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Declaration

I hereby declare that this treatise / dissertation / thesis is my individual work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification. It is the product of my own work through the guidance of my supervisor and all sources used have been acknowledged by means of complete references.

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I would like to dedicate this work to my family, for allowing me time to further my studies and for their support and understanding especially when I could not visit them at home.

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To the God of Mount Zion, all I can say is thank you, thank you, thank you...

Abstract

Polokwane Local Municipality is one of many municipalities in South Africa experiencing challenges of providing potable water services to their local residents. Residents' dissatisfaction about poor potable water services have manifested in community protests.

The study, which looks at the communities' experience within the Makweng Cluster, aims to assess the main constraints facing Polokwane Local Municipality in providing potable water to the Mankweng Cluster.

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List of Acronyms

ANC	African National Congress
DWAF	Department of Water Affairs and Forestry
DWS	Department of Water and Sanitation
IDP	Integrated Development Plan
LNWB	Lepelle Northern Water Board
MIG	Municipal Infrastructure Grant
NGO	Non-Government Organisations
RDP	Reconstruction and Development Programme
RSA	Republic of South Africa
WSA	Water Service Authority
WSDP	Water Service Development Plan
WSP	Water Service Provider

CHAPTER 1: INTRODUCTION AND CONTEXT

1. Introduction

Most communities in the Mankweng Cluster have the challenges of shortages of potable water. Some communities are forced to access water in areas that are not safe and the water is not of good quality. This ultimately leads to diseases such as diarrhoea. Even in the area under study, shortages of potable water remain a challenge to most community members. Despite intervention by government to ensure basic service delivery to everyone, there still remains a backlog of communities without basic water services. This study looks at the reasons for this.

This chapter will focus on the orientation and background of the study. It will also include the aims and objectives of the study, its problem statement and provide an overview of the treatise's chapters.

2. Background

This study was undertaken in the Mankweng Cluster, which is one of the cluster areas of Polokwane Local Municipality. It falls under Capricorn District. The Mankweng area is approximately 30km from Polokwane. Polokwane Municipality is the municipal seat, as well as the capital city of Limpopo Province. It is the largest city in the northern part of South Africa and is the major economic hub of the province (Polokwane Local Municipality, 2009). The city comprises of a total area of approximately 377578.99ha, and the geographical area of Polokwane has a large portion of the population living in rural or peri-urban areas, which for the most part are unplanned and poorly serviced (Polokwane IDP 2015-2016). The local municipality's water supply relies on both the Ebenezer Dam and the Dap Naude Dam (Polokwane Local Municipality IDP 2015-2016). Furthermore, once treated, the water from Ebenezer dam also

supplies Mamabolo, Mothapo and Mankweng before reaching Polokwane, while water from the Dap Naude Dam supplies Dalmada village before it is distributed to the communities around Polokwane. According to the SA Year Book (2006/7:22), Limpopo has a strong rural base. Its growth strategy relies on addressing issues of infrastructure, alleviation of poverty and social development. Therefore, development for this community could mean the improvement of their current standards of living and quality of life.

Mankweng cluster includes the settlements of Ga-Magowa, Ga-Makanye, Ga-Ramogale, Ga-Thoka, Makgwareng, Mankweng A-D, Moshate and Phomolong. The study focused on Ga-Makanye, Mankweng A and Ga-Thoka. Like many other villages the Mankweng cluster is characterized by high unemployment and most households rely on the government social grant system, state pensions, kin dependency, formal and informal employment and hawking. The taps in their yards sometimes run dry leaving them with no option but to seek unsafe alternative water resources

'Potable water supply' is a general term used to describe the delivery of drinking water by public utilities, commercial organisations, and community members or individuals, to consumers, usually via a system of pumps and pipes. In many developing countries, rural areas are characterised by high levels of poverty and hardship amongst the resident populations. In addition, the supply of potable water is often characterised by lack of accessibility, lack of sufficiency and lack of clean and or affordable water (Nathanson, 2014:3). According to Wikipedia (Water supply and women in developing countries, 2014) women and children are the primary household members responsible for providing water for domestic consumption. This duty may take three to four hours a day, which may prevent children from going to school and women from pursuing small business opportunities.

According to a study conducted in Polokwane Municipality at the Mabokele village by Manamela (2010:68), the major factor behind the poor delivery

of water services was the capacity constraints faced by the Polokwane Municipality.

Prior to 1994 the responsibility of supply of potable water was fragmented amongst the various homelands and the white areas, with no single national government department responsible. Ill-equipped and ill-supplied homeland governments ran potable water services infrastructure in the homelands, resulting in different levels of service inequalities between black and white areas (Department of Water Affairs, 1994:3). Furthermore, there was no systematic national water legislation (Fidelis, 2007:12). Consequently, the poor black rural areas were run unproductively by unskilled homeland government structures that were completely dependent on the South African government for funding (Nnadozie, 2011:2). The responsibility of the pre-1994 Department of Water Affairs and Forestry (DWAF) was limited solely to irrigation and forestry. As a result the potable water sector and environment suffered the consequences; resulting in 35.7 million out of a population of 41 million people lacking access to basic water services (Nnadozie, 2011:2).

The Reconstruction and Development Programme (RDP) is a policy instituted post the apartheid government, which was aimed, among others, at redressing South Africa's skewed water resource and service problems and to recognise the right of all South Africans to access clean water and adequate sanitation (African National Congress. 1994). The RDP policy gave the Department of Water Affairs and Forestry the responsibility of ensuring universal access to basic water services for all South Africans. Due to the political will to implement sustainable water development through sound water governance, the democratic government established reforms in water policies and institutions (Fidelis, 2007:8).

Chapter 7 of the Constitution of the Republic of South Africa (Act 108 of 1996) brought major shifts to local government. The Constitution assigns

responsibility of ensuring access to water services to local government. It further stipulates the objectives of the local government as being to provide for a democratic and accountable government for local communities. There are other factors that also affect water services in the country. Monashane (2011:33) stated the shortages of potable water services have a negative impact on health and local economic development. For example, no company would plan to build a complex at a place that has no water supply. However, despite the vast resources that have been directed towards water supply in the country, experience has shown that rural areas and their communities are extremely difficult to develop (Chambers 1997:58). This is because the problems facing rural areas and communities are often entrenched in the broader patterns of social and economic relations between urban and rural areas. Similarly, Nzimande (2009:56) states that although government has made improvement in the provision of water in different parts of the country, there remains a backlog of people living without access to basic water services especially the Eastern Cape, Limpopo and Mpumalanga provinces.

Given this situation, it is imperative that policy makers seek to learn from their mistakes and adjust their operations accordingly. While examples of successful communities with basic water services in the province may be few and far in between, they are extremely valuable in that they offer the most scope for learning and replication.

Hence this research aimed to assess the main challenges faced by the Polokwane Local Municipality in delivering water services to the Mankweng cluster. It is anticipated that the results of this research will have important value in that they will help to give directions to the present policy and also assist the Municipality on what they need to fix to get best outputs.

3. Problem statement

The Constitution of the Republic of South Africa (Act 108 of 1996) assigns responsibility of ensuring access to water services to local government. The 2015-2016 Integrated Development Plan of Polokwane Local Municipality indicates that there are no communities without water; but that there are 32% of villages that are below the RDP (Reconstruction and Development Programme) level as far as water provision is concerned. In the area under study the majority of the houses are provided with water and in some with flush toilets. However, community members have challenges of taps running dry without proper explanation. This research will seek to assess the reasons for the challenges faced by the Polokwane Local Municipality in delivering water services to Mankweng cluster.

3.1 Research Question

With the above in mind, the research question is:

“What are challenges facing water supply services in Mankweng Cluster of Polokwane Municipality?”

3.2 Sub-Questions

With the sub-questions as follows:

- What is the state of potable water supply in Mankweng cluster?
- What is the process of stakeholder consultation on service delivery to develop the Integrated Development Plan in Polokwane Municipality
- What is the current water supply service in Polokwane Municipality, how many times does the community get water in a period of a week?
- What are the potable water supply challenges facing Limpopo province?

- To what extent has Polokwane Municipality succeeded in providing water to the Mankweng cluster?
- What are the challenges faced by the Polokwane Municipality in terms of water provision?

