

Effectiveness of outcomes-based management on domestic water supply at local government level

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Research report presented in partial fulfilment for the degree of Master of Management (in the field of Public and Development Sector Monitoring and Evaluation) to the Faculty of Commerce, Law, and Management, University of the Witwatersrand

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DECLARATION

I declare that this research report titled ‘Effectiveness of outcomes-based management policy on water supply at local government level’ is my own, unaided work. I have acknowledged and referenced all sources that I have used and quoted. I hereby submit it in partial fulfilment of the requirements of the degree of Master of Management (Public and Development Sector Monitoring and Evaluation) in the University of the Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination to any other institution.

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ABSTRACT

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Thesis title: Effectiveness of outcomes-based management policy on water supply at local government level

The South African government introduced outcomes-based management in 2009 as an approach for implementation of the National Development Plan and government programmes. The policy facilitates achievement of government outcomes and subsequently the National Development Plan goals. One of intended outcomes of the policy is 100% of households have access to sustainable and reliable water supply by 2030. Despite some successes in the implementation of some principles of the policy, there have been water supply challenges in most municipalities threatening achievement of this outcome. This research seeks to assess and examine aspects that facilitate the South African government's outcomes-based management policy to achieve its intended outcomes and water supply outcomes in Madibeng and Rustenburg Local Municipalities.

The research employed qualitative research strategy, comparative case study research design, purposive sampling and semi-structured interviews. Key research data sources are officials at middle and senior management from national and provincial government, the two municipalities, South African Local Government Association as well as citizens' representatives.

The study found that managerial and technical aspects at institutional level limit the feasibility of the South African Government achieving its intended outcomes and water supply outcomes in both municipalities. Furthermore, the study found that there are inconsistencies and different challenges in implementation of the policy within and across the three government spheres and institutions and that application of the policy principles is stronger at macro level, but weaker at institutional level. Further, the study found that implementation of the aspects of outcomes-based water supply in Rustenburg is improving in comparison to Madibeng Municipality. The hindrances to achieving water supply outcomes include growing informal settlements; ageing water supply infrastructure; inadequate water services capacity and resources and poor water services monitoring and evaluation. The research concludes that the aspects that anchor

the policy's success and achievement of its intended outcomes and water supply outcomes are political commitment, functional intergovernmental machinery and institutional technical capacity because the other weaknesses of the systems are centred on these three aspects.

The study is qualitative, therefore, the results cannot be generalised to other municipalities and government outcomes.

The significance of this research is that it identified critical aspects facilitating and hindering achievement of the policy with respect to water supply in two municipalities with different success rates to establish explanations that make one better than the other; thus providing knowledge that can be utilised for improving the implementation of the policy and outcomes-based water supply strategies.

Key words: outcomes-based management, performance management, water supply, service delivery

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TABLE OF CONTENTS

DECLARATION.....	2
Abstract.....	3
Table of contents.....	5
List of tables.....	7
List of figures.....	8
Acknowledgements	9
1 Introduction to the research	10
1.1. Domestic water supply in South Africa.....	10
1.2. Description of Madibeng and Rustenburg Local Municipalities and their domestic water supply.....	11
1.3. Outcomes-based management policy in South Africa.....	13
1.4. Towards evaluating the effectiveness of implementation of outcomes-based performance management on domestic water supply.....	15
1.4.1. The research problem statement	15
1.4.2. The research purpose statement	16
1.4.3. The research questions	16
1.5. Delimitations of the research	17
1.6. Justification of the research.....	17
1.7. Preface to the research report.....	18
2. Literature review	19
2.1. History and description of local government in South Africa and implications for provision of basic services.....	19
2.1.1. History of local government in South Africa and provision of basic services	19
2.1.2. Configuration of the South African Government and its implications for water supply	21
2.1.3. Domestic water supply in Madibeng and Rustenburg Local Municipalities.....	22
2.2. Evolution and description of the outcomes-based management policy	25
2.2.1. Evolution and description of outcomes-based management policy in South Africa.....	27
2.2.2. Implementation of outcomes-based management policy in South African Municipalities	28
2.3. Methods, data, findings, and conclusions of studies on evaluations of outcomes-based management.....	29
2.3.1. Qualitative research studies on results-based management systems.....	29
2.3.2. Quantitative research studies on results-based performance management systems	33
2.3.3. Theory-based and document analysis studies on results-based performance management systems	33
2.4. An introduction to monitoring and evaluation as well as its components	37
2.4.1. Components of evaluation.....	39
2.4.2. Established facts, issues and debates in evaluation.....	41
2.5. Key attributes of a process evaluation.....	43
2.5.1. The inputs.....	43
2.5.2. The activities	43

2.5.3.	The outputs	43
2.5.4.	The outcomes	44
2.6.	Documented frameworks for interpreting empirical results assessing outcomes-based management policies	44
2.6.1.	Sustainable Services at Scale Framework (Triple-S' Principles Framework)	45
2.6.2.	Public value theory.....	46
2.6.3.	Otley's Performance Management Framework.....	47
2.6.4.	Bouckaert and Halligan Framework.....	48
2.6.5.	The theory of change.....	50
2.6.6.	Results chain framework.....	51
2.7.	Evaluating outcomes-based management policy on domestic water supply, a conceptual framework.....	52
3.	Research strategy, design, procedure and methods.....	58
3.1.	Research strategy	58
3.2.	Research design	59
3.3.	Research procedure and methods	61
3.3.1.	Data collection instrument	61
3.3.2.	Target population and sampling	62
3.3.3.	Ethical considerations when collecting data	64
3.3.4.	Data collection and storage	66
3.3.5.	Data processing and analysis	67
3.3.6.	Description of the respondents	70
3.4.	Research reliability and validity measures	74
3.5.	Research limitations	76
4.	Presentation of research results	78
5.	Discussion of research findings.....	98
6.	Summary, conclusions, limitations and recommendations	110
6.1.	Summary.....	110
6.2.	Conclusions.....	114
6.3.	Limitations	115
6.4.	Recommendations	115
	References.....	119
	Appendices.....	135
	Appendix 1.1: Consent Form and Interview Guide.....	136
	Appendix 1.2: Transcribed interview.....	142

LIST OF TABLES

Table 1: Components of results-based management system	35
Table 2: Description of research respondents at national Government Level	71
Table 3: Description of research respondents at Provincial Government Level.....	71
Table 4: Description of research respondents at local government level including stakeholders and citizens	72
Table 5: Description of respondents according to position in the organisation, work experience, age and gender.....	72

LIST OF FIGURES

Figure 1: Relationship between monitoring and evaluation	38
Figure 2: Major components of evaluations (Moore et al, 2010)	39
Figure 3: Key components and variables of process evaluation	40
Figure 4: Pillars and principles of sustainable services at scale framework.....	45
Figure 5: Public Value Strategic Triangle	46
Figure 6: Otley's Performance Management Framework in relation to outcomes-based water supply	47
Figure 7: Bouckaert and Halligan Framework in relation to outcomes-based water supply	49
Figure 8: Theory of change for outcomes-based management water supply	51
Figure 9: Results chain framework for outcomes-based water supply	52
Figure 10: Research Conceptual Framework	57

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1 INTRODUCTION TO THE RESEARCH

Before getting to the research problem statement (Section 1.4.1), purpose of the research (Section 1.4.2) and consequently to the research questions (section 1.4.3), a brief introduction conceptualising the research is presented. Section 1.2 introduces the research context generally and more specifically. Section 1.3 presents the intervention under study. Section 1.5 provides the delimitations of the study whilst Section 1.6 provides justification for the research.

1.1. Domestic water supply in South Africa

The South African Constitution, National Water Services Act and National Water Act entrench access to reliable, safe and adequate water supply as a basic human right (Republic of South Africa, 1996; Smith, 2009). These pieces of legislation prescribe a minimum provision of 20-25 litres of water per person per day per household (Smith, 2009) and prescribe an effectiveness standard of no citizen should be without water for more than seven days in a year (United Nations Children's Emergency Fund, 2011).

In South Africa, local government is legally accountable and responsible for delivery of sustainable and reliable access to domestic water (South African Human Rights Commission, 2014). However, water service delivery is a joint responsibility of all the three spheres of government (Smith, 2009). In this regard, at national level, the Department of Water and Sanitation is responsible for the development of policies, legislation and norms and standards for delivery of water services whilst the National Department of Cooperative Governance should play an oversight role, coordinate and monitor service delivery by municipalities (South African Human Rights Commission, 2014). On the other hand, provincial departments responsible for local government should monitor and support local government to provide safe and reliable water supply (South African Human Rights Commission, 2014). Therefore, to achieve this sub-outcome requires effective intergovernmental coordination since different government institutions across the three spheres have a role to play (Smith, 2009).

Momba *et al* (2006) indicate that prior to 1994, approximately 14 to 18 million South Africans did not have access to domestic water supply, and the democratic government

made significant strides in addressing the situation. In 2004, 10 million people had access to safe drinking water, and in 2012, just above 85 percent of the South African households had access to piped water in their homes, either inside their homes, within their stand or from communal taps (South African Human Rights Commission, 2014). In addition, the democratic government met the Millennium Development Goals targets on water supply and sanitation in 2014 (United Nations Children's Emergency Fund, 2011).

Despite the above achievements, there is still about 5.2 million South Africans without reliable access to domestic water supply, some sections of the population were still drawing water from rivers and about 30 percent did not have sanitation facilities in 2014 (South African Human Rights Commission, 2014). Even though the South African government met the Millennium Development Goals targets on water supply and sanitation, it has set itself a target of 100 percent coverage for household sanitation and water supply by 2014, which it has not met (South African Human Rights Commission, 2014). Furthermore, according to the 2014-2019 Medium Term Strategic Framework, government has a target of 5.2 million additional households with access to a reliable water service by 2019 (The Presidency, 2014). Government performance on this target indicates that only 283 000 households were provided with access to water, and it achieved 70% reliability on water supply since 2014 (Department of Planning, Monitoring and Evaluation, 2016).

1.2. Description of Madibeng and Rustenburg Local Municipalities and their domestic water supply

According to Madibeng (2014), Madibeng is a category B local municipality under Bojanala District Municipality in the North West Province. It is a mixture of urban and rural areas, but mainly rural with limited urban development constituting villages, farms and serviced industrial and mining areas. It has a population of 477 381, 160 724 households, 43 villages, 36 wards and 9 000 farm portions.

The municipality has an average annual growth rate of 3.17 percent and its unemployment rate was at 30.4 percent in 2014 (Madibeng, 2014). According to Madibeng (2014), the main economic activities of the municipality are mining,

agriculture, tourism and manufacturing, with the main economic drivers being mining followed by tourism. Since its second main activity is tourism and the Hartbeespoort dam is one of the most visited tourist attraction site (Madibeng, 2014), adequate water supply is a key necessity, otherwise the tourism sector will be adversely affected.

Madibeng is a Water Service Authority, implying that it has a legislated obligation to provide sustainable water services to all its citizens. However, in relation to government outcome 9, there is less than 30 percent access to basic services in the municipality (The Presidency, 2014). There have been reports that the Municipality had water shortages in the past ten years, and that communities experience water disruptions regularly (Cullinan, 2014; Tapela, 2013). In concurrence with these reports, of the 160 724 households of Madibeng Municipality; about 117 329 households (73 percent) did not have access to safe and reliable drinking water within dwelling, and 125 043 households (78 percent) did not have sanitation facilities in 2014 (Cullinan, 2014). Most of the villages and townships in the Municipality relied on truck deliveries of water to survive (Cullinan, 2014). The residents also alleged that water trucks have been unreliable most of the time and they delivered unhealthy water which resulted in violent service delivery protests over water supply in some of the areas within the Municipality, such as Majakaneng and Mothutlung in 2014, 2015 and 2016 (Kormorant, 2015).

Similar to Madibeng, Rustenburg Local municipality is a category B municipality under Bojanala District and it is a water service authority (Rustenburg, 2015). It has 38 wards and serves a population of 475 232 (Rustenburg, 2015). It is one of the fastest growing municipalities with about 6% economic growth rate; which is attributed to four of the largest mines in the world that are in the vicinity of the municipality, hence the Municipality's main economic driver is mining (Rustenburg, 2015). In 2010, Rustenburg had a backlog of 27 191 and 36 047 households without water and sanitation; this was reduced to 19 371 and 10 563 in 2014 (Rustenburg, 2015). In terms of the quality of water, Rustenburg is one of the three municipalities in the North West that received Blue Drop Certification for managing drinking water quality with excellence in 2011, and has retained this for the past three years (Rustenburg, 2015). In relation to government outcome 9, the municipality still has challenges of providing water access to all its citizens; however, it has made some progress since 2010. The Municipality's integrated development plan indicates that it is implementing a new national

government initiative for local government called Back-to-Basics, aimed at accelerating the delivery of basic services in municipalities (Rustenburg, 2015).

