439	NDLELA STREET	KING DINIZULU SURBUR
495	7044200	HLATSHWAYO JK	OWNER		M	M	P	3912155360087		0824355724	R 3 560	00442	12	0442	INKANYEZI STREET	KING DINIZULU SURBUR
496	7044600	SHANGASE NB	SIBONGILE R. SHANGASE		F	W	P	4707095524084	4606120511084	0792605359	R 2 180	00446	12	0446	NDLELA STREET	KING DINIZULU SURBUR
497	7044700	KHUMALO T	OWNER		M	M	P	3912100284085		0725682577	R 2 000	00447	12	0442	NDLELA STREET	KING DINIZULU SURBUR
498	7045001	NTULI K	WISEMAN X.J. ZUNGU	GRANDSON	M	S	UN	3408090273089	7207045740085	0603324082	R 500	00450	12	0450	NDLELA STREET	KING DINIZULU SURBUR
499	7045200	NDAWONDE NM	BUSANGANI E. KHOZA		F	W	P	3205150409086	5205150778082	0765528740	R 2980	00452	12	0452	NDLELA STREET	KING DINIZULU SURBUR
500	7045301	MYEZA M	NOKUTHULA Z. GAMA	NIECE	F	S	UN	4207305150085	7507150115084	0761784874	R 300	00453	12	0453	NDLELA STREET	KING DINIZULU SURBUR
501	7045800	NKWANYANA MJ	MSAWENKOSI W.N. NKWANYANA		M	S	UN	2507145107084	7402065683089	0765676614	R 800	00458	12	0458	NDLELA STREET	KING DINIZULU SURBUR
502	7045900	LUTHULI S	LETHUXOLO W. LUTHULI		M	S	UN	3906260207084	9504125407082	0716485720	R 600	00459	12	0459	NDLELA STREET	KING DINIZULU SURBUR
503	7046500	MHLONGO BZ	NKULULEKO K. NDLOVU		M	S	UN	5610030693080	8412125676089	0788188764	R 2 800	00465	12	0465	INKANYEZI STREET	KING DINIZULU SURBUR
504	7046801	MBATA B	SIPHIWE E. BUTHELEZI		F	S	UN	3905180313089	6201170490088	0719610193	R 800	00455	12	0455	NDLELA STREET	KING DINIZULU SURBUR
505	7047300	MNCWANGO NJ	OWNER		F	W	UN	6003140872084		0729082868	R 1 000	00473	12	0473	INKANYEZI STREET	KING DINIZULU SURBUR
506	7047600	MKHIZE ME	MALUSI V. MKHIZE		M	S	UN	7105235395084	7105235395084	0793718850	R 1 000	00476	12	0476	NDLELA STREET	KING DINIZULU SURBUR
507	7048000	NGUBANE TD	OWNER		M	S	UN	6406025697080		0723668244	R 1 000	00480	12	0480	NDLELA STREET	KING DINIZULU SURBUR
508	7050900	MZIMELA CT	ANDILE P. ZIBANE		M	S	P	6301010453088	8806305656086	0674031925	R 1 780	00509	12	0509	ZUNGU STREET	KING DINIZULU SURBUR
509	7055100	NDLOVU BD	SIPHOSETHU G. NDLOVU		M	S	UN	6202156199081	8508205715083	0728268142	R 700	00551	12	0551	NDABA STREET	KING DINIZULU SURBUR
510	7055201	NGIDI DD	OWNER		F	S	P	5505250842088		0721885749	R 1 780	00552	12	0552	SHANDU STRET	KING DINIZULU SURBUR
511	7055410	BIYELA DS	OWNER		F	S	P	6001010549089		0734685712	R 3 500	00554	12	0554	USUTHU STREET	KING DINIZULU SURBUR
512	7056000	GUMEDE MS	OWNER		F	W	P	4211070370084		0712152280	R 1 780	00560	12	0560	USUTHU STREET	KING DINIZULU SURBUR
513	7056410	MAKHANYA TI	OWNER		F	S	P	4805260231087		0798529632	R 1 780	00564	12	0564	NAZARENE STREET	KING DINIZULU SURBUR
514	7057902	ZONDO NGS	OWNER		F	S	UN	7105210527081		0715366059	R 400	00579	12	0579	INKWAZI STREET	KING DINIZULU SURBUR
515	7058000	MKHIZE GS	THEMBA V. DLAMINI		M	S	UN	5207070234089	7503116125085	0649149571	R 1 000	00580	12	0580	INKWAZI STREET	KING DINIZULU SURBUR
516	7058200	TJAYINTJAYI MP	WINFRED N. NTOMBELA		F	S	UN	2503075176082	5912080656086	0660222019	R 1 000	00582	12	0582	INKWAZI STREET	KING DINIZULU SURBUR