3.3 Research Aims

The aim of the study is to assess problems faced by Polokwane Local Municipality in delivering water services to Mankweng cluster.

3.4 Research Objectives

The objectives of the research were:

- To analyze what Polokwane Municipality has done so far to ensure the accessibility of water services in the Mankweng cluster in terms of the IDP.
- To analyze the challenges that prevents the Municipality from providing access to water on daily basis.
- To make recommendations on strategies that can be used to ensure that Mankweng cluster receives an adequate water supply.

4. Overview of the chapters

This study covered the following aspects of the research, and the findings are captured in the chapters as described below:

Chapter 2: Literature Review

This chapter focuses on the theoretical review from different scholars, books, journals, articles, government documents and the internet about the topic of research.

Chapter 3: Research Methodology

Chapter three takes us through the research methods used in arriving at the findings. The chapter includes the research approach, the research design, data collection, sampling and the data analysis method.

Chapter 4: Presentation of Findings

This chapter focuses on the presentation of results from the respondents by means of questionnaires, observation, document analysis and interviews. It also discusses, interprets and synthesizes the findings obtained during data collection.

Chapter 5: Conclusions and Recommendations

The main aim of this chapter is to report on findings and to make recommendations. It also links the main findings with the objectives of the study.

[5. Conclusion](#)

Chapter one focused on the introducing Ga-Makhanye, Mankweng A and Ga-Thoka villages belonging to Mankweng Cluster of the Polokwane municipality and the problem on access to potable water. The next chapter will look at the literature surrounding water supply to communities. The literature will consist of reviewing available legislation, regulations and other materials on potable water supply.

CHAPTER 2: LITERATURE REVIEW

1. INTRODUCTION

This chapter presents a review of literature related to the challenges facing water supply in rural areas in South Africa. It discusses issues such as the state of water supply in South Africa, the importance of potable water and some of the key water supply challenges. The chapter also covers issues surrounding the legislative and institutional framework that guides delivery of water in the country.

2. LITERATURE REVIEW

According to the 1996 Constitution of the Republic of South Africa, access to water services is recognised as a fundamental human right. The post-apartheid reforms in South Africa established the existing water framework in order to redress past disparities which were inherited prior racial segregation policies which had resulted in stark inequalities between black and white communities in the face of access to water (Gualtieri, 2007:1). Further, South Africa has adopted a progressive law and policy framework for water which is based upon the constitutional recognition of the right of access to water. Nzimande (2009:56) states that although the government has made improvements in providing water and sanitation in different parts of the country, there still remains a backlog of people living without access to basic water services. This is evident in communities in the predominantly rural provinces of Eastern Cape, North West, Mpumalanga and Limpopo.

3. LEGISLATIVE FRAMEWORK ON WATER SERVICES

3.1 WHITE PAPER ON WATER SUPPLY AND SANITATION, 1994

Prior to 1994, water services in South Africa were based on The Water Act of 1956. The Act was founded on two principle ideas:

- The Riparian principle which determines a link between who has the right to use water and ownership of the land adjacent to that; and
- A separation between public and private water.

This resulted in the uneven distribution of water. Water use was also racially biased and access to water was a privilege of those with access to land and political and economic power. As a result, there was a need for policy change.

The Reconstruction Development Programme (RDP) mandated the Department of Water Affairs and Forestry (DWA) the responsibility of ensuring that all South Africans have access to water services. However, this required a new policy and strategy in order to respond to the water services challenges (DWA, 2004:5). Therefore, the White Paper on Water and Sanitation was released in November 1994. The White Paper highlighted the importance of a rapid delivery of water and sanitation services. Furthermore, the White Paper's long term goal was to have Local Government take responsibility for both providing and sustaining water services. The White Paper (in line with the 1994 interim constitution) proposed that a programme of water and sanitation infrastructure delivery be rolled out by extending the mandate of all water boards in order to enable them to provide water services directly to end consumers and by allocating national government resources to infrastructure development via Department of Water Affairs and Forestry.

The 1997 White Paper on a National Water Policy outlines guidelines for the management of water, the drafting of effective legislation, and the creation

of programmes of action. It aims to promote equity in access to and benefit from the nation's water supply.

The 1997 White Paper on a National Water Policy's main objective is to create a principle of equity to the water law reform process, so that the needs of previously disadvantaged could be addressed. The other objective is for National Government to ensure that the country's limited water resources are used to improve the quality of life for all South Africans.

The Constitution of the Republic of South Africa (Act, 108 of 1996) and the Bill of Rights enshrines the principle of access to sufficient and clean drinking water as a basic human right. Section 27 of the Constitution stipulates that every person has a constitutional right to have access to sufficient water. The Constitution also binds all three sphere of government (national, provincial and local) to realise the right of access to water (Growland-Gualtrieri, 2007:2). The rights relates both to allowing for physical and for economic access to water. Moreover, the Constitution does not provide for the right of individuals to access water, instead it places the responsibility on the government to take equitable action to give effect to the general rights of the population. Thus, it is the responsibility of the national government to establish a framework to ensure the realisation of this right, local government have the responsibility to ensure the delivery of water to their communities.

3.2 Water Service Act

The Water Service Act, 1997 (Act 108 of 1997) created a regulatory framework within which water services should be provided, which involves regulating the use of water resources and issues affecting the water resources. The Act provides for the rights of access to a basic water supply and the right to basic sanitation necessary to ensure sufficient water and an environment that is not harmful to human health or wellbeing. The Act further places all water institutions under an obligation to give preference

to the provision of a basic water supply and basic sanitation to communities. The regulation to the Act prescribes what the basic water quantity and minimum standards of water supply should be. Regulation 3 outlines that the minimum standards of water supply should be a minimum quantity of potable water of 25litres per person per day or 6 kilolitres per household per month, at a minimum flow rate of not less than 10 litres per minute, within 200 metres of a household; and with an effectiveness such that no consumer is without supply for more than seven full days in a year.

Furthermore, the Water Services Act makes a clear distinction between the water institutions that play a role in the supply and the management of water services. The two institutions are: the Water Services Authority and Water Services Providers. The Water Services Act outlines the duties of a Water Services Authority as responsible for ensuring access to water services; accountable for making decisions on appropriate water service development approaches, delivery and resource allocation; responsible for deciding which Water Service Provider is appropriate for their circumstances and responsible for preparing a Water Services Development Plan (WSDP).

Although the Act stipulates that municipalities should always carry the water service authority function, it is not all municipalities that are authorised as Water Services Authorities.

The Water Services Act outlines the duties of a Water Services Provider as ensuring the delivery of water services to consumers or to another water service institution. A water service provider should account to the water service authority within its area of jurisdiction, to the relevant province and Minister in question as well as the consumer or potential consumer concerning the provision of water services.

3.3 National Water Act

The National Water Act (Act of 1998) provides for principled legal instrument relating to water resources. The National Water Act of 1998 is supported by the constitutional need to heal past inequalities and to improve the quality of life for all citizens. The Act sets out to redress part imbalances regarding water resource allocation, while respecting the constitutional right to property and the public environmental interest (Glazewski, 2005:429). The main purpose of the National Water Act of 1998 is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account, amongst others, factors such as: meeting the basic human needs of present and future generations; promoting equitable access to water; redressing the results of past racial and gender discrimination; promoting the efficient, sustainable and beneficial use of water in the public interest; facilitating social and economic development; providing for growing demand for water use; protect aquatic and associated ecosystems and their biological diversity (Gowlland-Gualtieri, 2007:3).

3.4 THE FREE BASIC WATER POLICY

The Free Water Policy was adopted in July 2001. The aim of the policy frameworks and the legislation governing water is to redress past inequalities by ensuring water provision should be a universal right. Also, it ensures that management and distribution is done in an efficient and effective manner for the benefit of all. Through this policy, each household should receive up to 6000 litres of clean water per month (Berger, 2004/5:603). The amount of free water is the same for every household, irrespective of wealth and number of persons comprising it.

3.5 MUNICIPAL STRUCTURES ACT

The Local Government Municipal Structures Act (RSA, 1998) defines types and structures of municipalities. The three categories of municipalities in South Africa after demarcation are Category A (Metropolitan), Category B (Local), Category C (District). The Local Government: Municipality Systems Act (RSA, 2000), defines how local government should operate and allows for various types of partnership arrangements a municipality may enter to ensure delivery of services such as water and sanitation. The Local Government Municipality Structures Amendment Act (RSA, 2000), places the function of ensuring access to water services at a district level, unless a local municipality is authorised by the minister to perform the function.