1.3. Outcomes-based management policy in South Africa

The South African government outcomes-based management policy called 'Improving Government Performance: Our Approach' was introduced in 2009 (The Presidency, 2009). According to The Presidency (2009), the policy emerged as part of broader public sector reforms to improve and accelerate access to basic services. The policy provides an approach to implementation of government policy, programmes and planning; and informs government planning, monitoring and evaluation in the three spheres. It implements and anchors the National Development Plan and five-year Medium Term Strategic Frameworks (The Presidency, 2014). It introduced a new regime of shifting government focus from measuring inputs, activities and outputs to achievement of results and specified agreed upon government outcomes. In this regard, the Medium Term Strategic Framework (MTSF) comprises government outcomes to be achieved over a five-year period and they are building blocks towards achievement of the National Development Plan (NDP) goals (The Presidency, 2014). Although the policy came into effect in 2009, prior to finalisation of the NDP, the two are intertwined. There were 12 government outcomes in the 2009-2014 Medium Term Strategic Framework, and they increased to 14 in the 2014-2019 MTSF; and each of the government outcomes has sub-outcomes (The Presidency, 2014).

One of the government outcomes in both of the two medium term strategic frameworks is government outcome nine, "responsive, accountable, effective and efficient local government" (The Presidency, 2014, p.27). Government outcome nine sub-outcome one is "members of society have sustainable and reliable access to basic services" including access to water as a basic service (The Presidency, 2014, p.6). As noted above, there is also a target of increasing the percentage of households with access to a functional water service from 85 percent in 2013 to 90 percent in 2019 in the 2014-2019 MTSF (The Presidency, 2014) and the NDP goal of achieving 100 percent access to sustainable and reliable water supply by 2030 (National Planning Commission, 2012). The outcomes-based management policy provides a strategy to facilitate achievement of these targets by 2019 and 2030 respectively.

Components of the policy are measurement of politically designated government outcomes for accountability, Ministers' performance agreements, accountability throughout the service delivery chain, changes in organisational behaviour, values and attitudes, inculcating results-based and performance culture and improved data architecture (The Presidency, 2009). The policy's main features are sectoral, vertical, horizontal and intergovernmental coordination, and joint strategic planning across the three government spheres (The Presidency, 2009).

On strategic planning, the policy prescribes that strategic plans of government Departments and institutions in all the three spheres of government should be aligned to the MTSF government outcomes and sectoral plans, and should include programmes that contribute to the achievement of the government outcomes and related indicators (The Presidency, 2009). In this regard, each government outcome has a lead Department at national level to coordinate other Departments and institutions across all government spheres that either contribute to the achievement of that outcome or lead some of the sub-outcomes (The Presidency, 2009). The lead Department for the government outcome under study is the National Department of Cooperative Governance, and the lead Department for the sub-outcome on water supply is the National Department of Water and Sanitation (The Presidency, 2014). These institutional arrangements require effective intergovernmental machinery to ensure that "plans, activities, budgets and implementation strategies are aligned across the three government spheres and departments in support of the outcomes" (The Presidency, 2009, p.13).

Out of the forty-four (44) district municipalities in South Africa, implementation of the government sub-outcome under study started with twenty-seven (27) districts, which have the highest number of households without water and sanitation that meet minimum standards (The Presidency, 2014). Bojanala District Municipality, under which Madibeng and Rustenburg Local Municipalities fall, is one of the twenty-seven district municipalities (The Presidency, 2014).

1.4. Towards evaluating the effectiveness of implementation of outcomes-based performance management on domestic water supply

1.4.1. The research problem statement

There have been recorded successes on implementation of the South African outcomes-based management system (Thomas, 2011). However, government is experiencing policy implementation challenges in relation to achieving government outcome nine, particularly its sub-outcome on provision of basic services, specifically provision of water supply (Cooperative Governance and Traditional Affairs, 2009). Though implementation of the policy started in 2009, some municipalities are still struggling to meet their statutory obligations for water supply (Smith, 2009; South African Human Rights Commission, 2014). For example, 27 of the 44 District Municipalities in South Africa still have the highest number of households without water and sanitation and do not meet minimum standards (The Presidency, 2014). Some of the Municipalities with these challenges are Madibeng and Rustenburg (The Presidency, 2014).

Relatedly, van der Waldt (2014) found that most municipalities are struggling to implement results-based performance management system. In addition, preliminary analysis has shown that results-based management in relation to water supply is effective in some but ineffective in other municipalities (Smith, 2009). Such discrepancies are also evident in local municipalities within the same district (Cullinan, 2014; South African Human Rights Commission, 2014; Tapela, 2013), for instance, Madibeng and Rustenburg. Although Rustenburg has challenges, it reduced its water backlogs from 27 191 in 2010 to 10 563 in 2014 (Rustenburg, 2015). In comparison, Madibeng's water supply backlogs have increased from 123 567 in 2010 to 170 530 in 2014 (Cullinan, 2014; Madibeng, 2014). These challenges might lead to government not achieving its targets for the sub-outcome and National Development Plan goals by 2030. A comparative case study to assess aspects that are crucial for the South African government to achieve its intended outcomes on water supply in Madibeng and Rustenburg Municipalities by 2030 is therefore significant. Moreover, the discussion of factors behind the noted differences in achievement of this sub-outcome in the two Municipalities within the same district provides lessons for improvement of the South African results-based management system in respect to water supply strategies.

1.4.2. The research purpose statement

The purpose of this research is to assess and examine the aspects that facilitate the South African government's outcomes-based management (OBM) policy to achieve its intended outcomes and water supply government outcome in Madibeng and Rustenburg Local Municipalities. Firstly, literature on results-based management policies and outcomes-based water supply was reviewed to understand the intervention and the research problem broadly (internationally and nationally) and specifically in the two Municipalities. Secondly, guided by the literature review and documented frameworks, a detailed theory of change and results-chain framework for the policy in respect to water supply was developed to illustrate causal links between inputs, activities, outputs, outcomes and impact. Thirdly, from the knowledge gained in the literature review, we developed a conceptual framework to show how the research proceeded beyond the literature review. Fourthly, guided by the newly developed theory of change and results-chain framework, we collected and analysed data to examine the aspects that facilitate the South African government's outcomes-based management (OBM) policy to achieve its intended outcomes and water supply government outcome in the two municipalities. Lastly, based on the results from the analysis, we drew conclusion on the crucial aspects in the implementation of the South African government outcomes-based management policy to achieve its intended outcomes and water supply outcomes in Madibeng and Rustenburg Municipalities by 2030.

1.4.3. The research questions

To carry out the assessment and achieve the above purpose, the research responded to the following questions:

- 1.4.3.1. What aspects facilitate for the South African government's outcomes-based management policy to achieve its intended outcomes?
- 1.4.3.2. What aspects facilitate for the South African government's outcomes-based management (OBM) policy to achieve its intended water supply outcomes in Madibeng and Rustenburg Municipalities?

1.5. Delimitations of the research

According to Flick (2014), delimitations of the research refer to those elements of the research that the researcher chooses to include and to exclude, and it therefore provides the boundaries of the research. The research evaluated the effectiveness of the implementation processes of the outcomes-based management policy on achieving one basic service of government outcome 9, sub-outcome 1, namely, access to sustainable and reliable water supply. Therefore, it neither evaluated the effectiveness of the policy on achieving all sub-outcomes of government outcome 9 nor other basic services (i.e. electricity, refuse removal, sanitation, and roads) within the sub-outcome. In addition, the research was limited to process evaluation of the implementation processes and did not include outcomes and impact evaluation of the policy under study. The study also did not include other aspects of outcomes-based water supply, that is, the effect of water tariff management and revenue collection, partnerships and spending patterns on achieving the water supply outcomes.

1.6. Justification of the research

Literature review indicated that although there are research studies on results-based management across the globe, there are limited studies that assessed the effectiveness of the implementation processes of the South African government's outcomes management system. Furthermore, there are limited studies that focussed on assessing the effectiveness of results-based management policies on delivering basic services, particularly access to water supply. It was important to evaluate the effectiveness of the outcomes-management policy implementation processes after six years of its implementation in two municipalities within the same district with different success rates of water supply to establish crucial aspects for implementation of the policy. The study therefore produced knowledge that can be utilised to facilitate successful implementation of the policy and achievement of the government sub-outcome under study. In addition, future reviews of the policy would benefit from the knowledge produced by the study. Moreover, since the research is a process evaluation study, it will also contribute to future outcomes and impact evaluations of the South African outcomes management policy in relation to the sub-outcome under study.

Considerable research on results-based management employed secondary data and literature review (Fryer, Antony and Ogden, 2009; Hawke *et al*, 2012; Siddiquee, 2010), while few, such as Try (2007), utilised either top executives or government officials at other levels as primary data sources. Though results-based management system is citizen-centric, limited studies included citizens as data sources. Furthermore, there are limited past studies, which applied the theory of change and results-chain framework for interpretation of the research results. There are also limited comparative analysis studies of results-based management. This study circumvents these limitations; it is a comparative analysis study, which employed a combination of primary and secondary data sources, and included senior and middle management government officials as well as citizens.

1.7. Preface to the research report

To this end, the report has six chapters. Following this introductory Chapter, Chapter 2 provides literature review covering the problem and intervention broadly and specifically, past and current studies, broad field of study for the research, explanatory and theoretical frameworks and concludes with a conceptual framework. Chapter 3 presents research strategy, design, procedure and methods used in the research, including reliability and validity measures as well as limitations. Chapter 4 provides research results of the key findings for each research question. Subsequently, in Chapter 5, we present an analysis of data from the findings and interrogate research results against the theory of change and results chain framework that we developed in Chapter 2, whilst Chapter 6 summarises and concludes the research.

2. LITERATURE REVIEW

This chapter reviews literature on the intervention, similar to prior studies and the broad field of study upon which the research is based. It starts by providing a history, context and description of the research setting (Sections 2.1.1, 2.1.2 and 2.1.3). In Section 2.2, it reviews literature on the intervention under study in broad and specific terms. Section 2.3 engages prior studies that attempted to evaluate some or all aspects of results-based management by reviewing their methods, data, findings and conclusions, and consequently highlight their limitations. With the knowledge gained, we situate our research within monitoring and evaluation field of study. Consequently, in Section 2.4 we examine literature on key concepts, attributes and components of as well as established facts surrounding monitoring and evaluation field, which led us to locate this research within process evaluation component. We therefore, in Section 2.5 engage literature on the attributes and appropriate data sources of process evaluation. From the knowledge gained in Sections 2.2, 2.3, 2.4 and 2.5, we identified and summarised the relevant theories and explanatory frameworks for this research in Section 2.6. Subsequently, the last section (Section 2.7) provides a road map of how this research has assessed the effectiveness of the South African government's outcomes-based management policy on the government sub-outcome on water supply in Madibeng and Rustenburg Local Municipalities.

2.1. History and description of local government in South Africa and implications for provision of basic services

2.1.1. History of local government in South Africa and provision of basic services

A brief history of the evolution of local government in South Africa and its implications for broader service delivery challenges put a perspective to the state of water services in the two municipalities under study. Tsatsire and colleagues (2009) traced the origins of local government in South Africa from 1652 with the advent of colonialism, to 18th century with the passing of Municipal Ordinances starting in the Cape, Natal and eventually across towns in the country, to the apartheid era in the 19th century. Municipal Ordinances established a board of Commissioners in towns across the

country with functions that are of municipal nature, and included among others, provision of basic services (Tsatsire *et al*, 2009). This history had far-reaching implications for South Africa because it laid the foundation for apartheid local government legislation and structures value laden with policies of separate development and racial discrimination (Cloete, in Tsatsire *et al*, 2009). “It was the local government system that the apartheid value system manifested itself most visibly”, with municipal services provided on racial basis resulting in most of the black dominated areas without basic services (Tsatsire *et al*, 2009, p. 133).

The advent of democracy in 1994 marked a turning point in the South African political landscape and brought a new era of democratic local government. The Constitution of South Africa proclaimed local government a third sphere of government, decentralised the provision of basic services to local government, gave municipalities full decision making powers and entrusted them with the provision of basic services (Boateng, 2014). To give effect to these Constitutional provisions, government formulated an array of legislation; among others, the White Paper on Local Government was developed and it placed community development and involvement at the helm of the affairs of municipalities (Department of Provincial and Local Government, 2007). Unlike its predecessor, the democratic government positioned local government as the main driver of economic development and proclaimed it “a democratic, legitimate and responsive local government to meet the needs of the people, irrespective of race and settlement areas” (Binza, 2010, p.79). The first South African local government elections in 2000 was the first step towards implementation of these legal provisions.