517	7058300	NGEMA SE	OWNER		F	S	UN	3605080186086		0726237685	R 3 158	00583	12	0583	INKWAZI STREET	KING DINIZULU SURBUR
518	7058400	ZULU ZJ	THEMBISILE G. MNGUNI		F	S	P	5204225738080	5506061072089	0648115765	R 1 780	00583	12	0584	INKWAZI STREET	KING DINIZULU SURBUR
519	7058800	DUBE NA	OWNER		F	W	UN	520430065080		0783934990	R 1 780	00588	12	0588	INKWAZI STREET	KING DINIZULU SURBUR
520	7058900	MAGELE M	OWNER		M	M	P	4210275457084		0763054006	R 1 800	00589	12	0589	INKWAZI STREET	KING DINIZULU SURBUR
521	7059000	BIYELA Z	BABHEKILE BIYELA		F	W	P	2501105227081	5501100826082	0721480623	R 1 780	00590	12	0590	INKWAZI STREET	KING DINIZULU SURBUR
522	7059300	MAGWAZA L	AYANDA K. ZUNGU	GRANDDAUGHTER	F	S	UN	410225023083	9705190120084	0782561882	R 300	00593	12	0593	USUTHU STREET	KING DINIZULU SURBUR
523	7060200	MHLONGO CS	OWNER		F	D	UN	6307230636089		0729562514	R 0	00602	12	0602	USUTHU STREET	KING DINIZULU SURBUR
524	7060400	MCHUNU MN	VUSUMUZI V. MCHUNU		M	S	UN	3809070206082	7411195420080	0715959660	R 0	00604	12	0604	USUTHU STREET	KING DINIZULU SURBUR
525	7060600	BHENGU NG	GLADNESS S. BHENGU		F	W	UN	3111295139085	7507130454082	0765440650	R 1 100	00606	12	0606	USUTHU STREET	KING DINIZULU SURBUR
526	7061500	MKHIZE NE	OWNER		F	W	P	3605270210084		0829643618	R 1 780	00615	12	0615	USUTHU STREET	KING DINIZULU SURBUR
527	7062000	MAKHOBA MG	OWNER		F	W	P	4204080185089		0798387006	R 1 780	00620	12	0620	USUTHU STREET	KING DINIZULU SURBUR
528	7062801	ZULU N	ERIC M. ZULU		M	S	UN	2505235121080	7111015420084	0726885903	R 500	00628	12	0628	USUTHU STREET	KING DINIZULU SURBUR
529	7063500	NGEMA KDS	OWNER		F	W	P	4704040643085		0766171969	R 1 780	00635	12	0635	USUTHU STREET	KING DINIZULU SURBUR
530	7064100	VILAKAZI R	OWNER		F	W	P	4508230502088		0761397629	R 2 532	00641	12	0641	USUTHU STREET	KING DINIZULU SURBUR
531	7064400	SITHOLE L	OWNER		F	W	P	4407250373084		0763636593	R 1 780	00644	12	0644	USUTHU STREET	KING DINIZULU SURBUR

532	7064510	MDAKANE TE	OWNER		F	W	P	4606280458084		0766638831	R 3 560	00645	12	0645	USUTHU STREET	KING DINIZULU SURBUR
533	7065100	XULU SP	JOHN XULU	SON	M	S	UN	5203190287081	8003086137086		R 400	00651	12	0651	NAZARENE STREET	KING DINIZULU SURBUR
534	7065500	NHLENYAMA AN	ZALELWENGUBANI L. NHLENYAMA		F	W	P	4908095256087	4212300387088		R 3 040	00655	12	0655	NAZARENE STREET	KING DINIZULU SURBUR
535	7065800	MKHIZE ME	QINISELA M. MKHIZE		M	S	UN	4809075465088	8108065867030	0820550812	R 1 000	00658	12	0658	NAZARENE STREET	KING DINIZULU SURBUR
536	7066100	MSOMI B	OWNER		F	W	P	6109160733088		0829311105	R 1 780	00661	12	0661	NAZARENE STREET	KING DINIZULU SURBUR
537	7066700	MALINGA MR	GLADYS S.N. MALINGA		M	S	P		3907010180084	0718028339	R 1 780	00667	12	0667	NAZARENE STREET	KING DINIZULU SURBUR
538	7066800	SIBIYA ME	MAKOSAZANA S. SIBIYA		F	W	P	4008255363086	4504100516084	0721283237	R 1 780	00668	12	0668	NAZARENE STREET	KING DINIZULU SURBUR
539	7067000	NDLOVU T	OWNER		F	M	P	4207280264085		0820765816	R 3 770	00670	12	0670	NAZARENE STREET	KING DINIZULU SURBUR
540	7067100	ZULU B	IRIS S. NGCOBO		F	S	UN	3004280122085	7401041340087	0638317224	R 410	00671	12	0671	NAZARENE STREET	KING DINIZULU SURBUR