3.6 MUNICIPAL SYSTEM ACT

According to the Municipality System Act (Act 32 of 2000), municipalities are given the authority to advance the social and economic upliftment of local communities and to ensure universal access to essential services that are affordable to all. Section 25 of the Act makes it a legislative imperative that a municipality adopts an integrated development plan (IDP), which is the core strategic planning document of a municipality and gives direction for the compilation of the medium term budget, which covers a period of three years. Section 73 (2) of the Act, deals with matters relating to municipal services. It states that the municipal services must:

- Be equitable and accessible;
- Be provided in a manner that is conducive to prudent, economic, efficient and effective use of available resources; the improvement of standards of quality over time;
- Be financially stable;
- Be environmentally sustainable; and

- Be regularly reviewed with a view of upgrading, extension and improvement.

Section 74 of the Act, further states that a municipality must adopt and implement a tariff policy on the levying of fees for municipal services provided by the municipality; that the consumers of municipal services should be treated equitably in the application of tariffs, and that the amount individuals consumers pay for services should generally be in proportion to their use of that service. In addition, poor households must have access to at least basic services through tariffs that cover only operating and maintenance costs; special tariffs or life line tariffs for low levels of use or consumption of services or any other direct or indirect method of subsidisation of tariffs for poor household.

4 ACCESSIBILITY OF WATER

'Access' is defined as the ability to use or derive benefit from things (in this case, from drinking water resources and technology). Potable water or good water is sometimes described as 'wholesome and palatable', a term which is defined as water which is free from disease, organisms, poisonous substances, and excessive amounts of mineral and organic matter. To be palatable means that it must be significantly free from colour, turbidity, taste and odour and well aerated (Fair, et al 1971). In South Africa, water services are an essential component of the development of communities. Large parts of the country are dry and rely on the capacity of the local government to provide piped water to households.

The Department of Water and Sanitation (formally known as Department of Water Affairs and Forestry) and the Local Municipality which are authorised as being water service authorities should see to it that communities are provided with sustainable water services to enhance their quality of life and their livelihood. The delivery of water to communities is a fundamental right and not a privilege. It is a right that is enshrined in the

constitution that every citizen should have access and affordable water services. The Department of Water and Sanitation as the custodian of water resources should ensure that adequate water storages are created. Such measure will ensure effective and reliable delivery of water services to the communities.

5 STATE OF ACCESSIBILITY OF WATER IN SOUTH AFRICA

According to an article on South Africa's current water situation (Water Access in South Africa, 2013), 60% of the population live in urban areas whilst 40% of the people live in rural areas, out of a population of 51 million people. The article states that currently, South Africa has access to surface water constituting to about a total use of 77%, groundwater constituting to about 9% of the total use and recycled water constituting to about 14 % of the total use.

However, due to the lack of infrastructure in rural areas, 74% of the population in rural areas rely on groundwater. On the other hand, the population in the urban areas get most of their water from surface sources like the Limpopo and Komati rivers. As a result, the population dependence on water is not evenly distributed. In addition, the article states that due to immigration and population growth, growth in rural areas is putting a huge impact on South Africa's water supply. Currently, 19% of the people living in rural areas do not have access to a reliable water supply whilst 33% do not have access to basic sanitation services. Moreover, in urban areas, over 26% of all schools and 45% of clinics have no access to water either (Water Access in South Africa, 2013).

The Polokwane Local Municipality Integrated Development Plan of 2015/2016 indicates that there are no communities without water; but that there are 32% of villages that are below the RDP level of supply as far as water provision is concerned. The majority of the houses are however

provided with water and flush toilets. The document also reflects that in recent years, there has been a decrease on the dependence on water vendors as a water source from 3.8% to 0.2%; this implies a significant improvement in the quality of life of the community. The Municipality continues to encourage the communities to harvest rainwater for household usage taking into account that Polokwane is water scarce and that it will be beneficial not to let any water go to waste.

6 THE IMPORTANCE OF POTABLE WATER

Water is the most important source of life, without which no living organism can survive (Stein, 1989:13). Water can help communities to alleviate poverty by introducing farming projects like fruit and vegetables garden which leads to the creation of job opportunities for the local community. Masimbambane (2006:5) states that the provision of clean water to the communities is more likely to reduce the outbreak of water related diseases such as cholera and diarrhoea.

In addition, water is the most common compound on earth and not only is it essential for life but has become intertwined with all aspects of human lives in various complex ways. Almost every person needs 20 to 40 litres of water per day for drinking, cooking and sanitation alone, yet there are people living without safe drinking water (Cunningham & Woodworth, 1997). King (2004:207) defines water as an indispensable natural resource- vitally necessary to sustain life, the environment, food production, and it is essential for economic development. According to a study conducted by the Water Resource Centre (WRC, 2011), water is regarded as a scarce resource all over the world, an estimate of 41% of the world's population lives under 'water stresses', meaning that per capita water supply for these people is less than 1.7m³/year. In addition, the Water Resource Centre revealed that 1.1 billion people live without safe

drinking water and that 2.6 billion people do not have access to adequate sanitation which often leads to health problems (WRC, 2011).

7. INTEGRATED DEVELOPMENT PLANNING

Prior to 1994, local government was mainly concerned with service provision and the implementation of regulations. However, post 1994, with the introduction of the new Constitution and the new legislative and policy framework, the role of local government expanded to a larger extent. The new approach to local government has to be developmental and aims to overcome the poor planning of the past. The integrated Development Plan (IDP) is a process through which municipalities prepare a strategic development plan which extends over a five-year period. The IDP is a principal strategic planning instrument which guides and informs all planning, budgeting, management and decision-making process in a municipality (Local Government Integrated Development Planning, 1996:9-11). The Constitution of the Republic of South Africa, 1996 stipulates that the local sphere of government consists of municipalities which were established for the whole of the territory of South Africa. The objects of local government are set out in Section 152 of the Constitution. Accordingly the objects are –

- a) To provide democratic and accountable government for local communities;
- b) To ensure the provision of services to communities in a sustainable manner;
- c) To promote social and economic development;
- d) To promote a safe and healthy environment; and
- e) To encourage the involvement of communities and community organizations in the matters of local government.

The legislative framework in which the IDP is vastly discussed includes the Municipal Systems Act of 2001 and the Municipal Structures Act of 1997. Another piece of legislation which has a tremendous impact on the IDP is the Municipal Finance Management Act 56 of 2003 (MFMA) as it outlines the alignment of the budget and IDP (Polokwane Local Municipality IDP, 2015-2016).

8. CONCLUSION

Chapter Two focused on explaining the legal framework regulating water supply service delivery at the level of National and Provincial government level, as well as the local municipal level in South Africa. It further explained the status of water supply in the Polokwane Local Municipality and highlighted some of the water supply challenges faced by South Africa. The next chapter, will look at specific methods that will be used to gather data.

CHAPTER 3: METHODOLOGY AND RESEARCH METHODS

1. INTRODUCTION

This chapter takes us through the research methods used to arrive at the findings of the study. It explains the research design, the various data collection tools used and the data analysis method applied. It also presents the methods used to verify data.

2. RESEARCH DESIGN

The research method applied for this research is qualitative. The rationale for selecting a qualitative method is that using qualitative methods, in particular open-ended questions and focus groups discussions will allow the researcher to get more information from the respondents which through follow up questions will allow the researcher to delve deeper into the research topic. In addition, Bryman (1984:77) argues that the indispensable condition or qualification for qualitative methodology is committed to seeing the world from the point of view of the actor participant. Therefore, because of this commitment to see through the eyes of one's subject, close involvement is recommended.

3. TARGET GROUP

The target group for the study comprised Polokwane Local Municipality officials, and community members and leaders from the Ga- Makanye, Ga-Thoka and Mankweng A villages.

4. SAMPLE SIZE

Sampling refers to the process used to select a portion of the population for study and is based on purposive sampling which means that participants are selected because of some defining characteristics that makes them the holder of the data needed for the study. For the purpose of obtaining comprehensive outcomes, the sample size for this study was 35 respondents in total for all target groups (Ga-Makanye, Ga-Thoka and Mankweng A) and two representatives from the Polokwane Local Municipality were interviewed.