Despite the excellent legal frameworks of the democratic government, it will take municipalities a long time to equalise access to services and address socio-economic imbalances from the apartheid legacy (Tsatsire *et al*, 2009). Confirming this notion, the Department of Cooperative Governance 2015/16 Annual Report indicates that most of the municipalities are still shaped by the apartheid legacy and there is unequal provision of basic services based on settlement areas, with most of the black dominated areas still underserved (Department of Cooperative Governance, 2016). The report further confirms that most municipalities are unable to deliver basic services and meet socio-economic development needs of their communities, particularly in townships and rural areas (Department of Cooperative Governance, 2016). Among others, the report

attributes these challenges to tensions between political and administrative interface, weak technical capacity within municipalities, political instability, weak citizens' involvement in municipal affairs, poor diagnostic and data analysis, inaccurate and incomplete data, weak revenue collection systems and poor infrastructure (Department of Cooperative Governance, 2016).

2.1.2. Configuration of the South African Government and its implications for water supply

To provide context to water supply in South Africa, it is necessary to start with an outline of the configuration of the South African government and the roles of each government sphere in the water supply value chain.

As rightly put by Wright (2014, p. 1) South Africa is a unitary state with 'some elements of federalism in practice and constitution'. Chapter 3 of the Constitution, which established three spheres of government that are distinctive, interdependent and interrelated, pronounces this set up; a national government, nine provincial governments and 284 municipalities or local governments (Yemek, in Boateng, 2014). Each sphere has constitutionally assigned powers, functions and unique role to play in performing concurrent functions (Malan, 2012). This configuration comes with complexities, has far-reaching implications for attainment of government outcomes and requires strong coordination and collaboration across and within the three spheres (Edwards, 2008; Layman, 2003; Malan, 2005). Government passed the Intergovernmental Relations Framework Act in 2005 to manage these complexities (Malan, 2005).

As highlighted, the Constitution entrusts local government with the provision of basic services (Boateng, 2014). National government on the one hand has a constitutional responsibility of setting policy direction and legislative frameworks (Malan, 2012) and allocates national revenues to provincial government through the Division of Revenue Act of 2003 (National Treasury, 2007). On the other hand, provincial government's mandate is to implement national legislation and policy, deliver most government services and support local government to deliver basic services (Edwards, 2008; Malan, 2012). Therefore, national government should ensure that government machinery

works by managing the country's affairs while sharing the responsibility for service provision with provincial government (Boateng, 2014).

The implications of this system is that although national government provides national regulatory frameworks and sets out national targets for water supply services, the responsibility to deliver on those targets rests with provincial and local government (United Nations Children's Emergency Fund, 2011). Furthermore, although the Constitution mandates national government to provide general budget support in the form of operating and capital grants to local government, it does not control how the budget is locally apportioned and spent or control municipalities' service delivery choices (Boateng, 2014). In most instances, this has resulted in tension between the setting and achievement of national targets for basic services in the context of decentralised service delivery (Malan, 2012). Nevertheless, national government can intervene in the decisions of provincial and local government within the confines of the Constitution (Boateng, 2014). In this regard, Section 100 of the Constitution empowers national government to intervene and put a province under administration if it fails to execute its Constitutional obligations (Republic of South Africa, 1996). Similarly, Section 139 of the Constitution empowers provincial government to intervene in cases of poor governance and inability of a municipality to perform its Constitutional responsibilities (Republic of South Africa, 1996).

2.1.3. Domestic water supply in Madibeng and Rustenburg Local Municipalities

Schnoor (2010, p.1) describes sustainable water supply as “supplying or being supplied with water for life or perhaps more precisely as the continual supply of clean water for human uses and for other living things”. Relatedly, the United Nations Convention on the Rights of Persons with Disabilities and Millennium Development Goals proclaim “the right of everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses”; and all member states should comply (United Nations, 2003. p1).

Most researchers concur that sustainable access to quality and adequate water leads to improvement in socio-economic and health status of citizens (Bendahmane, 1993; Davis

et al, 1993; Okun, 1988). However, it is worrying that about 17% of people in the world did not have access to clean water and many African countries have not met the United Nations Right to water Declaration in 2009 due to a number of challenges (Moe and Gangarosa, 2009). The reasons cited for non-access include among others, population growth and urbanisation, affordability, poor water infrastructure, technical skills and resources, ineffective community involvement, water losses, flaws in billing and revenue collection mechanisms and lack of knowledge on the pricing structure (Moe and Gangarosa, 2009; Mulwa, 2013). What exacerbates the challenge is the fact that about 31 countries are economically and physically water scarce and the number is projected to increase to 48 and 54 in 2025 and 2050 respectively (Mulwa, 2013). To address these challenges, Beyene (2012) recommends robust capacity building programmes for communities to strengthen their participation in water planning, implementation and maintenance of water systems. Doe (2007) adds strengthening of private sector participation, tariff regulation, monitoring tariff collection and improving the functionality of water supply as success factors for water supply.

According to Marsden (2014), generally, the South African government is doing relatively well on the provision of water supply compared to other countries because of its existing infrastructure, though it is currently collapsing. The country has robust legislation and it has met its Millennium Development Goals on water supply. However, most of the country's municipalities are experiencing water supply challenges (Department of Water and Sanitation, 2016; Marsden, 2014). This is evident from the 2014 Environmental Performance Index, which ranked South Africa 107th of the 178 countries in terms of access of the population to sustainable domestic water supply (Marsden, 2014). Furthermore, as noted earlier, South African government reports indicate difficulties regarding meeting the target of providing access to 5.2 million additional households by 2019 (Department of Planning, Monitoring and Evaluation, 2017).

In addition to South Africa being one of the water scarce countries, most municipalities' existing infrastructure is ageing and there is shortage of skills to manage water schemes on a sustainable basis (Department of Water and Sanitation, 2016). Marsden (2014) and the Department of Water and Sanitation (2016) also identified challenges of weak asset management, non-revenue water, high water leakages, poor planning, weak operations

and maintenance, inefficient revenue and debt management, environmental degradation of many South African natural systems and water pollution leading to high treatment costs. They attribute these challenges to mining, urban development, untreated wastewater, in-migration, industries and agriculture.

Specifically, Madibeng Local Municipality experiences most of these highlighted challenges. In addition to the above listed challenges of most municipalities, the Department of Water and Sanitation identified that the Municipality's woes emanate from project delays due to prolonged bureaucratic processes and possible fraudulent and corruption activities (Department of Water and Sanitation, 2015). Hence, it has been placed under administration more than once by the North West "Provincial Government in terms of Section 139 (1) (b) of the Constitution with regard to its water and sanitation functions" (Department of Water and Sanitation, 2015, p.1). However, in line with Beyene's (2012) recommendations, in 2015 the Department of Water and Sanitation established Madibeng Water and Sanitation Community Forums and introduced community-based water leaks detention and repair programme to capacitate communities to participate as part of solving the challenges (Department of Water and Sanitation, 2015).

Although Rustenburg Local Municipality does experience uneven provision and interruptions of water services, the challenge is not regular as compared to Madibeng Local Municipality (Naidoo, 2017). Also worth noting is that Rustenburg Municipality was never placed under administration with regard to water functions (Department of Water and Sanitation, 2015). However, most notable water supply challenges in Rustenburg are water leakages and aging infrastructure caused by huge mining operations, population growth, in-migration, informal settlements and lack of electronic data systems (Marx *et al* (2008).

Nonetheless, Rustenburg Local Municipality has visible successes, which are partly attributed to the digitised water management system introduced in 2010 (Naidoo, 2017), confirming assertions on the power of technological innovations in water supply. According to Naidoo (2017), this innovation, 'revolutionised' and digitised the municipality's water management systems and networks. He argues that, the benefits accrued from this system include engineers and other officials' enhanced ability to

manage infrastructure digitally; improved operations and maintenance, real time performance and fault monitoring, reduced water leakages, decrease in the number of illegal connections and faulty metres, improved revenue collection and data management. Most importantly, the digitised system “reduced overtime fees from R1.5 million in 2015 to R328 000 in 2017” (Naidoo, 2017, p.1). Other success factors for the Municipality are effective public-public and public-private partnerships and active citizenry with well-established apolitical structures that hold the municipality accountable, such as MUNWATCH (Marx *et al*, 2008).

2.2. Evolution and description of the outcomes-based management policy

Outcomes-based performance management system is an equivalence of results-based performance management in other countries. It is defined as

“a management strategy by which all actors, contributing directly or indirectly to achieving a set of results, ensure that their processes, products and services contribute to the achievement of the desired results (outputs, outcomes and higher levels goals or impact). The actors in turn use information and evidence of actual results to inform decision making on the design, resourcing and delivery of programmes and activities as well as for accountability and reporting” (United Nations Development Group (2011, p.2).

Taking a cue from Meier (2003), providing a brief discussion of how outcomes-based management system evolved and factors framing its successes and failures in different countries is imperative to provide a perspective to the evolution of the South African system. Results based management emerged from around the 1950s, when Peter Ducker introduced the concept of ‘management by objectives (MBO)’ (United Nations Educational, Scientific and Cultural Organisation, 2008). Meier (2003) argues that MBO principles of participatory decision-making, objectives-oriented approach and performance evaluation culture have resonance with results-based management. These principles were a prevalent practice in the private sector until around the 1960s when they evolved into the Logical Framework for public sector institutions in the United States. Around the 1990s, the insurmountable socio-economic challenges, pressure to deliver quality services and the need for accountable and transparent governance forced

many governments to adopt New Public Management (NPM) approach, of which results based management was one (Meier, 2003).

Prior to the adoption of results-based management system, the focus of public sector institutions was on human, technical and financial resources as Nabaho (in van der Waladt, 2014) rightly puts it, government officials “were focusing on how they were kept busy and not on how they made a difference in the lives of people”. The introduction of results-based management required a major change of focus to outcomes and impacts, and public institutions were to “define expected results, focus their attention of result achievement, measure performance regularly and objectively, learn from performance information, make adjustments and improve efficiency and effectiveness of their programmes’ (Meier, 2003, p.3).

In countries where results-based management systems have succeeded such as Canada, Australia and Korea citizens realised remarkable socio-economic benefits (Boyne, 2003b, Hoque, 2008, Meier, 2003, Pazvakavambwa and Steyn, 2014). The system’s success lies in the effective execution of its three key components; results-based planning, implementation, monitoring and evaluation, with the latter providing required information for adjustment of the system, hence its cyclical nature (UNDG, in Shangahaidonhi, 2013). Successful execution of the three components requires long term, medium term and annual plans, with well-established regulatory frameworks and institutional arrangements for government planning.

UNDG (in Shangahaidonhi, 2013) identifies critical aspects for implementation of results-based management as effective performance reporting, data management, monitoring and evaluation and involvement of citizens and all role players in the entire value chain. In support of UNDG, APCoP (2011) added capacity to react quickly to minor fluctuations in expected performance and use of information from monitoring results to improve budgets, project designs and implementation as critical success factors. On the other hand, Meier (2003) advocates for accountability at political level, strong partnership element with all role players across government and private sector, and compliance with legislation as significant success factors. Other literature identified the use of logic models, alignment of regional programmes with national priorities, intergovernmental planning, performance-based budgeting, risk management and

implementation capacity and capability as facilitating effective implementation of outcomes-based management systems (Bester, 2012; Bourne *et al*, 2003; Boyne, 2003a; Pazvakavambwa and Steyn, 2014; Thomas, 2011; Yereven and Mkhitarian, 2009).

2.2.1. Evolution and description of outcomes-based management policy in South Africa

Like in other countries, outcomes-based management in South Africa evolved as part of public sector reforms to accelerate service delivery and address socio-economic challenges inherited from the apartheid legacy. Prior to the introduction of outcomes-based management, the focus was on inputs resulting in increased backlogs in the provision of basic services (Layman, 2003; Malan, 2012).

The introduction of the South African outcomes-based management moved the focus from inputs and activities to outcomes (The Presidency, 2009). The policy therefore emphasises sectoral rather than departmental planning and that “plans, activities, budgets and implementation strategies should be aligned across spheres and departments in support of outcomes” to limit intergovernmental complexities (The Presidency, 2009, p. 13). In this regard, the policy components are in line with international best practices and they included among others, strong monitoring and evaluation systems, strong intergovernmental machinery, active citizenry and strong leadership (Malan, 2012; Phago, 2013).

Despite the policy components harmonised with internationally recognised standards, there are implementation challenges. A survey by the Department of Planning, Monitoring and Evaluation revealed that monitoring and evaluation culture is non-existent in 54% of 96 national and provincial government departments while 39% view monitoring and evaluation “as a policing and controlling rather than a continuous improvement function” (The Presidency, 2016, p.5). The survey further indicated that 81% of the 96 departments are not conducting evaluations, the implications of which are that evaluation results do not inform planning and consequently hinder effective government planning, policy making and budgeting (The Presidency, 2014, p.5). Layman (2003) and Malan (2012) identified poor intergovernmental planning,

implementation and reporting across the three spheres as the main hindrance factors for the South African outcomes-based management system.