541	7070600	MASONDO M	MDLALISENI J. MASONDO		M	S	UN	301212545180	7408105360083	0836963379	R 1 187	00706	12	0706	SHANDU STRET	KING DINIZULU SURBUR
542	7070700	ZUNGU M	KHETHIWE E. ZUNGU		F	M	P	3802275262083	4406170190081	0765705074	R 1 780	00707	12	0707	SHANDU STRET	KING DINIZULU SURBUR
543	7071103	MZIMELA M	NHLANGANISO B. KHUMALO		F	M	UN	7001045748085	8010215351082	0732638948	R 1 260	00711	12	0711	SHANDU STRET	KING DINIZULU SURBUR
544	7071300	KHUMALO BE	OWNER		M	S	UN	5706155954081		0729266854	R 500	00713	12	0713	SHANDU STREET	KING DINIZULU SURBUR
545	7072100	MHLONGO MT	OWNER		F	S	P	5812100868085		0820585931	R 1 780	00721	12	0721	PRINCE G ZULU STREET	KING DINIZULU SURBUR
546	7072400	NTULI NP	NTOMBIZAKITHI NTULI		F	S	UN	5107015622085	9406060189081	0733846894	R 1 000	00724	12	0724	PRINCE G ZULU STREET	KING DINIZULU SURBUR
547	7072500	CELE SA	OWNER		M	W	P	4906235524083		0833481967	R 1 780	00725	12	0725	PRINCE G ZULU STREET	KING DINIZULU SURBUR
548	7073700	MPILI J	OWNER		F	S	P	4204080309085		0828628709	R 2 620	00737	12	0737	PRINCE G ZULU STREET	KING DINIZULU SURBUR
549	7075400	NKWANYANA ED	OWNER		F	W	P	5606290745081		0727715202	R 3 620	00754	12	0754	SHANDU STRET	KING DINIZULU SURBUR
550	7075600	DANISA K	OWNER		F	W	P	3806060730089		0724144429	R 1 780	00756	12	0756	NAZARENE STREET	KING DINIZULU SURBUR
551	7075700	ZULU NH	PAMELLA N. ZULU		F	S	UN	1401011651089	7708101261080	0799089585	R 800	00757	12	0757	NAZARENE STREET	KING DINIZULU SURBUR
552	7075800	XULU NP	NOMUSA P. XULU		F	W	UN	6208260312080	6208260312080	0637871170		00758	12	0758	NAZARENE STREET	KING DINIZULU SURBUR
553	7076000	DHLAMINI MM	DUDUZILE B. DHLAMINI		F	M	P	3412275125080	3512260167086	0734637404	R 1 780	00760	12	0760	NAZARENE STREET	KING DINIZULU SURBUR
554	7089500	ZULU EK	ZWELENKOSI M. ZULU		M	S	UN	5801110269087	8705105475087	0765877785	R 1 600	00895	12	0895	MLALAZI STREET	KING DINIZULU SURBUR
555	7089600	HLONGWA E	DUMISANI W. HLONGWA		M	M	UN	3805240268085	6610315551085		R 2 340	00896	12	0896	PRINCE G ZULU STREET	KING DINIZULU SURBUR
556	7089900	MHLONGO D	OWNER		M	M	P	4910235621089		0768325228	R 917	00899	12	0899	MLALAZI STREET	KING DINIZULU SURBUR
557	7090800	XABA TR	PHUMLANI N. XABA		M	S	UN	5606250118089	7607265627088	0790665630	R 2 700	00908	12	0908	ZUNGU STREET	KING DINIZULU SURBUR
558	7103500	MHLONGO SZ	BUSANA L. MHLONGO		F	M	P	5502285369088	5611090809087	0734346050	R 1 780	01035	12	1035	UMTHOMBOTHI STREET	KING DINIZULU SURBUR
559	7105301	MDLETSHE DE	OWNER		M	M	SE	7402235537082		0732917911	R 0	01053	12	1053	UMKHUHLU STREET	KING DINIZULU SURBUR
560	7108700	MTHEMBU NL	OWNER		F	M	P	4310060349080		0824217274	R 1 780	01087	12	1087	UKHULU STREET	KING DINIZULU SURBUR
561	7109000	NDLOVU KR	OWNER		M	S	P	5102055522089		0725737549	R 2 100	01090	12	1090	UMKHUHLU STREET	KING DINIZULU SURBUR
562	7111900	MTHABELA NF	OWNER	SIGNATURE	F	S	UN	5611140725085		0835639481	R 1 500	01119	12	1119	UMSONTI STREET	KING DINIZULU SURBUR
563	7122900	MBHELE NP	PORTIA Z. MBHELE	DAUGHTER	F	S	UN	7206062273087	8912300600085	0719339628	R 920	01229	12	1229	UBHOBHONI STREET	KING DINIZULU SURBUR