5. DATA COLLECTION TOOLS

5.1 Questionnaires

Questionnaires are the easiest and quickest tool to collect data in a non-threatening way and are regarded as the most accurate and suitable instrument for qualitative research method (Welman & Kruger, 2001:162). Tuckman (1978:196) affirms that questionnaires are used by researcher to convert the information directly given by people into data. Also, by providing access to what is inside somebody's mind, this approach makes it possible to measure what a person knows, likes and dislikes and what he thinks. For the purpose of this research questionnaires were used to generate data from the community members. The researcher distributed 35 questionnaires for self-completion to the three communities (Ga-Makanye, Ga-Thoka and Mankweng A) which are within the jurisdiction of Polokwane Municipality. The questionnaires were hand delivered to the individual respondents, who completed the questionnaire themselves, and the questionnaires were collected five days later from the individual respondents.

5.2 Interviews

According to Babbie (1973:172) individual interviews allow the interviewee to be free to expand on the topic as they see fit. It also allows the interviewer to feel free to intervene in order to ask for clarification of further explanation during the interviewing process.

For this study, the researcher conducted face-to-face interviews with Polokwane Local Municipality officials in order to avoid any misinterpretation, postponements and misrepresentations that might occur from respondents. An Interview Protocol (please refer to the Appendix) was used for the interviews with Polokwane Municipality officials. The focus in the Polokwane Municipality were staff working in water services, employees working in the division that deals with planning of services delivery (water services delivery as a focus) and staff in public participation.

5.3 Observations

Frankfort-Nachmias & Nachmias (1996:245) states that observational techniques are used to determine how individuals or groups of persons react under specific circumstances, either natural or artificial. According to Mathews & Ross, (2010:262), the advantage of using observation method is that it provides a detailed, rounded picture of social phenomena. Also, it does not rely on the use of the participants' words and therefore it does not matter if the participants are articulate.

For this study, the researcher used observational techniques as they have an advantage of clarifying misunderstandings, because real life behaviour can be perceived, studied and verified. During this research, behaviour between the community and employees of the Polokwane Municipality were observed to determine if any behavioural patterns could be discerned and

if so, whether it could possibly be linked to the potable water access problems. Added to this, the researcher spent a week observing the patterns of water running from community taps in order to determine the extent of the water problem.

6. Document Analysis

Mathews & Ross (2010:305), states that the advantage of using documents analysis is that documents are often readily available and frequently contain large amounts of information. Also, because they are socially constructed, they can tell us more than just the data and information that they contain. Administrative documents such as the Polokwane Local Municipality Integrated Development Plan and the Polokwane Local Municipality Water Service Development Plan were analysed for issues that are linked to access to water supply in Mankweng Cluster.

7. DATA ANALYSIS AND INTERPRETATION

Content Analysis is a systematic qualitative data analysis approach that identifies and summarises the message (Maree, 2007:101). In this case, it was used to analyse interviews that were conducted with community members and municipal officials. Codes were created from the content which later was placed into categories.

To supplement the content analysis, discourse analyses was also used. This was more focused on the meanings of the words spoken, written and the reasons why words were used in a specific manner. Since structured and semi- structured interviews were used, discourse analyses assisted in studying and analysing written texts and spoken words to reveal the discursive sources of power, dominance, inequality and biases (as per Bles, Higson and Kagee, 2006:44).

8. RELIABILITY AND VALIDITY OF DATA

According to MacMillan and Schumacher (1993:385), reliability is the extent to which a researcher could independently discover the same phenomenon, on which subsequently there is agreement in the description of the phenomenon between the researcher and the participant.

To test for the reliability of the data for this study, the researcher asked the same questions to all the participants of the research. Validity of the research was provided by the strong chain of evidence flowing through the study.

9. TRIANGULATION

Triangulation is a powerful technique that facilitates validation of data through cross-verification with more than two sources. In particular, it refers to the application and combination of several research methodologies in the study of the same phenomenon; the idea being that one can be more confident with a result if different methods lead to the same result. If a researcher uses only one method, the temptation is strong to believe in the findings. If the researcher, however, uses two methods, the results may well clash. By using three methods to get at the answer to one question, the hope is that two of the three methods will produce similar answers; or if three clashing answers are produced, the investigator knows that the question needs to be reframed, or the methods reconsidered, or both.

10. LIMITATION OF THE RESEARCH

This research is limited to the Polokwane Local Municipality. However, other municipalities, particularly those in the same province, may find the findings useful and informative.

11. ETHICAL CONSIDERATIONS

The information obtained will not be used for any other purpose except for this research.

12. CONCLUSION

The above-mentioned methods helped the researcher to get an understanding of the data that was collected and analysed; as well as helping to answer the research question. The methods also assisted the researcher to make sure that the objectives are reached. In the following chapter the research findings are presented.

CHAPTER 4: RESEARCH FINDINGS AND ANALYSES

1. INTRODUCTION

This chapter presents analysed data from interviews and questionnaires conducted with respondents from Mankweng cluster. Residents of the area responded to interviews and by self-completing qualitative questionnaires presented by the researcher. The Ward Councillor for the area, and the management from the Water and Infrastructure Unit of the municipality were also interviewed to gather more information and to validate some findings.

Fig.1: The table below represents the demographic information of the respondents and the number of questionnaires returned to the researcher

	Ga-Makanye	Ga-Thoka	Mankweng A
Number of Questionnaires distributed	Thirty-five (35)	Thirty-five (35)	Thirty-five (35)
Number of Questionnaires received back	Thirty (30)	Thirty-two (32)	Twenty-seven years (27)
Ages of Respondents (The target group for the researcher was from the ages of 16 to 52 years and above)	The respondents in this village varied from the ages of eighteen years of age to fifty three years.	The respondents in this village varied from the ages of twenty-two to sixty-five years	The respondents in this village varied from sixteen years to fifty-five years
Gender of respondents	Seventeen Females Thirteen Males	Twenty Females Twelve Males	Fifteen Females Twelve Males

Number of years at current resident	Fifteen of the respondents have been living at the village for more than thirty years, six indicated that they have ten years at current resident and five indicated that they do not have more than two years at current resident.	Twenty respondents indicated that they have more than thirty-five years at current resident, two indicated that they have one year at current resident; five indicated they have fifteen years and five indicated that they have more than ten years at current resident.	Ten of respondents have more than thirty years at the current residence, seven of the respondents have more than twenty years, four of the respondents have more than fifteen years at current resident and six of the respondents have more than five years at current resident.
Race	The race group in this village are all black	The race group in this village are all black	The race group in this village are all black

Data on water supply patterns over a period of a week for different areas of the cluster, as observed by the researcher, are also presented.

2. RESEARCH FINDINGS

2.1 Water Supply in Mankweng Cluster

This section's findings is presented according to sections of the Mankweng Cluster.

Ga-Thoka village: This village forms part of the Mankweng Cluster, and consists of different settlements.

(i) There is an area that has mud and tin houses, which can be classified as a lower income settlement. Water supply for this section, is at the level of communal street tap. The researcher tried to find out how many times per day or week the street taps provide water, but the results were mixed. Some of the people interviewed indicated that they get water during the night, while some respondents indicated that they get water from 8h00 till the evening. The residents indicated that a water tanker truck sometimes deliver water to sections that do not have access to potable water. However, they could not provide exact days, times or sections that the truck supplies water to. Some residents indicated that the delivery of water by the water tanker truck is very helpful.

(ii) It has another section which has tiled roof houses which could be classified as a middle income residential area. The tiled roof section has yard connections, with some houses having house connections. According to the gathered information, these levels of service were developed by the municipality. But the respondents indicated that the scheme that the municipality wanted to use to collect revenue did not work because it was neglected. The people are getting their water supply without paying for the service.

However, in one section of the same tiled houses, respondents indicated that they get water for two days in a period of a week, while the rest of the section gets water uninterrupted.

The finding for this section of the cluster shows that the state of potable water supply in Ga-Thoka is not reliable.