2.2.2. Implementation of outcomes-based management policy in South African Municipalities

As observed by van der Walt (2014) and confirmed by the National Planning Commission (2012), more than the other two spheres of government, municipalities are the leading vehicles of socio-economic development in communities and thus the main players in achieving the National Development Plan goals. They are at the coalface of service delivery and directly implement programmes that will improve socio-economic conditions of communities. To perform this role, they should adopt and effectively implement an outcomes-based management approach. In this regard, national government developed a performance management guide for municipalities intended to capacitate them to perform this role and effectively implement the outcomes-based management policy (Department of Provincial Government and Local Government, in van der Waldt, 2014). Subsequently, Government-Wide Monitoring and Evaluation System, which expected municipalities to improve their monitoring and evaluation capacity, data management systems and provide key data on “outcomes indicators specified in the Millennium Development Goals, National Development Plan, Medium Term Strategic Frameworks and Provincial Growth and Development Strategies” (van der Waldt, 2014) was introduced. Nevertheless, van der Waldt (2014) argues that most municipalities could not meet these expectations.

Due to non-implementation of outcomes-based approach and poor achievement of desired outcomes by municipalities, the then Department of Cooperative Governance and Traditional Affairs introduced Local Government Turn Around Strategy (LGTAS) in 2009 (COGTA, 2009). In 2015, when government realised that LGTAS was also unable to ‘*turn around*’ municipalities to achieve desired socio-economic outcomes, it introduced the Local Government Back-To-Basics (B2B) Approach grounded on five pillars:

“putting people and their concerns first; supporting the delivery of municipal services to the right quality and standard; promoting good governance, transparency and accountability; ensuring sound financial management and

accounting; and building institutional resilience and administrative capability” (Department of Cooperative Governance, 2016, p.21).

Despite these efforts, many municipalities in South Africa still experience challenges of implementing outcomes-based management. Unlike the challenges of provincial and national government, van der Waldt (2014) argues that the absence of performance culture, performance management and monitoring and evaluation systems in most municipalities are the root causes of poor service delivery. In this regard, van der Waldt (2014) identified lack of capacity to implement outcomes based performance management, weak institutional and operational mechanisms, lack of skills and reliance on consultants to develop public value adding integrated development plans, inadequate budgets and inability to implement their long-term strategic plans.

2.3. Methods, data, findings, and conclusions of studies on evaluations of outcomes-based management

There are limited past studies in South Africa that assessed effectiveness of outcomes-based management systems in municipalities and on water supply (Pazvakavambwa and Steyn, 2014). Therefore, since performance measurement is a key aspect of results-based management systems, this section also reviewed studies on performance measurement systems globally (Binnendijk, in Kuye, 2006). The studies are categorised into three. First, we summarised studies that used qualitative methods, secondly, the quantitative studies and thirdly, those that solely relied on literature and document review.

2.3.1. Qualitative research studies on results-based management systems

Rantanen and colleagues (2007) applied a qualitative research strategy and a case study research design to investigate the design and implementation of the Finish public service performance measurement systems. The challenges include setting of measurable indicators and targets, understanding objectives by officials, and lack of resources. Multiple stakeholders and the ‘masters’ within as well as conflicting needs among politicians, top executives, different spheres of government, and citizens introduce complexities in the implementation of results-based management systems. They

conclude that contextual factors are central to public sector results-based management systems.

Try (2007) employed a qualitative research strategy and an exploratory case study research design to examine senior government executives' perceptions of the effectiveness of results-based management in Canada. Other than reviewing secondary data sources (results-based implementation documents and Canadian government surveys), the researcher used both unstructured and semi-structured interview schedule to collect data from officials in head and regional offices for comparative purposes. The study used thematic content analysis and public value theory to analyse the information and interpret the results respectively. The selected methods allowed for an in-depth understanding of the theoretical contribution of public value theory in results-based management. Try (2007) found that sound management practices are important to results-based management and that public value theory does highlight the constraints of implementing results-based management. The study concludes that the components of public value theory, that is, service, outcomes and citizens' trust in government do not contribute equally to the success of a results-based management system. Further, greater managerial control and influence over programme outcomes lead to affirmed acceptance and successful implementation of results-based management system in the public sector (Try, 2007).

Another study by Conaty (2012) employed qualitative research strategy and case study research design to examine the implications and challenges of organisational and stakeholder attributes and relationships on the Irish government performance management. In addition to the review of secondary data sources, that is, performance management policies and reports, the study used semi-structured interviews to gather data from senior government officials. The research applied a combination of thematic and content analysis as well as Bouckaert and Halligan Framework to analyse the data. Application of the selected methods provided in-depth knowledge of challenges of implementing results-based performance management in public sector settings (Conaty, 2012). The study found that intergovernmental public sector models present complexities for outcomes management due to tensions across priority objectives, cultural and organisational clashes, power distribution and interdependent stress. (Conaty, 2012). The study concludes that outcomes management systems should

incorporate “not just the achievement of outcomes, but the means employed towards that achievement and the organisational structures within which the service delivery process is set” (Broadbent and Laughlin, in Conaty, 2012, p.304). Further, Conaty (2012) concludes that intergovernmental public sector models should be managed effectively to achieve successful outcomes performance management.

A similar research by Silva and Ferreira (2010) applied qualitative research strategy and case study research design to assess the effectiveness of performance management practices within public primary healthcare services in Australia. The study used semi-structured face to face and focus group interviews to collect data from staff in three primary healthcare service centres in regional health authorities and individual institutions. It applied Otley’s performance management framework to analyse data. Applying these research methods, Silva and Ferreira (2010) found that hindrance factors for outcomes-based performance management in the three cases include weak and incoherent vertical controls between primary healthcare services and central government. Further challenges identified are poor knowledge of outcomes performance management among staff members, inability of staff to articulate the specific objectives of their organisations and absence of mechanisms to translate broad objectives into actionable objectives for different levels of staff (Silva and Ferreira, 2010). The study also found that poor target and indicator setting presents difficulties for measuring performance. The study concludes that poor managerial ability and linkages between different aspects of outcomes performance management systems and poor coordination of regional and institutional outcome indicators and targets are key hindrance factors (Silva and Ferreira, 2010).

Sillanpää (2011) also applied qualitative and case study research design to identify critical elements of outcomes-based performance measurement system in the Finish government welfare services. The study’s focus was on how outcomes performance is measured and the needs of management on the development of performance indicators. Other than relying on document review only, the research applied semi-structured interviews to gather data from public sector managers and employed thematic content analysis to analyse the data. Using the selected methods, the study found that outcomes performance management systems require adequate and suitable resources to undertake the activities and processes that will yield desirable outputs and outcomes. The study

concludes that critical success factors for performance measurement systems are effective use of performance management frameworks in strategic planning, setting measurable indicators and targets, effective information management systems and adequate resources and skills (Sillanpää, 2011).

Another similar study by Mavhiki and colleagues (2013) employed qualitative research strategy and case study research design to evaluate implementation of results-based management system in the Zimbabwean public sector. They used semi-structured interviews to gather data from directors and sectional heads in five Ministries in four government clusters selected through convenience sampling from each cluster respectively. The study used data coding and thematic analysis. The selected research approaches enabled Mavhiki and colleagues (2013) to explore reasons for failure of the Zimbabwean outcomes-based performance management system. They found that lack of technical capacity to implement results-based management, lack of incentives, and lack of political and administrative leadership and commitment are amongst the reasons behind the failure of the Zimbabwean outcomes-based performance management system. They further found ineffective planning, weak data collection systems and monitoring and evaluation systems as some of hindrance factors. They conclude that Zimbabwean government should use a selective approach to implementation of the outcomes performance management due to financial and human resource constraints faced by the country.

Van der Waldt (2014) employed qualitative research strategy, case study research design and purposive sampling to uncover challenges of implementing outcomes-based performance management systems in South African municipalities. The researcher used semi structured interview schedule to gather data from municipal managers, performance management systems managers, and integrated development plans managers, human resource managers and Section 57 Managers from three South African municipalities for comparative purposes. These research methods allowed the researcher to provide in-depth understanding of implementation challenges of performance management approaches at municipality level. According to van der Waldt (2014), the challenges include lack of political will, poor coordination and lack of skills, capacity and leadership to implement the system. Further challenges identified by the study were the absence of institutional systems and governance structures for

implementation of performance management system. The study concludes that conducive performance culture in the whole municipality, capacity-building interventions for staff and institutional mechanisms are central to institutionalisation and implementation of outcomes-based performance management in municipalities (van Der Waladt, 2014).

2.3.2. Quantitative research studies on results-based performance management systems

Another similar study by Verbeeten (2008) employed quantitative research strategy and cross sectional survey of 93 government institutions in Netherlands to assess the effectiveness of results-based management in all sectors. The study focussed on central government and municipalities. To achieve this purpose, Verbeeten (2008) collected data from managers of individual units, programmes, projects or operations. These selected methods allowed the study to find that clear measurable goals, quantity performance, quality or outcomes performance are closely related. It further found that the challenges in outcomes-based performance management include the difficulties in setting measurable outcomes and indicators in large organisations where a variety of stakeholders contributes to the outcomes. Verbeeten (2008) concludes that public sector organisations should strike a balance between quantitative and qualitative performance outcomes, and critical role players and citizens should play a central role in the development of outputs, targets, outcomes and indicators.

2.3.3. Theory-based and document analysis studies on results-based performance management systems

Hoque (2008) employed multiple case study research design, literature review and document analysis to assess implementation of results-based management framework in four public institutions in Australia. The study focussed on the strategic planning and reporting aspects. Using these selected methods, the research found that public sector organisations that are successful in outcomes-based management, in addition to including service quantity and quality indicators, budgetary key performance indicators, timeliness and cost indicators in their strategic plans, they report on them. Hoque (2008) further found that such institutions have advanced performance information

management systems with performance measures that are centred on outcomes and outputs. Furthermore, such institutions have adopted private sector approaches of conducting citizens and employees' satisfaction surveys. It concludes that the macro and micro contexts of institutional processes are critical success factors for outcomes management system.

Fryer and colleagues (2009) used theoretical research and reviewed 112 literature sources to assess critical components of results-based management system. They found that four critical components of results-based management are elements of effective monitoring and evaluation systems; and they include deciding on performance indicators, how to measure the indicators, interpretation of data and communicating the results. They found that the primary function of outcomes performance measurement is to specify broad and abstract goals, outcomes, results and missions to enable monitoring and evaluation. Fryer and colleagues (2009) conclude that an effective results-based management system incorporates setting and regular reporting on different kinds of indicators, that is, inputs, outputs, outcomes and impact indicators. Further, the performance management system should include and define short, medium and long-term indicators, including what should be measured in the short, medium and long term and a measurement tool.

Another similar study by Siddiquee (2010) selected quantitative research strategy to assess outcomes-based management in Malaysia to uncover the effect of human resource management and budgeting aspects in the success of the system. The research applied a combination of literature review and document analysis for data analysis. Using the selected methods, the study found discrepancies between the principles outlined in the Malaysian results-based management policy and actual implementation. Further challenges identified by the study include lack of political and administrative commitment, discrepancies between the system and human resources and budgeting processes. The study concludes that results-based management approaches are unlikely to succeed if human resource and budgeting processes are not reformed and aligned to the principles of the system (Siddiquee, 2010).

Hawke (2012) used case study research design and literature review to assess the impact of the Australian results-based management focusing on two areas, that is, quality of

performance measures and their perceived worth to citizens and stakeholders. The study assessed the two areas against all six factors of results-based performance management, presented in Table 1 below.

Table 1: Components of results-based management system

Factors	Description
External	All influences outside the public sector that affect PMS, most importantly politicians in power and those in the opposition
Structural	legal, regulatory, institutional, organisational structures
Managerial	role of managers in government, alignment of policies and plans, intergovernmental and inter-organisational factors
Technical	skills, capacity and competence of public sector personnel
Cultural and behavioural	societal and organisational values inherent in the system such as institutional, operational and societal cultures

Hawke, 2012, pp. 313-314

Employing the selected methods provided a holistic view of factors affecting implementation of results-based management in the public sector. These methods allowed Hawke (2012) to create a framework that classified different types of performance management systems employed by different governments and their depth of coverage. They further enabled the development of a results-based performance management framework appropriate for individual institutions, across organisations and across the whole of government. Hawke (2012) found that weaker management, behavioural and cultural factors are hindrance factors, and concludes that the positives of Australia's performance management system are strong external, structural and technical factors.

Another similar study by Goh (2012) reviewed literature to identify key contextual pre-conditions for performance management and measurement systems to be effective in the public sector. Employing this method, the study found that managerial discretion, evaluative and learning organisational culture and citizens' involvement in the entire value chain are three significant preconditions for successful implementation of results-based management system within the public sector. The study concludes that some of the contributory factors to failures of performance management systems are lack of

focus on the process of managing and monitoring implementation of the system (Goh, 2012).