564	7123400	SITHOLE MP	OWNER		F	W	UN	6109020701085		0721804913	R 1 800	01234	12	1234	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
565	7123900	MKHIZE VN	BONISIWE N. ZULU		F	S	UN	6006106196083	8901291188085	0768941331	R 1 000	01239	12	1239	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
566	7124201	MTSHALI MP	BUSISIWE MTSHALI		F	S	P	4010106067080	4010200734080	0647330476	R 2 180	01242	12	1242	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
567	7125000	SIBIYA BO	NELISIWE S. MAHAYE		F	S	UN	4312230401080	7610160383088	0793909892	R 840	01250	12	1250	ISIBHELU STREET	KING DINIZULU SURBUR
568	7125100	SIBIYA AV	ZANELE G. DLAMINI		F	S	UN	7009135615080	7309100743085	0721522925	R 400	01251	12	1251	ISIBHELU STREET	KING DINIZULU SURBUR
569	7125600	MBATHA SH	CABANGANI B. ZUMA	SON	M	C	UN	4903040556087	7302116015085	0765023659	R 1 600	01256	12	1256	ISIBHELU STREET	KING DINIZULU SURBUR
570	7125800	BIYELA S	SIZAKELE V. MAMASHILA		F	S	P	2802030329087	5602100725082		R 1 780	01258	12	1258	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
571	7126000	ZULU T	PHINDILE P. MKHWANAZI	NIECE	F	S	UN	4108075164084	9202280173082	0631805033	R 1 260	01260	12	1260	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
572	7126200	NZUZA TT	CO-OWNER		F	S	P	5104090431086		0798646746	R 2 120	01262	12	1262	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
573	7126300	SHEZI PZ	GUGU N. SIBIYA	SISTER	F	S	UN	7302275570086	8612100004088	0607038755	R 800	01263	12	1263	IBHOBHONI STREET	KING DINIZULU SURBUR
574	7127101	MKHIZE D	OWNER		F	W	P	4708200184087		0798147081	R 3 560	01271	12	1271	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
575	7127600	KHANYILE GA	OWNER		F	W	P	5707310169086		0832391725	R 1 780	01276	12	1276	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
576	7128800	NTULI F	MBHEKISENI J. NTULI	BROTHER	M	M	P	5811255707080	5312235667080	0737190221	R 1 780	01288	12	1288	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
577	7129000	MNGOMA PR	MNCEDISI B. SIBIYA		M	S	UN	4806065294080	0403105908087		R 420	01290	12	1290	IJUBA STREET	KING DINIZULU SURBUR
578	7129100	NZUZA T	RUTH L. NSIBANDE		F	S	UN	4204030417087	6509080576089	0793968764	R 1 230	01291	12	1291	IJUBA STREET	KING DINIZULU SURBUR
579	7131200	MTHEMBU ZM	DUDUZILE R. MTHEMBU	WIFE	F	W	SE	5802235726084	6301120742081	0739744933	R 1 000	01312	12	1312	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
580	7131410	NCANANA B	OWNER		F	W	P	5306040702082		0839619512	R 1 780	01314	12	1314	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
581	7131600	MSOMI N	OWNER		F	S	P	3011200329088			R 1 800	01316	12	1316	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
582	7132120	SEME NA	OWNER		F	S	UN	6405070542084		0739890039	R 500	01321	12	1321	IBHOBHONI STREET	KING DINIZULU SURBUR
583	7132502	BAMBISO KB	OWNER		F	W	UN	6405240337084		0638252961	R 800	01325	12	1325	IJUBA STREET	KING DINIZULU SURBUR
584	7133701	KHUZWAYO DH	OWNER		F	W	UN	6011010465087		0824331742	R 1 200	01337	12	1337	NCEDE STREET	KING DINIZULU SURBUR