Ga-Makanye village: Ga-Makanye is a village that also has mixed residences. It has (i) tiled houses (which is assumed to indicate middle income class), and (ii) shacks (tin houses) and mud houses. The Ga-Makanye area has around 250 households. Ninety percent (90%) of the households have household yard connections (water stand tap inside the yard). According to the respondents, these street taps were done by individual households at their own expenses. The municipality did not contribute anything to get the household connections. The yard connections are not metered.

The respondents indicated that their water supply in the area is not reliable. Households receive water on weekends (Friday, Saturday and Sunday) in a period of a week. There are households that indicated that they receive water up to seven days a week. The main reasons for this could be attributed to the area's general landscape and topography, combined with the inadequate water pressure capacity of the system, resulting in lower lying areas having water throughout the day. Some of the questionnaires conducted in this community indicated that they have not had a water supply for the period of two months preceding the research.

Others indicated that they only receive water during rainy days because then the system copes as less people use it.

Most of the street taps are vandalized by thieves who steal the copper. At the moment these households rely on getting water from the neighbours to do washing and cooking. Furthermore, they indicated that it is really bad when there is a funeral in their section, because they would need to organise enough potable water until the burial has ended.

In this village the residents indicated that they rarely come across the water tanker truck that delivers water.

Mankweng A (Block F): This block consists of two areas:

(i) A larger area of middle income houses, which most are bought through the banks' mortgage system, and

(ii) An area adjacent to it, which in the 1990s was an informal settlement camp, but has now developed into a lower income area with a village nature.

The middle class area has house connections because they are mostly mortgage houses and the lay-out of the residential area is entrenched. Households in this area pay for water services billed by the municipality on a monthly basis. The water supply service here is excellent. It is believed that they do not get water from the pipelines supplying the villages in the Mankweng cluster, but rather get their supply from a pipeline dedicated to the University of Limpopo and Mankweng Hospital. This pipeline is well taken care of to ensure the university and hospital have uninterrupted supply of water. This is because the two are national institutions and they are given preference over the households in the Mankweng Cluster.

The Block F households have individual household gardens which are watered daily by household owners.

2.2 STAKEHOLDER CONSULTATION PROCESS

Out of all the people who responded to the questionnaires and interviews, they responded as follows:

Ga-Thoka. The people interviewed responded that they have never heard or seen a notice inviting them to Integrated Development Planning (IDP) meetings, in which water supply is part of the agenda. Some of the residence indicated that they used to see notices at the school (Ga- Thoka Primary School and the local High School) premises about IDP meetings,

but that it has been long (three years) since they have come across those notices. They all confirmed that they never attended the meetings.

Ga-Makanye. The people responded that they have never attended IDP meetings, but they know about IDP. Most of the residents indicated that they felt the venue was inappropriate as it was at Mankweng Hall, about five kilometres from Ga-Makanye. They felt it would be fair if the IDP meetings would be held in each village, and that the process should not centralise the Mankweng cluster, especially because they have different needs and concerns. They also indicated that they received flyers and notices reminding them of the schedules for the IDP meetings in the past.

Block F (Mankweng A). The respondents here demonstrated that they are aware of IDP meetings, and even though they never attended any, they know the importance of Integrated Development Planning.

Ward Councillor: In an interview with the Councillor in Ga-Makanye, Cllr Steve, he indicated that dates for IDP meetings are arranged by the municipality and that the residents are invited to the meetings through print media and other available mediums of communication to ensure that residents are aware of the IDP meetings. He further stated that normally people take these meeting for granted especially because they are for planning purposes, and end up not attending them. As a result most of the people become surprised when they are told their areas are not prioritized for the period and they end up responding with anger instead of feeling guilty that they failed their areas. Cllr Steve indicated that flyers are usually distributed to households and notices are pasted on the street poles, churches, tuck shops as well as bottle stores, schools and salons. These are identified as common places that most people in the community spend their time.

Municipal Officials. In an interview with an official in the Polokwane Local Municipality in the Public Participation Department (Mr Mothapo), it was indicated that there is communication between the municipality and the

communities in the Polokwane Local Municipality. This is indicated in Section 16 of the Municipality Systems Act (32 of 2000), which mandates municipalities to develop a culture of municipal governance that compliments government representatives with a system of participatory governance, and must for this purpose encourage and create conditions for local communities to participate in the affairs of the community. Mr Mothapo further indicated that media invitations issued by the Communications and Public Participation Unit are distributed in advance. Meetings are held at the Mankweng community hall for Mankweng Cluster, which is at the centre of the cluster villages. He states that community members have a problem of being ignorant and not taking responsibility on their part.

2.3 STATUS OF WATER SUPPLY IN POLOKWANE MUNICIPALITY

In an interview with Ms Mushai, the Assistant Manager of Polokwane Local Municipality (Water and Sanitation Infrastructure Development), she indicated that Polokwane Municipality is both a Water Service Authority and a Water Service Provider (Mushia, 2015, pers.com. 18 September). Therefore, every Water Service Authority has the duty to ensure efficient, affordable, economical and sustainable access to Water Services to all its customers and potential customers in its area of jurisdiction (Polokwane IDP, 2015/16). Lepelle Northern Water Board (LNWB) is the bulk water service provider in respect of the following two major transfer schemes:

- Polokwane Government Regional Water Supply Scheme: Ebenezer, with source capacity of 19MI/day and;
- Olifants – Sand Bulk Water Transfer Scheme to Polokwane/Seshego urban areas and on route rural areas, it has a source capacity of 27MI/day

Polokwane Local Municipality operates its own scheme, the Dap Naude Dam Water Supply, which has a source capacity of 16MI/day. In addition, Seshego Dam with a source capacity of 1.5MI/d, rural dams with a total

source capacity of 10.7MI/d and boreholes schemes scattered around the Polokwane municipality and other municipalities around it with a total source capacity of 25.33MI/d (Polokwane Local Municipality: Water Services Development Plan, 2014:165).

Mrs Mushia further indicated that there is a water supply problem in the municipal area. It has worsened because water restrictions has now been put in place by the municipality just prior to the period in which the research took place. These restrictions included a moratorium that halted all development projects in the municipal area. All these were to ensure that the available water resources are not depleted. But now approval has been granted to amend the existing water restriction in Polokwane City, Seshego and in the Mankweng cluster. This includes domestic consumptions, houses, town houses and flats, business and industry, residential agricultural holdings, schools and tertiary institutions (Mushia, 2015, pers.com. 18 September).

Mrs Mushia indicated the following water augmentation plans from the municipality:

- Short term: safe guard of borehole fields, this includes Seshego-, Sand River North- and Marshall Street borehole field. These will deliver additional 20MI/d capacity to the City and Seshego;
- Medium term: increasing the supply of the Ebenezer dam with 20MI/d and extension of Sand and Sand River North borehole fields with 6MI/d; and
- Long term: Upgrade Olifants sand purification capacity from 60MI/d to 120MI/d with double pipe line to Polokwane. Supply additional bulk source from Rooipoort dam (Mushia, 2015, pers.com. 18 September)

During the interview, she further stated that the municipality has budgeted an amount of R191 million from Municipal Infrastructure Grant (MIG) for the provision of water infrastructure in rural areas. A further R1.5 million has been budgeted to provide water meters in some households at Seshego

Zone 5 as well as old meters at Toronto (Mushia, 2015, pers.com. 18 September).

2.4 OBSERVATIONS ON WATER SUPPLY IN THE MANKWENG CLUSTER

Ga-Thoka: Observations from this section indicate that the supply of potable water is not reliable. Throughout the whole observation week, the supply of potable water to residence was inconsistent. One part of the village received water from 8pm until 4am daily, while another section received water only twice a week, and the times and days are not exactly the same when verified with the previous week's days (checking with the people because the observation was done over one week). During the observation period one section would get water on Wednesday and Friday, while another section will get water on Monday and Saturday. Some parts of the village did not have problems of taps running dry, potable water was uninterrupted unless there is a problem of water pipes bursting, which rarely happens. The reason was that they reside on the low lying areas, which will always have water due to topography trends

Ga-Makanye: Observations from this section indicates that the supply of potable water is also unreliable. However, as compared to Ga- Thoka village there at least appears to be a trend (or some schedule) of the availability of potable water. Some parts received water from Friday to Sunday, while others were from 1am until 3am or from 12am until 2am, three times in a period of a week.