Rhodes *et al* (2012) employed comparative case study research analysis to assess the effectiveness of performance measurement systems in seven countries in Southern Europe, Africa, Asia and South America. Other than applying a combination of thematic and content analysis, the research applied Bouckaert and Halligan Framework to analyse data. The selected methods allowed in-depth understanding of contextual factors affecting performance measurement systems in Ghana, Brazil, Indonesia, Ireland, Italy, Portugal and Spain. These methods further allowed for comparative analysis of within and across countries and specific challenges and strengths for developed and developing countries. Rhodes and colleagues (2012) found that countries with no political and economic crises, prioritise external outcome performance indicators such as customer service, participation and transparency objectives, while their counterparts prioritise internal performance measures such as financial, employee issues and reporting (Rhodes *et al*, 2012). They conclude that Bouckaert and Halligan is a useful Framework for assessing outcomes performance measurement systems and allows for comparison, albeit for some adjustments; and that political and administrative culture, organisational values and attitudes are vital elements of the system (Rhodes *et al*, 2012).

Gouais and Wach (2013) employed literature and document review to assess results-based performance management in relation to sustainability of rural water supply in the public sector of thirteen countries. Besides applying document analysis, the study employed Sustainable Services at Scale (Triple-S) theory to analyse the data. Using the selected methods, they found that aspects that were highly aligned to the Triple-S theory principles were learning and adaptive management, coordination and collaboration. The aspects found to be contrary to the principles of the Triple-S theory were implementation of asset management, monitoring, recognition and promotion of alternative service provider options, strategic and financial planning for full life cycles costs (Gouais and Wach, 2013). They further identified that key aspects of planning for full water life cycle costs include asset management planning, monitoring and evaluation of access and sustainability indicators and high recognition of alternative water supply service providers (Gouais and Wach, 2013). Based on their findings, Gouais and Wach

2013) conclude that most governments regard traditional approaches of community management as the only way to providing water services in rural areas. They further concludes that planning for full water supply life cycle costs is paramount to reliable and sustainable access to water (Gouais and Wach, 2013).

We note that there is wide use of theories and frameworks to assess the effectiveness of outcomes-based management in both developed and developing countries by similar studies. The theories include public value theory (Try, 2007), Bouckaert and Halligan framework (Conaty, 2012, Rhodes *et al*, 2012), Otley's Performance Management Framework (Silva and Ferreira, 2010) and Sustainable Services at Scale (Triple-S) theory (Gouais and Wach, 2013). However, none of these studies employed the theory of change and results-chain framework. We also noted that most studies used qualitative methods. It was also evident that most studies favoured case study research design, qualitative documentary analysis and public sector officials. Moreover, review of similar studies revealed that although outcomes-based management is citizen-centric, primary data sources in most of the qualitative and quantitative studies were senior government officials and did not include citizens. The analysis further shows that none of the past studies assessed implementation of the South African outcomes-based management system on any of the government outcomes particularly the sub-outcome on provision of domestic water supply.

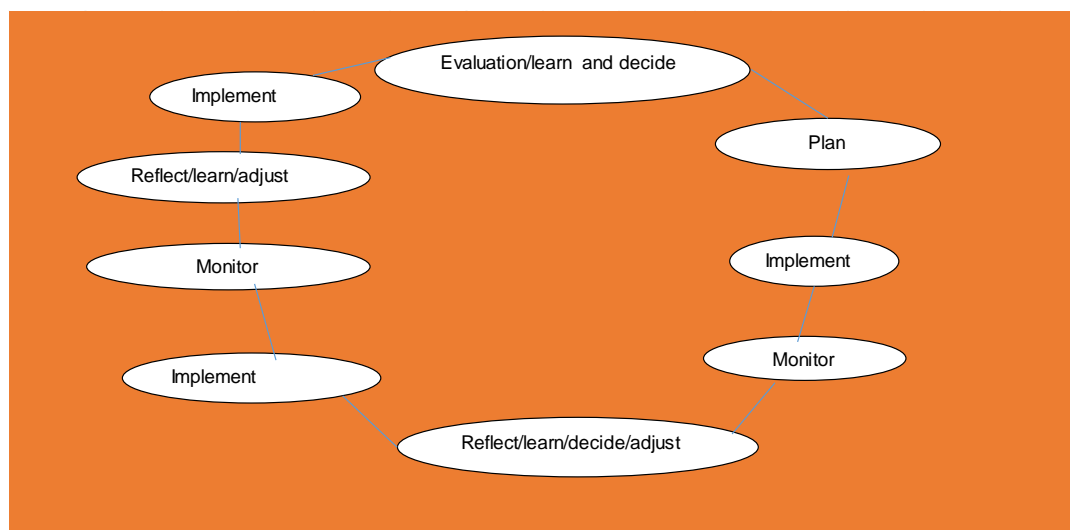
2.4. An introduction to monitoring and evaluation as well as its components

This research is an evaluation; hence, it is located within monitoring and evaluation broad field of study. Therefore, providing a conceptual understanding of monitoring and evaluation, and established facts and debates surrounding this field provides an understanding of appropriate components, processes and methods for the research. It also provides a perspective on the choices of locating the research within the process evaluation component.

Monitoring and evaluation are deemed integral part of public sector reforms for performance improvement, transparency and accountability (Muller, 1996; Shapiro, 2001) and are used by governments globally to achieve results (Kuzek and Rist, 2004).

Kuzek and Rist (2004) contends that the two concepts are interrelated, complementary but not the same. They define monitoring as a systemic collection and analysis of information about the progress of a plan, project, policy or programme. It involves continuous collection of information about implementation of a programme in order to determine progress towards achievement of its objectives, targets and indicators against its allocated funds. In contrast, evaluation entails systematic, objective and analytical assessment of the results of an ongoing or completed project, programme, or policy, including its design and implementation processes, emphasising reliability and usefulness of findings (Metz, 2007; Shapiro, 2001). Data collected from monitoring form an integral part of evaluation (World Health Organisation, in O'Connor-Fleming *et al*, 2006). Figure 1 below illustrates the relationship between monitoring and evaluation.

Figure 1: Relationship between monitoring and evaluation



Shapiro (2001, p. 6)

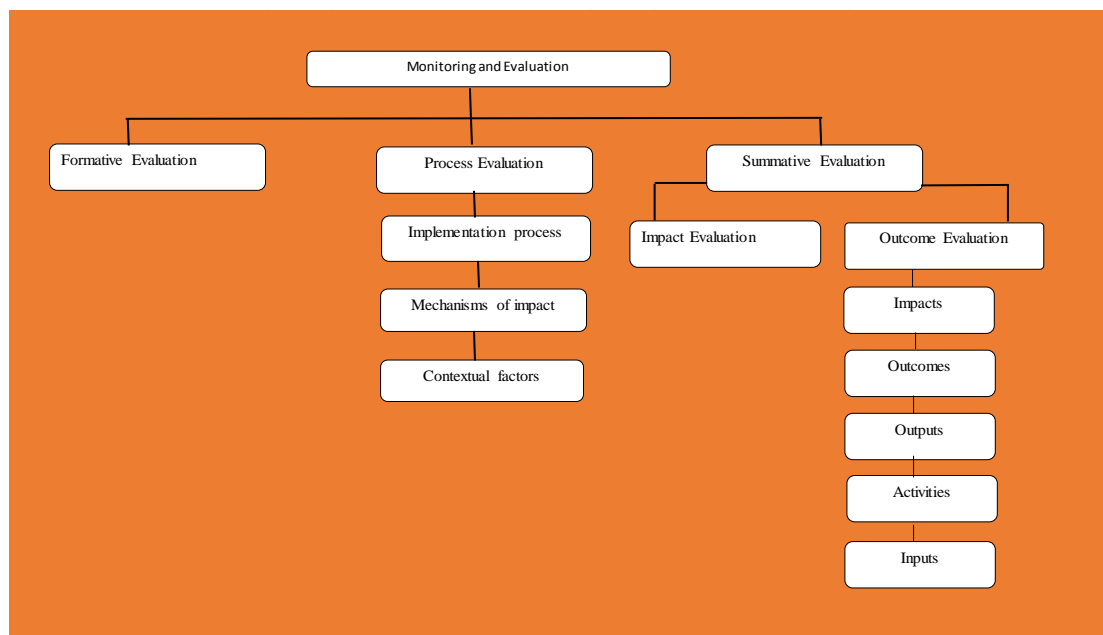
Evaluation, serves to compare actual project impacts against intended and planned objectives and outcomes, and focuses on what has been achieved against what was planned and how it was accomplished (Shapiro, 2001). Evaluation also tests the effectiveness of policies, programmes and intervention on changing the lives of citizens or the beneficiaries (Patton, 2002) and determines the aspects of an intervention that works and those that do not and as such generate information for improving programme performance and effectiveness (Metz, 2007; O'Connor-Fleming *et al*, 2006).

The attributes of an evaluation exercise are inputs, activities, outputs, outcomes and impacts (McCawley, n.d; United Nations Development Group, 2011). Herranz *et al* (2009) and McLaughlin *et al* (1999) describe inputs, activities, outputs, outcomes and impact as changes that take place at different levels of the project life span, from the beginning of project implementation to long-term and sustainable changes in citizens' lives. They are interlinked and interdependent for the realisation of desired programme outcomes and impact (Herranz *et al*, 2009; Roche, 1999).

2.4.1. Components of evaluation

Most literature provides three type of evaluation; formative, process and summative; and each type focuses on the different attributes (Hughes, Black and Kennedy, 2008; Moore *et al*, 2014). Figure 2 below presents three components of evaluation and their variables:

Figure 2: Major components of evaluations (Moore *et al*, 2014)



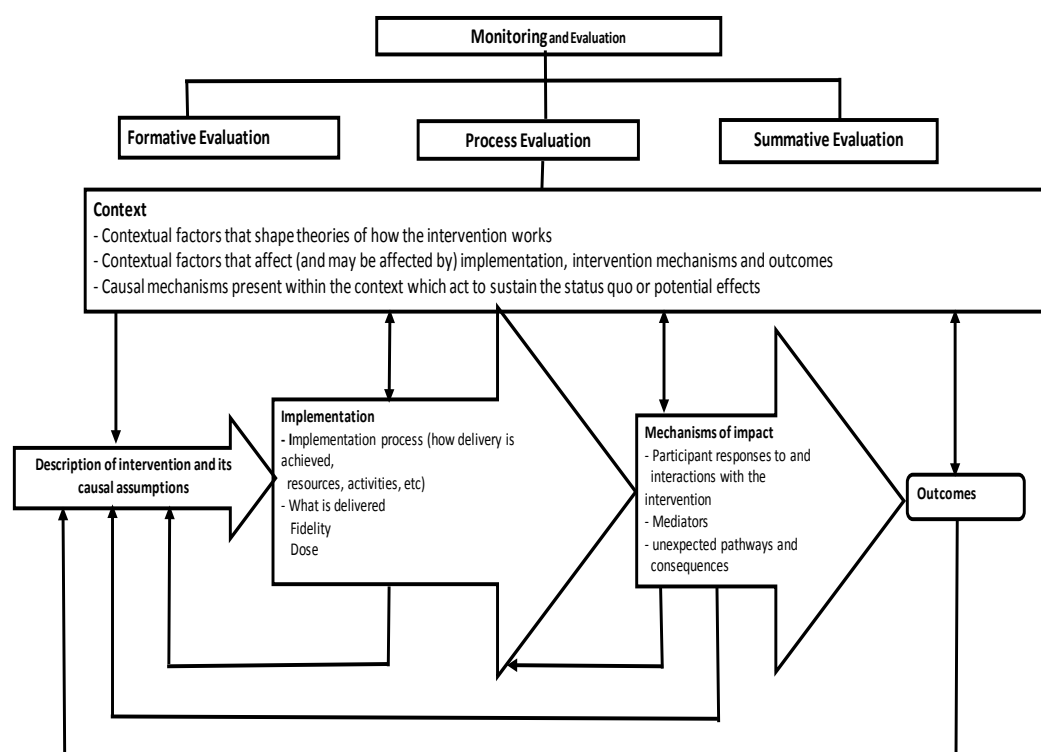
Adapted from Hughes, Black and Kennedy (2008) and Sormunen et al (2011)

Formative evaluation occurs prior to programme implementation and focusses on improvement of programme design, hence its attributes are inputs, activities and outputs (Hughes, Black and Kennedy, 2008). It entails systematic incorporation of data about planned programme inputs, activities and outputs to identify and correct gaps in

the programme design, as well as to improve the intervention prior to or during implementation and assesses if the way the intervention is designed will yield desirable outcomes and impacts (Hughes, Black and Kennedy, 2008; Patton, 2002). Process evaluation, on the other hand, assesses the effectiveness of programme implementation (Sormunen, Saaranen, Tossavainen and Turunen, 2011) and focusses on inputs, activities, outputs, and to some extent outcomes, but not impact (Patton, 2002). In comparison, summative evaluation assesses a programme's success in achieving its intended outcomes or impact (Hughes, Black and Kennedy, 2008).

This research is located within the process evaluation component. According to Moore *et al* (2014), process evaluation has three elements; context, implementation and mechanisms of impact which in turn have six aspects; exposure, reach, satisfaction, delivery, fidelity and context of the intervention. Figure 3 below presents key components of process evaluation and their variables.