585	7134600	MAKHATHINI F	BONGIWE M. MKHIZE	DAUGHTER	F	S	UN	4109100394084	7204180901085	0826400738	R 650	01346	12	1346	NCEDE STREET	KING DINIZULU SURBUR
586	7134802	NTULI TB	OWNER		F	S	P	4606090167081		0729186342	R 1 780	01348	12	1348	NCEDE STREET	KING DINIZULU SURBUR
587	7135400	GAZU KL	OWNER		F	W	P	4907290225087		0673853284	R 1 780	01354	12	1354	IBHOBHONI STREET	KING DINIZULU SURBUR
588	7135700	KHUMALO SL	OWNER		F	W	UN	7311030719086		0796711075	R 420	01357	12	1357	IBHOBHONI STREET	KING DINIZULU SURBUR
589	7135902	NALA SN	OWNER		F	W	UN	6607010349088		0606364105	R 300	01359	12	1359	IBHOBHONI STREET	KING DINIZULU SURBUR
590	7136701	HLATSHWAYO TA	MUZOTSHINGIWE QWABE		M	S	UN	3205050277088	6007075451087	0768902843	R 700	01367	12	1367	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
591	7137000	SIBEKO JM	EMILY T. MASUKU		F	S	P	6412165400087	4307280359089		R 1 780	01370	12	1370	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
592	7138200	SIKHAKHANE M	SYLVIA N. SIKHAKHANE		F	S	UN	3905015255083	6502100592087	0766705914	R 500	01382	12	1382	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
593	7138300	MTHEMBU AJ	OWNER		M	S	UN	6004265877080		0606437395	R 1 000	01383	12	1383	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
594	7139001	GUMEDE NB	OWNER		M	S	P	5602205812082		0633472254	R 1 780	01390	12	1390	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
595	7139100	PHILI ZG	OWNER		F	S	UN	6412260310082		0659484370	R 1 500	01391	12	1391	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
596	7139900	MASONDO (SIBIYA) PB	ZONKE H. SIBIYA	DAUGHTER	F	S	UN	6204260456084	8302100448085	0746628045	R 860	01399	12	1399	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
597	7140000	SHANDU B	NGENANGANI E. SHANDU		F	S	P	0612060058080	4801030515081	0638713026	R 1 780	01400	12	1400	BISHOP STREET	KING DINIZULU SURBUR
598	7140200	SIKHAKHANE JB	ZINHLE MTHETHWA		F	S	UN	6706270682087	8507151432081	0719313425	R 1 400	01402	12	1402	BISHOP STREET	KING DINIZULU SURBUR
599	7140600	MTHABELA BC	THAMSANQA L. MTHABELA	NEPHEW	M	S	UN	5805115556083	9207175351081	0747947872	R 500	01406	12	1406	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
600	7141200	MBAMBO SC	OWNER		M	W	P	5307125486088		0767422620	R 1 780	01412	12	1412	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
601	7141400	MABUYA A	NOMVELO N. DLOMO		F	S	UN	2406065114081	9507020592080	0661580916	R 600	01414	12	1414	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
602	7141710	MTIMKHULU TZ	OWNER		F	S	P	5707010985088		0711815200	R 2 600	01417	12	1417	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
603	7142500	NTOMBELA C	OWNER		F	M	P	5502020969085		0783552736	R 3 560	01425	12	1425	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
604	7142600	MHLONGO MS	OWNER		F	S	P	5802240284087		0609115046	R 2 620	01426	12	1426	IJUBA STREET	KING DINIZULU SURBUR
605	7144200	MTHABELA M	HLENGIWE M. LUTHULI		F	S	UN	5905025876082	7209140540089	0726139738	R 0	01442	12	1442	IBHOBHONI STREET	KING DINIZULU SURBUR