Block F (Mankweng): Observation from this section indicates that the supply of potable water is consistent and reliable. Potable water is available all week days. The residents pay for water services that are billed by the municipality on a monthly basis.

During the observation period, the researcher did not come across the truck that delivers water to water scarce areas in all the villages.

During the interview with Mrs Mushai, the indication was that water restriction is implemented in the Mankweng cluster but is not effective due to vandalism and non-cost recovery.

She also stated that the fact that some residents get water only on certain days, is part of the water restriction. She further indicated that the municipality is aware of illegal connections of pipes that the community members have done to the system, and that these illegal connections put strain on the system and makes it difficult to supply water equitably. These illegal connections of pipes furthermore interrupts the flow of potable water to different sections and results in this current havoc of one section receiving water and another not.

3. DOCUMENT ANALYSIS

According to the Integrated Development Plan (Polokwane Municipality, 2015:185), Polokwane Municipality is made up of thirty-eight wards, which are grouped into four cluster for administrative purposes, namely:

- (i) Mankweng/Sebayeng/Dikgale Cluster;
- (ii) Maja/Chuene/Molepo/ Cluster,
- (iii) Moletjie Cluster, and
- (iv) City/Seshego Cluster.

The Executive Mayor, Mayor Committee and the Management Team convenes regular consultation meetings with communities and stakeholders in all clusters, capturing the needs of the community in order of priority (Polokwane IDP, 2015/16:185).

The Polokwane IDP (2015/16:100) indicates that Polokwane Municipality is water scares City. The Water Services Development Plan (Polokwane

Municipality WSDP, 2014:08) records the climate (annual rainfall, evaporation and temperature) as follows:

- Northern part of Polokwane is arid (Rainfall = 300 to 400 mm/a) and the southern part is semi- arid (Rainfall = 400 to 500 mm/a). Summer rains occurs regularly.
- Annual rates of evaporation throughout Capricorn are high, in all areas exceeds mean annual precipitation. This results in a semi-arid landscape with limited availability of surface water resources e.g. perennial springs, streams and small dams. The mean annual evaporation in Polokwane is between 1700 and 1800 mm per year.

The Municipality is currently receiving water at a rate of 80 to 94MI/d and is unable to meet the peak flow demand of 163MI/d. Water shortage in the municipal area will have an impact on projects that the municipality and other sector departments are planning. Completion of development projects by both the public and private sector will have a major impact on the municipality's current insufficient water sources. The Polokwane IDP (2015/16:195) lists the challenges that the municipality is facing as follows:

- lack of cost recovery in some areas,
- the lack of maintenance plans for water infrastructure,
- lack of sustainable water sources,
- aging infrastructure
- vandalism, and the
- limited operation and maintenance of infrastructure due to shortages of funds.

The current water supply backlog is estimated at 21%, and is anticipated that achieving higher service level can be obtained by implementing the Olifants River Water Resource Development Project (Polokwane Municipality, 2015/2016:98).

4. ANALYSES OF THE DATA

South Africa is a country with a scarce water supply. According to Ashley Starkey, South Africa is the 30th driest nation in the world and the government expects the country's water demand to outstrip its resources as early as 2025. This is because of the burden of low rainfall. Furthermore, Ashley Starkey states that Climate Change has also affected water supplies within the region, with rains that used to regularly and predictably come and supply and replenish the country's water resources, now arriving infrequently (Sunday Times 05 May 2015:3).

According to the Constitution of South Africa (Act 108 of 1996), access to basic water supply is a basic human right as guaranteed by the Bill of Rights. This implies that the government has a mandate to ensure that every citizen is provided with water services. Polokwane Municipality as Water Services Authority and Water Services Provider is faced with a challenge to ensure that water is supplied to all people staying in its jurisdiction as well as those staying in the Mankweng Cluster (Ga-Thoka, Ga-Makanye and Mankweng A). From the presented data it is clear that Polokwane Municipality has insufficient water to supply the areas in their jurisdiction. The section below discusses the challenges that the municipality need to address and resolve.

4.1 EQUITABLE SUPPLY

As much as water is a scarce resource in South Arica, which includes Polokwane Municipality, it is clear that water in Mankweng Cluster is not supplied equitably. The fact that there are mixed levels of service within the cluster, i.e household connections metred and billed in Block F,

household connections metred but not billed in Ga-Thoka, and illegal house connections in Ga-Makanye, will always make it difficult for the municipality to administer water supply effectively. This will also affect cost recovery and proper maintenance of infrastructure in the area. It will be difficult to convince the whole area of Block F to pay for water services if Ga-Thoka is getting the same service without payment.

One of the main reasons that may affect equitable supply of water might be the illegal household connections. The municipality may be losing a lot of water through these connections because they are done by unprofessional people, in which case wrong material (pipes) and connections may be used resulting in water dripping from those connections. The municipality claims that since these illegal connections are not owned and controlled by the municipality, all the leaks and pipe burst are not the responsibility of the municipality and cannot be repaired by the municipality. This might be true, but the water losses through these leaks and bursts, affect the availability of water within the municipality.

The system was found to have insufficient pressure to supply the whole area equitably leaving the high lying areas with less or no water at times. Pressure reduction is caused by the illegal connections along the supply mains. Pressure is often lost because connections are also done on the main pipeline not on the supply line.

4.2 COMMUNICATION

From the results of the research, it is clear that the municipality has never consulted with the communities about their water supply problems, except during the IDP meetings, which appear to be poorly attended by communities. In a case like this, the municipality is supposed to discuss with the community specific issues that concerns them. These discussions may be through community meetings conducted by municipal officials, or

through meetings with Ward Committee and meetings with the Ward Councillor.

The municipality indicated that another main reason why there is uneven water supply is also due to the Water Restrictions Policy implemented by the municipality, but the community is not aware of the restriction policy, they only know that they do not have an adequate water supply. The water restrictions were not adequately communicated to the residents.

According to Municipal Systems Act 32 of 2000, the municipality should communicate with communities through the Ward Councillor and the Ward Committees. The functions of the Ward Councillors are:

- Give ward residents progress reports, explaining decisions of councils in committing resources;
- Assess whether municipal programmes and plans are having their intended impact;
- Assessing if services are delivered fairly, effectively and in a sustainable way;
- Determine if capital projects are being committed in accordance with IDP;
- Stay in close contact with the constituency;
- Convey important information to council from residents and from residents to council (Jossel, 2006:11).

As much as the Public Participation unit of the municipality indicate that they implement public participation, it is crucial to keep community meetings conducted by council, councillors and ward committees as a way of communication to communities. Print and electronic media are important part of communication but when it comes to service delivery, residents will need to see people that are in power explaining issues.

Part of the communication problems between the municipality and residents was noted in a service delivery protest that took place in 2014 (News24 13 October 2014:8) in which residents of Ga-Thoka and Ga-Makanye blockaded the R71 roads demanding they are provided with electricity, water and that those households that are billed should have their outstanding amounts written off as bad debt. During the service delivery protest, community leader Makama Malebana, indicated that the community is ready to pay for services, as long as there is a fresh start. At the time of the fieldwork for this research, the issues had still not been resolved.

This, and the fact that residents are unaware of the implemented water restrictions, are indications that there is poor communication between the municipality and residents.

5. CONCLUSION

It is clear that there is unreliable potable water supply in the Mankweng cluster of Polokwane Municipality. Illegal connections done with substandard materials, and vandalized community street taps does make it difficult for the municipality to provide water services in equitable way. Poor communication between Polokwane Municipality and the residents contribute to the crises because community members are not aware of municipal activities, such as water restrictions. That residents are not happy with the level of service, has resulted in protests against poor service delivery by the municipality.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

1. INTRODUCTION

This chapter presents a brief overview of the context and the findings of the research, as well as recommendations for the Polokwane Local Municipality.

2. OVERVIEW

This study was undertaken in Polokwane Local Municipality in the Mankweng cluster, focussing on three areas: Ga-Makhanye, Mankweng A and Ga-Thoka. In terms of Municipal Structures Amendments Act, Polokwane Local Municipality is a Category B municipality and is authorized to provide water services.