Figure 3: Key components and variables of process evaluation



Adapted from Moore et al (2014, p. 11)

As depicted in Figure 3, process evaluation components noted above are “informed by the causal assumptions of the intervention, and inform the interpretation of outcomes”

(Moore *et al*, 2014, p. 11). Wareham (2014), Hughes, Black and Kennedy (2008) and Sormunen *et al* (2011) add that process evaluation is concerned with the functionality of a programme, and thus focusses on examining implementation details, actual implementation process, results, strategy, costs and resources against the intervention design. They argue that process evaluation research should provide an understanding of whether the programme was delivered according to its design and if it has reached the intended beneficiaries. It is significant for outcome evaluation as it details methodology for interpreting outcome data; hence, it occurs prior to outcome evaluation.

There are divergent views on appropriate research methods and techniques for process evaluation. Some scholars like Hughes, Black and Kennedy (2008) advocate for the use of qualitative methodologies to understand the factors that affect implementation of the programme. Others, such as Moore *et al* (2012) highly recommend the use of mixed methods to respond to the how and why questions while at the same time being able to obtain the advantages of quantitative data. They also advance that process evaluation should assess six elements of the intervention as well as the components of the programme's logic model and each of the six elements. They argue for the use of structured observations, questionnaires, focus groups, and semi structured and open ended interviews, particularly in process evaluations of complex interventions. They further contend that appropriate sources of data for process evaluation are all participants involved in the programme such as designers and implementers, intended beneficiaries or implementing organisations.

2.4.2. Established facts, issues and debates in evaluation

Compared to other fields of study, monitoring and evaluation is an established field. It has well established theories which evolved over many decades, starting from around 17th century with the work of William Farish, to the Tyler's objective oriented approach in the 1930s, to Bloom's taxonomy and Kirk Patrick in the 1950s, to the 20th and 21st century where many theorists such as Stufflebeam and Scriven emerged (Coryn, Noakes, Westine and Schröter, 2011). It therefore has basic principles, arguably called established facts or 'rules of the game' (Coryn *et al*, 2011). These rules lay down the ingredients of a credible monitoring and evaluation exercise. One of these facts is that the process of monitoring and evaluation reflects a repetitive cycle of planning, implementation,

monitoring and evaluation phases, “where evaluation involves revisiting the planning cycle” (O’Connor-Fleming et al, 2006, p.12). Most literature overemphasise the significance of the planning phase and argue that the planning phase of a programme, policy or intervention should integrate monitoring and evaluation to ensure that it is evaluable (Sonpal-Valias, 2009) and ‘monitor-able’.

Over many decades the field of monitoring and evaluation has seen the emergence of many theories that are closely related and oftentimes used interchangeably, such as theory-guided evaluation, theory-of-action, theory-of-change, program logic, logic model, logical frameworks, result-chain, outcomes models and hierarchies (Coryn, Noakes, Westine and Schröter, 2011). The most prominent of these theories are theory of change, logic models, logical framework and results-chain frameworks (Kuzek and Rist, 2005, Coryn, Noakes, Westine and Schröter (2011). Kuzek and Rist (2004) argue that the use of these theories is central to results-based monitoring and evaluation.

Despite widespread application and acceptance of these theories, including the popularly used theory of change and results chain in evaluations, there are conflicting views on their significance in evaluations (Weiss, 1997a). While some of the eminent scholars of monitoring and evaluation place value and advocate for theory-based evaluations to determine cause-effect relationship, others have questioned their significance and accuracy. The proponents of theory-based evaluations argue that programmes without well-designed roadmap for change that illustrates destinations and steps to arrive at the intended outcomes to allow monitoring and evaluation are difficult to evaluate and are bound to fail (Chen, 1990; Coryn, Noakes, Westine and Schröter, 2011; Vogel, 2012, Setlhako and Msila, 2013; Weiss, 1997b). On the other hand, the antagonists of theory-based evaluations argue for goal free evaluations, emphasise the value of common sense in explaining why programmes work or do not work and that evaluators should be concerned about whether the programmes work and not about explaining how they work (Scriven, in Coryn, Noakes, Westine and Schröter, 2011; Stein and Valters 2012). To balance the divergent views, Vogel (2012) advocates for flexible application of evaluation theories to accommodate contextual factors.

2.5. Key attributes of a process evaluation

As noted in 2.4, the central focus of process evaluation is on inputs, activities, outputs, and to some extent outcomes, and does not include impact. Since this research is a process evaluation study, we limit our discussion to the four attributes and their appropriate data sources.

2.5.1. The inputs

Inputs include human, financial, technological, infrastructure, information, organisational, technical and community resources allocated for a project to carry out its activities and achieve its intended outcomes (Gray, Fox and Schuller, 2001; W.K Kellogg Foundation, 2004). Hinnant-Bernard (1979) added that inputs include time, skills, resources, policies or frameworks used and partnerships established for the intervention. Sources of data for inputs include implementers, reports and documents on the intervention, information on funding, human resources allocated for implementation, technology and infrastructure, information on partnerships, and the use of these resources during implementation (W.K Kellogg Foundation, 2004).

2.5.2. The activities

Moore *et al* (2014) and United Nations Development Group (2011) describe activities as processes, actions and work undertaken through which inputs are mobilized to produce planned programme outputs. Data sources to assess processes and activities through which the intervention was implemented and to ascertain whether the programme was delivered as prescribed are design documents, official reports on the implementation of the intervention.

2.5.3. The outputs

According to United Nations Development Group (2011, p. 7), outputs are “changes in skills or abilities and capacities of individuals or institutions, or new products and services that result from the completion of activities within a development intervention

within the control of the organization”. Outputs are expressed in quantitative or qualitative terms, or both. W.K Kellogg Foundation (2004) advances that primary data sources used for assessing outputs include citizens, government officials as implementers, and politicians. Secondary data sources for outputs are significant to compare actual outputs achieved against the planned outputs detailed in the intervention’s theory of change and results chain and they include the intervention’s plans and reports.

2.5.4. The outcomes

Kuzek and Rist (2004, p.57) describe outcomes as second level of project results and “illustrate what success looks like” and have direct relationship link to project goals. They are medium term results of an intervention and represent the changes that occur between the finalisation of project outputs and the attainment of project goals, which are visible within communities. Outcomes occur during and after the intervention and they lead to project impact (Gray, Fox and Schuller, 2001). There are three categories of outcomes; short-term or immediate, intermediate and long-term outcomes (Gray, Fox and Schuller, 2001; Kuzek and Rist, 2004). W.K Kellogg Foundation (2004) argues that short-term outcomes should be visible and achievable within one to three years, intermediate outcomes should be attainable within four to six years and long-term outcomes should result in impact, which should be attainable and visible within seven to ten years. Therefore, relevant outcomes of focus for process evaluation research are short-term and intermediate outcomes. Appropriate data sources to assess short-term and intermediate outcomes include satisfaction levels of programme beneficiaries, programme implementers and designers, reports and other documents on the intervention (Hughes, Black and Kennedy, 2008).

2.6. Documented frameworks for interpreting empirical results assessing outcomes-based management policies

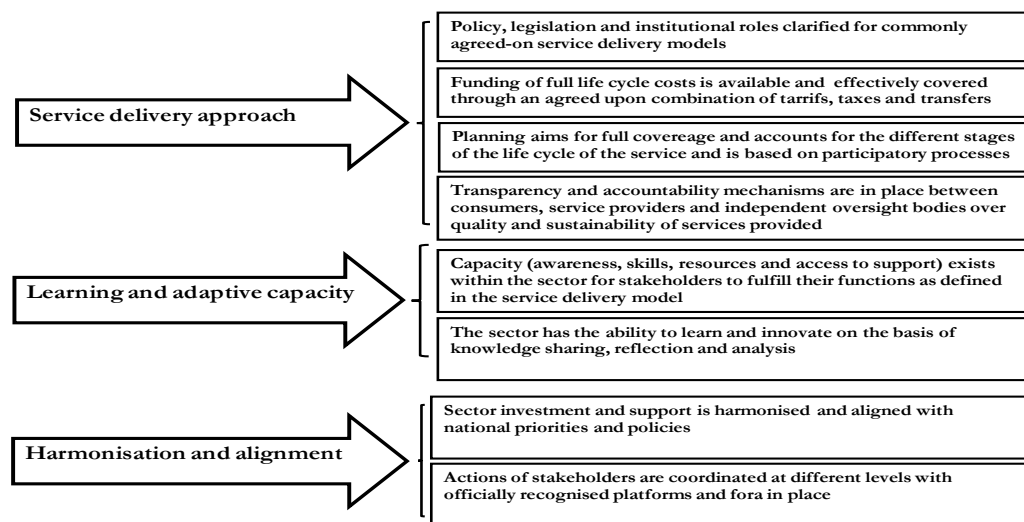
This section presents explanatory and theoretical frameworks used to interpret the research results. It starts with a discussion of a framework for sustainable water supply, public value theory and results-based performance management frameworks before developing a theory of change for outcomes-based water supply.

2.6.1. Sustainable Services at Scale Framework (‘Triple-S’ Principles Framework)

Triple-S Principles Framework is one of the recently established frameworks intended to improve sustainability of government services and has been applied by several research studies to assess sustainability of water supply services (Lockwood and Smits, 2011; Smits, Rojas and Tamayo, 2013). It is an eight-principle framework build upon three main pillars; a service delivery approach, harmonisation and alignment, and learning and adaptive water sector (Gouais and Wach, 2013). It advocates outcomes-based water supply models (Schouten and Moriarty, 2013, Gouais and Wach, 2013, Moriarty *et al*, 2013). It appreciates that professionalization of community management, alternative options of water service provision, partnerships, asset management and regulation are central to sustainable water supply services (Gouais and Wach, 2013).

Figure 4 below depicts pillars and principles of the Triple-S Principles Framework for outcomes-based water supply.

Figure 4: Pillars and principles of sustainable services at scale framework



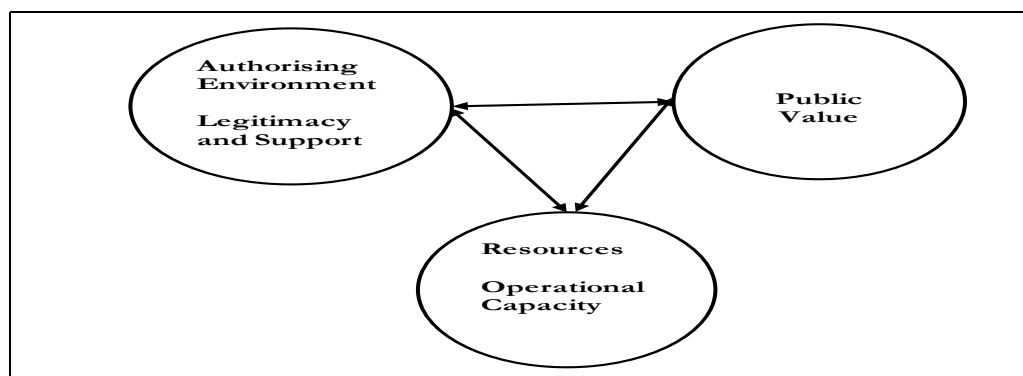
Adapted from Smits et al (2013, p. 15-17)

2.6.2. Public value theory

Public value literature is drawn mostly from Mark Moore's work, which outlines three components of public value through a strategic triangle as depicted in figure 8 below (Moore, 1995). Most literature on public management literature see public value as a blue print of broader public sector improvement (Kelly *et al*, 2002; Moore, 1995). Kelly and colleagues (2002) define public value as the value that government produces through its strategies, policies, laws, operations and other actions for its citizens. Related to this definition, public value theory involves a paradigm shift from the "primary focus on results and efficiency toward the achievement of broader government goal of public value creation" (Mobberely and O'Flynn, 2014, p. 358).

Figure 5 below depicts the three elements of creating public value advocated by Moore (1995).