606	7144402	KHUZWAYO GL	OWNER		F	S	UN	7212300323080		0633195152		01444	12	1444	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
607	7144801	MHLONGO B	OWNER		F	S	P	5605300348086		0767972637	R 1 780	01448	12	1448	IBHOBHONI STREET	KING DINIZULU SURBUR
608	7144901	KHUZWAYO NN	OWNER		F	S	UN	6204040930085		0760913989		01449	12	1449	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
609	7145400	UMLALAZI MUNICIPALITY	MUNICIPALITY HOUSE		F	S	UN	8107220959089		0780300026	R 1 200	01454	12	1454	IJUBA STREET	KING DINIZULU SURBUR
610	7145600	DLAMINI MG	PRIMROSE H. GUMEDE	GRANDDAUGHTER	F	S	UN	2402185178080	7208240800088							
611	7145701	MBATHA LG	NOMFUNDO ZWANE		F	S	UN	7512300683080	9409211291087	0714508788	R 0	01457	12	1457	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
612	7145800	GUMEDE TT	THABILE NDLOVU	DAUGHTER	F	S	UN	5906050544082	8512101351084	0764437074	R 840	01458	12	1458	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
613	7145901	BIYELA EP	CO-OWNER		F	W	UN	6403020322087		0766557175	R 1 620	01459	12	1459	IJUBA STREET	KING DINIZULU SURBUR
614	7147601	NDLOVU S	OWNER		M	S	P	7303215381089		0729179952	R 1 780	01476	12	1476	TWO HUNDRED HOUSES	KING DINIZULU SURBUR
615	7147801	MAFULEKA M	NOKUPHILA N. NDLOVU	GRANDDAUGHTER	F	S	UN	2603240147081	9101210815087	0760822698	R 800	01478	12	1478	IJUBA STREET	KING DINIZULU SURBUR
616	271500	MAJOZI MQ	OWNER		F	M	UN	5503050822087		0787002001		02715	11	2715	SOGNDAL STREET	SUNNYDALE
617	267500	WAGNER DE	OWNER		M	S	UN	7909075103080		0780177174	R 1 400	02675	11	2675	ZAMIMPILO STREER	SUNNYDALE
618	177701	KHANYI SC	KHANYI PS	SIBLING	F	S	UN	6212166006085	9101020663081	0843981022	R 1 000	01777	11	1777	GREENTWIN SPOT ROAD	NORWOOD PARK
619	150600	DANISA J	DANISA SG	SON	M	S	UN	6201055695082	9303215275081	0640236019	R 3 300	01506	7	1506	CLIVIA STREET	MPUSHINI PARK
620	251200	MBATHA XN	MBATHA ZP	DAUGHTER	F	S	UN	7510230529084	9801030828083	0635447756	R 2 500	02512	11	2512	SOGNDAL STREET	SUNNYDALE
621	158700	NXUMALO HN	NXUMALO NS	DAUGHTER	f	s	UN	5805210881089	9003010549082	0719494052	R 750	01587	7	1587	FIDDLEWOOD ROAD	MPUSHINI PARK
622	161800	GOVENDER MR	OWNER		M	M	UN	7010145092088		0822257766	R 800	01618	7	1618	CLIVIA STREET	MPUSHINI PARK
623	279400	CELE SN	OWNER		F	S	UN	8205021375081		0637366796	R 460	2794	11	2794	MELOKUHLE STREET	SUNNYDALE
624	6000274	PULAY R	OWNER		F	S	UN	4211060285086		0833754327		386		386		GINGINDLOVU
625	281000	HORSLEY MY	OWNER		M		UN	6602225204087		0820858993	R2 450	281	11	281	MELOKUHLE STREET	SUNNYDALE
626	6000332	RAJAKUMAR L	OWNER		F		P	6102170693087		0623549927	R 1860	468		468	GEMBOK STREET	GINGINDLOVU
627	276200	NGONYAMA BS	OWNER		M	S	UN	7906026419086		0664929063	R 300	2726	11	2726	BISHOP BIYELA STREET	SUNNYDALE
628	7055501	BUTHELEZI M	BUTHELEZI N	SON	M	S	UN	3807285181082	8810045708082	0761051369	R 1920	555	12	555		KDS
629	250900	DUBE BM	DUBE LK	WIFE	F	W	UN	7005050434085	6501285699089	0756105545	R 1 300	2509	11	2509	SOGNDAL STREET	SUNNYDALE
630	4055666	TOVEY AS	OWNER		F	S	EM	6401040226189		0824635872	R 14 914,2	556		556	MCCALLUM STREET	MTUNZINI