The aim of the study was to assess the main constraints faced by the Polokwane Local Municipality in delivering water services to the Mankweng cluster and recommend ways and means to resolve the problems. In order to achieve the aims of the study, the following research questions were asked:

- (i) What is the state of potable water supply in Mankweng Cluster?
- (ii) What is the process of stakeholder consultation on service delivery to develop the Integrated Development Plan in Polokwane Municipality?
- (iii) What is the current water supply service in Polokwane Municipality, (iv) how many times do the communities in the study area receive water in a period of a week?
- (v) What are the potable water supply challenges facing Limpopo province?
- (vi) When the communities in the Mankweng Cluster receive water, how long does the supply last?

(vii) To what extent has Polokwane Municipality succeeded in providing water to the Mankweng cluster? and

(viii) What are the challenges faced by the Polokwane Municipality in terms of water provision?

The research findings are:

- **WATER SUPPLY IN THE MANKWENG CLUSTER:** the supply of potable water is not consistent in Ga-Makanye and Ga-Thoka villages; however there was consistency of potable water supply in Toronto (Mankweng F). There are water restriction in the Mankweng cluster (which was confirmed by the assistant manager for Water Sanitation Infrastructure in the Polokwane Municipality) hence the inconsistency of potable water supply in Ga-Thoka and Ga-Makanye villages, but the community members said that they were unaware of those water restrictions, they only know that they do not have an adequate water supply.
- **STAKEHOLDER CONSULTATION PROCESS:** even though there are IDP meetings arranged by the municipality, there is poor attendance of these meetings from community members. This is because the community members, especially of the Ga-Thoka and Ga-Makanye villages feel that the venue of the meetings, Mankweng Hall, is not suitable for everyone and made it difficult for community members to attend. The community members of the Ga-Thoka and Ga-Makanye villages said that the needs of each village differs from that of the other village, therefore the meetings cannot be centralised in one cluster but should be de-centralised to each village. The researcher also discovered that there is a poor flow of communication between the municipality, Ward Councillors and Ward Committees of

the villages and community members, hence the poor attendance of IDP meetings.

- **STATUS OF WATER SUPPLY IN THE POLOKWANE LOCAL MUNICIPALITY:** Polokwane Local Municipality is both Water Service Authority and a Water service Provider. Even though the municipality operates its own scheme, the Dap Naude Dam, has two major transfer schemes (namely; Ebenezer and Olifants- Sand Bulk Water Transfer Scheme), receives potable water from Seshego Dam, rural dams and boreholes scattered around the municipality it is currently receiving only 80 to 94MI/day and is unable to meet the peak flow demand of 163MI/day (Polokwane Local Municipality IDP, 2015/16:101).

Although these could not be quantified, the researcher confirmed that there are serious potable water supply challenges in the Mankweng Cluster, especially in Ga-Thoka and Ga-Makanye villages. The Polokwane Local Municipality is aware of these challenges hence they imposed water restrictions to ensure that everyone has access to potable water, although the study has confirmed that the water restrictions are not effective due to vandalism and non-cost recovery. The municipality also identified the following constraints: theft and vandalism of household and street taps; illegal connections done by the community members, lack of cost-recovery in some areas and the inadequate water service infrastructure in the municipality.

The community members are frustrated by the lack of effective communication between community members and the municipality. The Ward Committees and Ward Councillors are undermined by the community members because community members feel that they do not listen nor address their issues. They cited, as an example, the failure of the ward

councillor to convene regular meetings to discuss water issues with the community. That is the main reason why they end up taking the law into their own hands and resort to illegal connections of water pipes, which result in the disruption of potable water supply in some sections.

3. RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

- It is within the mandate of the municipality to ensure supply of potable water to the communities; therefore the municipality should have an immediate short term strategy to ensure that potable water is delivered to the communities. For example, it should make water tanks available on a daily basis to communities without regular supplies of water. It should also consider drilling boreholes that would be managed by the community members themselves. This will ensure that water is delivered on daily basis to all the villages in the Mankweng cluster. The municipality should consider as a long-term goal to make all the villages pay for water services as community members have indicated that they do not mind paying for services as long as they will have access of potable water.
- There should be improvement of communication between the municipality and the community members. The ward councillors should also be more effective in ensuring greater interaction with the community members. The ward councillor should have regular meetings with the community members and give progress regarding the IDP of the municipality. This will ensure effective communication between Ward Committees, Ward Councillors, the Municipality as well as community members.

4. CONCLUSION

The Polokwane Local Municipality is faced with a number of challenges ranking from illegal connections, inadequate water supply, and poor communications with communities being serviced. Therefore, these challenges hinder the process of delivering services to communities. Furthermore, the identified potable water supply challenges impact negatively on the residents as they are not happy with the level of services, hence they resort to protesting.

The study concludes that the current water systems are inadequate and that long-term and short-term goals should be set in order to improve the process of service delivery in the Polokwane Local Municipality.

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ANNEXURE A

QUESTIONNAIRES
INTERVIEW PROTOCOL
OBSERVATION SHEET

LETTER TO RESPONDENTS (COMMUNITY MEMBERS AND POLOKWANE MUNICIPALITY)
INFORMING THEM ABOUT THE STUDY

09 Voortrekker Street

POLOKWANE

0699

26 July 2015

Dear Respondent

**RESEARCH STUDY: WHY IS ACCESS TO POTABLE WATER IN THE VILLAGES
OF MANKWENG AREA OF POLOKWANE MUNICIPALITY NOT POSSIBLE**

Ms Irene Lerato Mashego is a Nelson Mandela Metropolitan University student undertaking a research project: Why is access to potable water in the villages of Mankweng area of Polokwane municipality not possible.

You have been selected to participate as a respondent in this research. We hereby request you to provide us with information about the area of study which will enable me to provide conclusive evidence of the challenges and provide recommendations for way forward for the municipality. Without your participation, the study will be impossible to add value to service delivery through providing solutions to problems between communities (beneficiaries) and municipalities (service provider institutions).

We hope the outcome of this research will assist Polokwane municipality to resolve challenges that faces their service delivery processes in potable water.

Furthermore, the outcomes will assist other municipalities facing the same problem to be able to implement the results of this study.

Sincerely,

IL Mashego (NMMU student)

QUESTIONNAIRES

INTRODUCTION

Dear Participant

You have been selected to participate in this study: **WHY IS ACCESS TO POTABLE WATER IN THE VILLAGES OF MANKWENG AREA OF POLOKWANE MUNICIPALITY NOT POSSIBLE.** This study is conducted by Irene Lerato Mashego for her MA degree in Development Studies. The purpose of the study is to find out reasons why there is a problem of access to potable water for people living in Mankweng cluster in the jurisdiction of Polokwane municipality. If you respond to the Questionnaire both the researcher and the municipality will develop and understanding of the challenges that need to be resolved to ensure that the community get proper access to potable water supply.

This questionnaire has two sections, namely Section A and Section B. In order to complete the Questionnaire follows the Instruction:

Section A: Please mark the appropriate box with (X)

Section B: Tick Yes/ No and where needed provide more information

Thank you in advance

SECTION A: BIOGRAPHICAL DATA

Please mark your selection with a cross (x) in the appropriate box

1. Gender

Male	1	
Female	2	

2. Age group

16- 21	1	
22- 27	2	

28 -33	3	
34- 39	4	
40- 45	5	
46-51	6	
52 and above	7	

3. Population classification (For statistical purposes only)

Black	1	
White	2	
Indian	3	
Coloured	4	
Other	5	

4. What is the name of the village

Ga- Thoka	Ga- Makhanye	Mankweng A
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5. How many years have you been staying in this village

1-5	6-10	11-15	16-20	20 and above
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SECTION B: WHY IS ACCESS TO POTABLE WATER NOT POSSIBLE IN THE MANKWENG CLUSTER

Below are a number of questions that relate to your perception on the supply of potable water in the villages. Please mark with a cross (X) on the spaces provided for yes/no and explain further where appropriate.

1. Does the Polokwane Local Municipality consult with the community regarding water services implementation plans? (Yes/No)

1.2 If so, how often do they do it?

1.3 And how do they consult? Is it via?

Meetings	Newsletter	Radio	Letters inserted with municipal accounts	Other
----------	------------	-------	--	-------

2. Are you satisfied with the performance of the Polokwane Local Municipality in terms of water service delivery? (Yes/No)

3. What is your understanding on proper water supply

4. What do you understand by the term "Integrated Development Plan (IDP)"?.....

.....