Figure 5: Public Value Strategic Triangle



Adapted from Moore (1995)

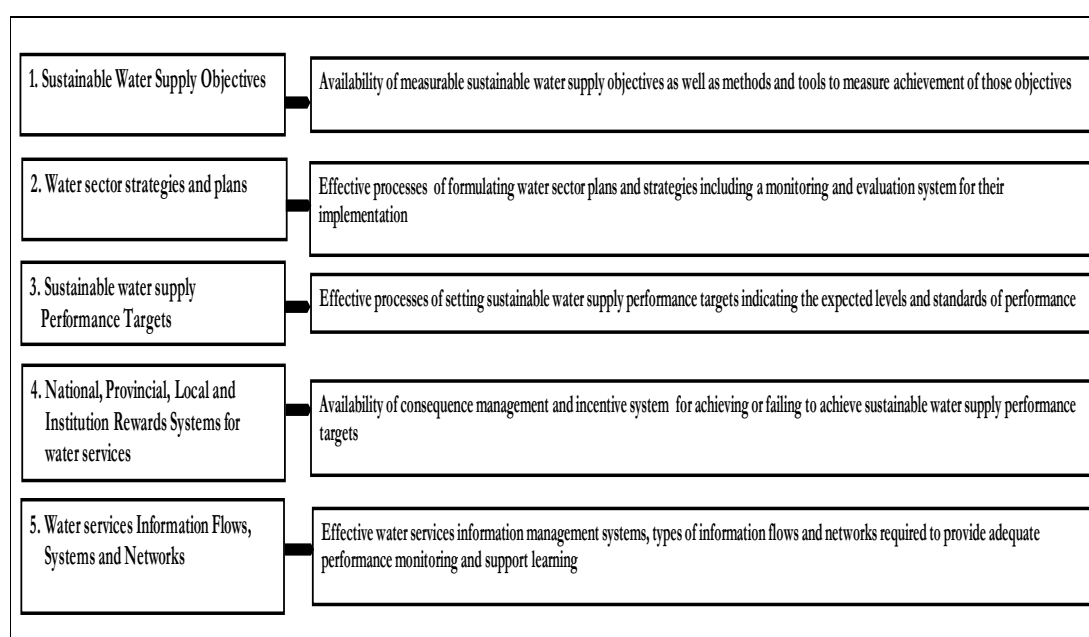
In the context of water supply, theory of public value creation for outcomes-based water supply advocates for a fair and equitable distribution of water services to all citizens (Kelly *et al*, in O'Flynn, 2007). The key components of the theory are legitimacy and support by citizens, an authorising environment, high-level outcomes and operational capacity for water supply (Moore, 1995). This theory places participation of citizens and stakeholders in the entire value chain of water supply and their trust and

confidence in government water supply operations at the helm of service delivery (Moore, 1994). Moreover, the theory advocates for capacity and capability of public managers to balance technical and political aspects to produce sustainable water services that meet citizens' expectations (Moore, 1994).

2.6.3. Otley's Performance Management Framework

Earlier literature on performance management was mostly compartmentalised focusing on one aspect rather than providing a comprehensive approach (Ferreira and Otley, 2009). Otley's performance management framework addresses this gap. Its general nature aids in integrating all parts of performance management to address five key aspects of the system, and thus providing a helpful structure to assess performance management (Ferreira and Otley, 2009). Figure 6 below presents the five components of Otley's performance management framework in the context of water supply.

Figure 6: Otley's Performance Management Framework in relation to outcomes-based water supply



Adapted from Ferreira and Otley (2009)

According to Ferreira and Otley (2009), Otley's framework emphasises five central aspects of performance management. The first aspect is identifying the main organisational objectives as well as methods and tools for measuring the level of

achievement of each of the objectives. The second aspect involves development and implementation of strategies and plans inclusive of evaluation and performance measurement processes for their implementation. Third aspect is setting of performance targets and the level at which they are set. The fourth aspect is organisational reward systems and involves consequences for achievement or non-achievement of performance targets. The fifth aspect relates to types of information flows and networks required for effective monitoring and institutional learning (Ferreira and Otley, 2009). However, one of the key criticisms of the framework is that it does not explicitly address the interconnections between the different aspects of performance management (Ferreira and Otley, 2009). The other criticisms levelled against the framework is its disregard for the role of vision and mission (Simons, 1995) and its focus on top management and ignoring lower levels, and thus downplaying the dynamics of informal controls within the entire organisation (Ferreira and Otley, 2009).

2.6.4. Bouckaert and Halligan Framework

Geert Bouckaert and John Halligan (Bouckaert and Halligan, 2006) introduced Bouckaert and Halligan Framework in the 1990s. It covers all three dimensions of performance management; performance measurement, incorporation and usage (Bouckaert and Halligan, 2006; Grigaliuniene, 2014; Jones *et al*, 2015, Rhodes *et al*, 2012). Jones and colleagues (2015, p.3) argue that the framework appreciates the “span across which performance management operates and provides a typology that details the three core activities for effective systems: first, collecting and processing measurement data into information; second, incorporating into documents, embedding into procedures, and stakeholder discourses; and third, using it to improve decision making, results and accountability”. Along the three dimensions, it proposes four performance management models from basic to more advanced; performance administration, management of performance, performance management and performance governance (Bouckaert and Halligan, 2006).

Bouckaert and Halligan (2006) purport that performance administration model is more basic and is characterised by availability of a formalised performance management system and poor incorporation and use of performance related information which are either lacking, fragmented or incoherent. The second model, managements of performances is more systematic and emphasises technically sound and functional

performance management systems. It applies specialised performance management systems and focuses on performance improvement and producing useful information, but in terms of its incorporation and use of performance information, it is disconnected and incoherent. Jones *et al* (2015) argues that in comparison to managements of performances model, the third model; performance management model is technically more advanced and functional on all three dimensions notwithstanding its complexity and that it may have challenges of being a stable system. The fourth model, performance governance, is more advanced on all the three design features. It incorporates internal and external performance information and uses a bottom up approach in the development of performance measures. Furthermore, its core features are responsive government, civil society and citizens' wellbeing indicators and preferences (Jones *et al*, 2015).

Figure 7 below illustrates the four performance management models in the context of water supply derived from Jones *et al* (2015).

Figure 7: Bouckaert and Halligan Framework in relation to outcomes-based water supply

PERFORMANCE ADMINISTRATION MODEL	MANAGEMENTS OF PERFORMANCES MODEL	PERFORMANCE MANAGEMENT MODEL	PERFORMANCE GOVERNANCE MODEL
Availability of water supply formalised performance management systems	More systematic water supply performance management system. More emphasis is put on technically sound and functional water supply services performance management system	Technically more advanced water supply performance management systems	Technically more advanced water supply performance management systems
Poor incorporation and use of water supply performance related information, usage of water supply performance information either non-existent or incoherent	Application of specialised water supply performance management systems.	Functional systems for collection and processing of water supply performance measurement data into information	Functional systems for collection and processing of water supply performance measurement data into information
	More focus placed on performance improvement and producing useful water supply information	Functional systems for for incorporation of water supply performance information into organisational documents, procedures, stakeholder discourses	Functional systems for for incorporation of water supply performance information into organisational documents, procedures, stakeholder discourses
	Poor incorporation and use of water supply performance information	Effective use of water supply performance information to improve organisational policy and decision making, results and accountability	Effective use of water supply performance information to improve organisational policy and decision making, results and accountability
	Incoherent and disconnected usage of water supply information in institutional decision and policy making and planning processes	Complex and affecting stability of the water supply performance management system	Incorporates internal and external water supply performance information and uses bottom-up approach in the development of water supply services performance measures and indicators. Responsive government, civil society and citizens' well being indicators and preferences

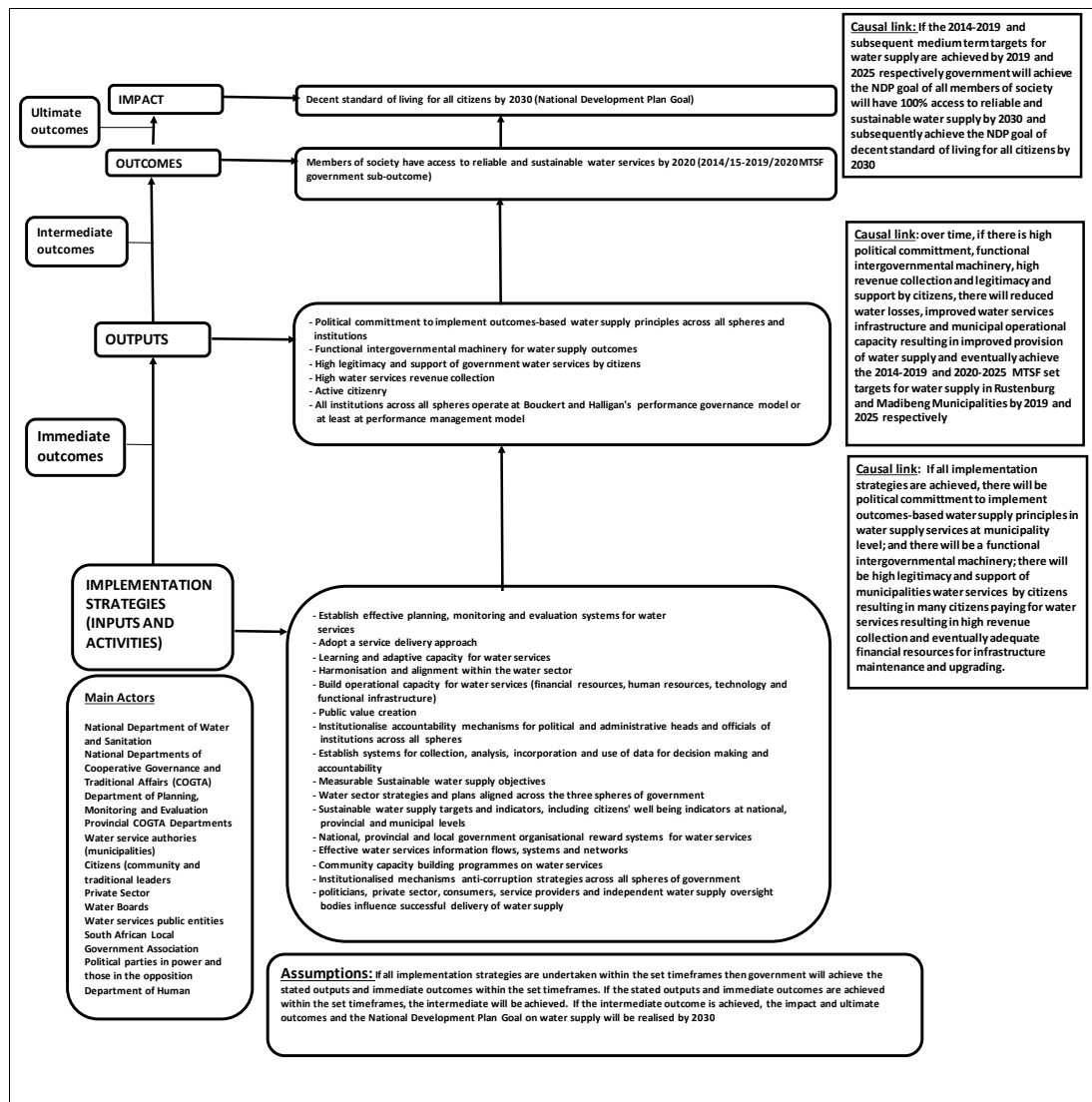
Adapted from Jones et al (2015)

2.6.5. The theory of change

Theory of change is most popular within the evaluation field, particularly in results-based management (Bester, 2012). Coryn, Noakes, Westine and Schröter (2011) purport that theory of change is an element of programme theory and the core of theory-driven forms of evaluation. They traced its origins to Ralph Tyler's concept of constructing and testing program theory for evaluating interventions in the 1930s. It maps out the change process (Rogers, 2013) and its purpose is to improve programme design, implementation and evaluation processes (Johnson, 2012). Rogers (2013, p.3) argues that a good theory of change outlines "how change is expected to come about and how activities are understood to contribute to a series of results that produce the final intended impacts". The most common elements of theory of change are context, actors, outcomes and pre-conditions, indicators, interventions, processes and activities leading to long term change, assumptions, rationales and narrative (Vogel, 2012).

Figure 8 below illustrates the theory of change for outcomes-based water supply.