.....

.....

5. The meetings for the Integrated Development Plan consulting process are called by the Municipality at certain times each year, when was the last time this meeting took place_____

6. Do you attend these meetings? (Yes/No)

5.1 Do you participate in these meetings? (Yes/No)

6. As a resident of the Polokwane Local Municipality, how would you describe the manner in which the municipality must involve you in the day to day running of the municipality?.....

.....

.....

.....

.....

.....

7. In your opinion, is the scheduling of these meetings convenient and are the venues accessible to everyone?.....

.....

.....

.....

8. From a scale of one to ten, how would you rate the quality of water services provided by the Polokwane Local Municipality?

1	2	3	4	5	6	7	8	9	10
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9. What are the constraints faced by the Polokwane Local Municipality? If there are any?.....

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.....

.....

10. In your opinion, what are the expectations of the community members?.....

.....

.....

.....

.....

.....

.....

11. In your opinion, what should be done to ensure that there is provision of water at the Mankweng cluster?

.....

.....

END OF THE QUESTINNAIRE

THANK YOU FOR YOUR PARTICIPATING IN THIS STUDY

DELIVERY OF ALL QUESTIONNAIRES

We request that all filled Questionnaires will be collected after 5 days from the day of delivery. As we dropped it at your house, note that we will come and collect it

at your house. If you are not available, leave it with any member of the family who will hand it over to me (IL Mashego). If there are problems, you can phone me on 071 5323 046.

INTERVIEW PROTOCOL

INTRODUCTION AND OVERVIEW

Irene Lerato Mashego is conducting a Research: **WHY IS ACCESS TO POTABLE WATER IN THE VILLAGES OF THE MANKWENG AREA OF POLOKWANE MUNICIPALITY NOT POSSIBLE.** The research aims at assisting Polokwane Municipality to find out the challenges that make it difficult to supply potable water and to ensure that once identified they are resolved to provide services villages in Makweng Area.

The purpose of the Interview is for the researcher to meet with the respondents and gather information on the water supply and to ensure that the information is clarified at the same time and additional information needed is fully gathered

The findings of this research will be used by the municipality to resolve challenges that made it impossible for the community to have potable water supply. The later publication of the findings of this research will assist other municipalities to apply the resolution in their own municipal areas.

SECTION B: WHY IS ACCESS TO POTABLE WATER NOT POSSIBLE IN THE MANKWENG CLUSTER

1. Does the Polokwane local Municipality consult the community regarding water services implementations plan? (Yes/no)
2. Do the community members understand what is meant by Integrated Development Plan? Yes/ No
 - 2.1 Has there been any community awareness and training events to make residents aware of the IDP process? Yes/ No

3. How are the community members informed of Integrated Development Plan consultative public meetings?

4. When are the Integrated Development Plan consultative public meetings held?

4.1 How often are they attended?

4.2 Does the municipality keep minutes of such meetings? Yes/ No

5. Do stakeholders (community members) have access to talk with municipal officials other than at scheduled meetings by the Polokwane Local Municipality? If yes how?

6. Is the language used at the meetings accommodative to everyone and if not are there interpreting services at these meetings?

7. Who conducts the public participation meetings?

8. Who records the minutes of the public participation meetings?

9. Is the evidence that indicates that these public participation meetings have an impact on the service delivery levels?

10. How many projects related to water provision are listed in the previous IDP?

11. How many of these projects were listed in the current IDP?

12. In terms of these projects listed in the previous IDP, how many were implemented, how many were fully completed and how many are currently still operational?

13. How were these specific projects decided on?

14. Were there any monitoring and evaluation (M&E) plans for the individual water projects?

15. Was there an M&E plan for the implementation of the whole IDP?

16. Were there any impact evaluations done for water projects completed during the previous IDP period?

17. Are there any M&E plans for current water projects being implemented?

18. Does the municipality receive any assistance (financial or otherwise) for the implementation of water projects in this cluster from the District Municipality, the province? Or from National departments (e.g. DWA, etc.)? Does it receive assistance from NGOs, or big corporates (as part of their CSR budgets), etc.? If yes, please provide more information.

19. What are the water service delivery constraints faced by the Polokwane Local Municipality?

20. What strategies are in place to address the water service constraints?

THANK YOU FOR YOUR PARTICIPATION

Logistics: This Interview is recorded in this sheet, the information will be analysed and presented in the research report. A copy of this research report will be given to Polokwane Municipality as a token of appreciation by the researcher and to ensure that all participants/ respondents are able to access the findings

OBSERVATION SCHEDULE

This observation tool aims at determine the times that the people staying in the Makweng Cluster receive potable water from their source (street and household taps) and also the attitude of people towards the problem of access to potable water during the research period.

This tool will be used over a period of seven days so that the researcher can have a good picture of water supply in the area

OBSERVATION OF THE DAILY WATER POTABLE SUPPLY

Week Day	Supply Periods (in hours)				Total hours of supply
	Morning 06h00 – 12h00	Afternoon 12h00 – 18h00	Evening 18h00 – 22h00	Night 22h00 – 06h00	
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					
TOTAL NUMBER OF HOURS					

BEHAVIOUR AND ATTITUDE

Respondent	Description	Attitude and behaviour during the study		
Respondent	Description	Positive	Not certain	Negative
Municipal officials	Responded to the interviews well			

	Did they honour the agreed time			
	Did they provide all document requested for the study			
	Are they positive about the study			
Community Members	Responded to Questionnaires			
	Did they respond to all Questions fully			
	The response when the Questionnaires were delivered			

ANNEXURE B

Turnitin Report

Originality Report

- Processed on: 20-Nov-2015 14:21 SAST
- ID: 581319793
- Word Count: 10672
- Submitted: 3

Mashego_EDS504_Final By Irene Mashego

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Gwen Buchanan

Language Editing & Proofreading

Gwendolyn@intekom.co.za

082 684 7557

Nelson Mandela Metropolitan University
Port Elizabeth

13 November 2015

Dear Madam/Sir

Declaration by Language Practitioner

I hereby certify that I have checked the language and grammatical structure of the treatise document prepared by Irene Lerato Mashego (student number: 214337502).

Where possible I have made changes directly to the text and in other instances, I have suggested changes. It remains the responsibility of the student to accept or reject such suggestions.

Sincerely,

Gwen Buchanan

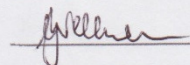
Gwen Buchanan

Ethic Clearance Form

(c) NMMU students?		✓
(d) The elderly/persons over the age of 60?		✓
(e) A sample from an institution (e.g. hospital/school)?		✓
(f) Handicapped (e.g. mentally or physically)?		✓
3. Does the data that will be collected require consent of an institutional authority for this study? (An institutional authority refers to an organisation that is established by government to protect vulnerable people)		✓
3.1 Are you intending to access participant data from an existing, stored repository (e.g. school, institutional or university records)?		✓
4. Will the participant's privacy, anonymity or confidentiality be compromised?		✓
4.1 Are you administering a questionnaire/survey that:		✓
(a) Collects sensitive/identifiable data from participants?		✓
(b) Does not guarantee the anonymity of the participant?		✓
(c) Does not guarantee the confidentiality of the participant and the data?		✓
(d) Will offer an incentive to respondents to participate, i.e. a lucky draw or any other prize?		✓
(e) Will create doubt whether sample control measures are in place?		✓
(f) Will be distributed electronically via email (and requesting an email response)?		
<p>Note:</p> <ul style="list-style-type: none"> • If your questionnaire DOES NOT request respondents' identification, is distributed electronically and you request respondents to return it <i>manually</i> (print out and deliver/mail); AND respondent anonymity can be guaranteed, your answer will be NO. • If your questionnaire DOES NOT request respondents' identification, is <i>distributed via an email link and works through a web response system (e.g. the university survey system)</i>; AND respondent anonymity can be guaranteed, your answer will be NO. 		

Please note that if **ANY** of the questions above have been answered in the affirmative (**YES**) the student will need to complete the full ethics clearance form (REC-H application) and submit it with the relevant documentation to the Faculty RECH (Ethics) representative.

and hereby certify that the student has given his/her research ethical consideration and full ethics approval is not required.



SUPERVISOR(S)

30 April 2015

DATE