Figure 8: Theory of change for outcomes-based management water supply



Adapted from Ferreira and Otley (2009); Gouais and Wach (2013); Jones et al (2015); Moore (1995); Rogers, 2013; Smits et al (2013); and Schouten and Moriarty (2013)

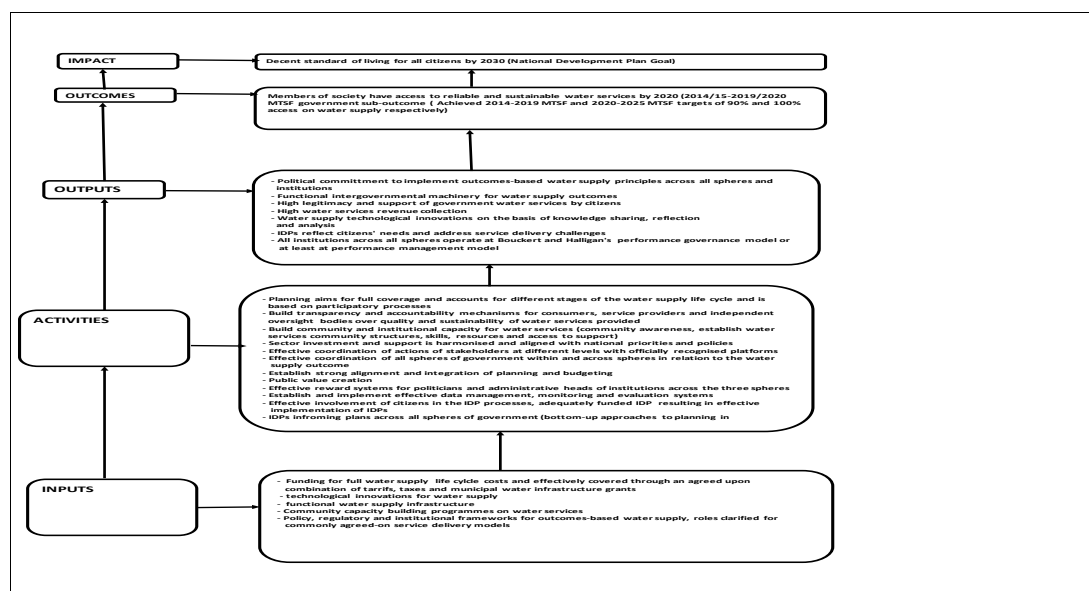
2.6.6. Results chain framework

Results chain framework is one of the key components of results-based management theories (Kuzek and Rist, 2004; United Nations Educational, Scientific and Cultural Organisation, 2011). It is a significant tool used to refine the Theory of Change if it is not likely to produce intended results under the same conditions, and to diagnose the flaws of theory of change after or before the project is fully designed or implemented (United Nations Educational, Scientific and Cultural Organisation, 2011). Results-chain framework presents a graphic display of how particular activities will produce desired

results and how implementation strategies will yield desirable outcomes and impacts by showing causal links from project design to implementation phase to results phase (Foundations of Success, 2007). Roberts (2012) advocates that results chain framework should be results-oriented, reasonably complete, show desired results in simple form and indicate causal chain in boxes with if-then statements. The three basic components of results chain are strategy, expected outcomes and desired impact, and its development involves defining objectives and goals and describing desired future programme outcomes and impacts (Roberts, 2012).

Figures 9 below exemplify a results-chain framework for outcomes-based water supply.

Figure 9: Results chain framework for outcomes-based water supply



Adapted from Ferreira and Otley (2009); Gouais and Wach (2013); Jones et al (2015); Moore (1995); Rogers, 2013; Smits et al (2013); and Schouten and Moriarty (2013)

2.7. Evaluating outcomes-based management policy on domestic water supply, a conceptual framework

The purpose of this research is to establish the aspects that facilitate the South African government's outcomes-based management policy to achieve its intended outcomes and water supply government outcomes in Madibeng and Rustenburg Local Municipalities. This section establishes the conceptual framework, i.e. a detailed discussion on how the research advanced beyond the literature review.

Preliminary analysis indicated that the South African government introduced the outcome management policy as an approach for implementation of the medium term strategic frameworks towards the achievement of the National Development Plan goals (The Presidency, 2014). One of these goals is achieving 100% access to water by all citizens by 2030 (National Planning Commission, 2012). However, we noted that government has several challenges in the implementation of the outcomes management policy, particularly in relation to the government sub-outcome on access to water supply. Official reports on outcomes-based management policy and government outcome 9 have also indicated that most municipalities are not meeting their statutory requirements on water supply and government is not achieving the 2014-2019 medium term strategic framework (MTSF) targets on the sub-outcome which might deter achievement of the sub-outcome by 2030 (The Presidency, 2014). Literature has also pointed out the difficulties of implementing outcomes-based performance management systems by most municipalities (Van der Walldt, 2014).

Several past studies attempted to address the research problem in both developed and developing countries focusing on different aspects of results-based management. These studies were mostly process and outcomes evaluations. From prior studies, qualitative, literature review and document analysis appeared to be the most preferred research methods of addressing the research problem and limited studies favoured quantitative methods. It was also established that the qualitative studies employed case study design, either single or multiple case studies, and there is limited use of comparative analysis studies of municipalities on a concurrent function.

Theories most prevalently used by similar studies to interpret research findings are Otley's Performance Management Framework (Silva and Ferreira, 2010), Bouckaert and Halligan Framework (Conaty, 2012; Rhodes *et al*, 2012), Public Value Theory (Try, 2007), Sustainable Services at Scale (Triple-S) theory (Gouais and Wach, 2013).

In most past studies, primary data sources were senior officials and public service managers only. One notable limitation in all past studies is the exclusion of citizens as primary data sources, though they are beneficiaries of the system. Despite results-based

management literature emphasising the importance of functional intergovernmental mechanisms, limited past studies drew data from government officials across all spheres.

Looking at all past studies, they seemed to approve Hawke's (2012) six-factor framework of results-based management system, because they all focused on one or more of the aspects within the Framework. Among others, the focus areas for these studies were intergovernmental, inter-organisational and inter-stakeholder attributes and relationships (Conaty, 2012), planning and quality of performance indicators and their perceived worth to citizens and stakeholders (Conaty, 2012; Goh, 2012; Hawke, 2012; Hoque, 2008; Silva and Ferreira, 2010; Sillanpää, 2011; Mavhiki *et al*, 2013). The other areas of focus by prior studies include results based performance management practices (Silva and Ferreira, 2010), results-based budgeting (Aly, 2015; Siddiquee, 2010) and human resource management practices (Mavhiki *et al*, 2013; Sillanpää, 2011; Verbeeten, 2008).

Despite application of different methods, most past studies found that the success factors for results-based policies are among others, effective strategic planning that incorporates use of logic models, measurable outcomes and indicators, results-based budgeting, monitoring and evaluation and effective data analysis and management systems (Aly, 2015; Conaty, 2012; Fryer *et al*, 2009; Goh, 2012; Gouais and Wach, 2013; Hawke, 2012; Hoque, 2008; Mavhiki *et al*, 2013; Silva and Ferreira, 2010; Try, 2007). The other success factors cited by most past studies are effective intergovernmental relations, coordination and alignment of national, provincial and local government planning and national and institutional outcome indicators and targets (Silva and Ferreira, 2010; Try, 2007), adequate resources (Mavhiki *et al*, 2013) and clearly mapping out the 'how' and means towards achieving the outcomes (Conaty, 2012; Hoque, 2008). These studies also argue that the success of results-based management depends on well-established national regulatory and policy frameworks (Aly, 2015; Hawke, 2012) and effective citizen and stakeholder involvement (Conaty, 2012; Fryer *et al*, 2009; Goh, 2012; Gouais and Wach, 2013; Hawke, 2012; Mavhiki *et al*, 2013; Silva and Ferreira, 2010; Try, 2007). Some of the past studies found sound management practices, political and administrative commitment as well as accountability mechanisms as critical success factors of the system (Goh, 2012; Hawke, 2012; Mavhiki *et al*, 2013). Past studies identified that aspects facilitating sustainable water supply include capacity, partnerships,

citizens' involvement in the entire water supply value chain and planning for full water supply life cycle costs (Gouais and Wach, 2013).

The knowledge gap identified from past studies is that none of the past studies evaluated implementation processes of the South African outcomes-based management policy on any of the government outcomes and sub-outcomes, particularly domestic water supply, which is a critical basic service. None of the past studies employed the theory of change and results chain framework to interpret and analyse the research findings. Furthermore, there is limited use of comparative analysis of local government institutions to examine aspects that facilitate effective implementation of outcomes-based water supply.

To close the knowledge gap, we developed and applied the theory of change (ToC) and results chain framework (RCF) for the policy and outcomes-based water supply to interpret and analyse the findings. The ToC and RCF were derived from the literature and theoretical frameworks on results-based performance management, public value, monitoring and evaluation and sustainable water supply (Public Value Theory, Halligan and Bouckaert Performance Management Framework, and Sustainable Services at Scale Framework).

Based on the literature review and identified knowledge gap, the research builds on prior studies and it therefore proceeded as follows:

This research is a process evaluation study assessing and examining aspects facilitating the South African government's outcomes-based management policy to achieve its intended outcomes and water supply outcomes in two municipalities. The broad field of study is monitoring and evaluation, and is located within the process evaluation component. It focusses on all the three components of process evaluation; implementation, mechanisms of impact and contextual factors in order to have an in-depth understanding of the policy implementation processes with respect to domestic water supply, improve the validity and reliability of research results and complement past studies. The South African government's outcomes-based management policy is in its sixth year of implementation; and its outcomes and impact are expected in 2030.

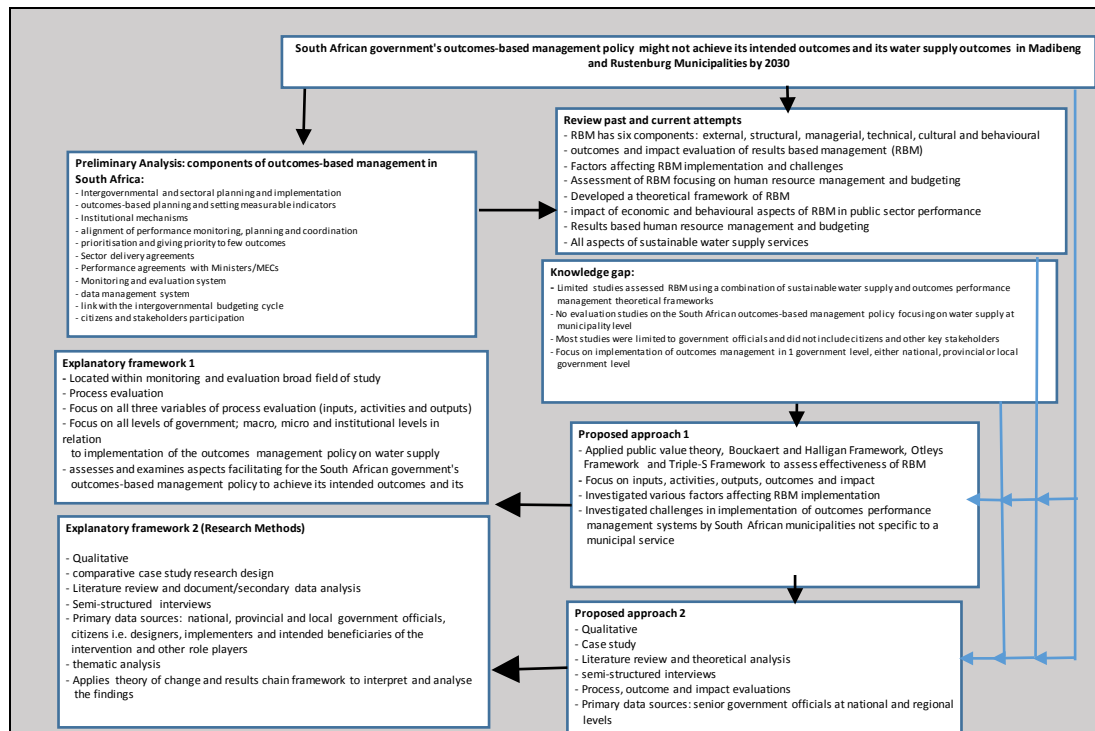
Therefore, the selection of a process evaluation study would produce implementation data that would complement future outcomes and impact evaluations of the policy.

Taking a cue from most past studies, this research is qualitative, applied comparative case study research design, purposive sampling, semi-structured interviews and content analysis to uncover in-depth data on the intervention (Conaty, 2012; Mavhiki *et al*, 2013; Rantanen *et al*, 2007; Rhodes *et al*, 2012; Sillanpää, 2011; Silva and Ferreira, 2010; Try, 2007). To address some of the limitations of most qualitative studies which relied on top government officials as primary data sources in the sample, this research included senior and middle management government officials at national, provincial and local government and South African Local Government Association and citizens' representatives from the two municipalities.

Drawing from prior studies, this research focused on four of the six components of outcomes-based management, namely, external, structural, managerial and technical factors in Hawke's six-factor model of outcomes-based management system (Hawke, 2012). Most literature argue that implementation of results-based management on concurrent services is largely influenced by macro (national) and micro (provincial) contexts and regulatory frameworks and it cannot succeed at institutional level if national and provincial levels do not effectively perform their roles and functions (Bester, 2012; Bourne *et al*, 2003; Boyne, 2003a; Clark, 2009). Therefore, this study assessed the four factors of outcomes-based management policy at both national, provincial and local government broadly before focusing on the two cases under-study. Assessment of macro and micro contexts was also used to triangulate the findings and increase research validity and reliability.

Figure 10 below presents a visual picture of the research conceptual framework.

Figure 10: Research Conceptual Framework



In conclusion, this approach enabled the research to uncover crucial aspects at macro and micro levels facilitating achievement of the policy's intended outcomes and its water supply outcomes in Madibeng and Rustenburg Municipalities. Of critical importance, the selected approach partly addressed some of the limitations of past and current studies and addressed the research purpose and questions adequately.

3. RESEARCH STRATEGY, DESIGN, PROCEDURE AND METHODS

This chapter discusses the strategy, design, procedure and methods used for the study; and provides justification for the choices, and how the research process unfolded, which Bryman (2012) argue is pivotal to answer the research question. The chapter starts with a brief description of the three research strategies, and justifies why the research employed qualitative strategy (Section 3.1). Similarly, Section 3.2 provides a brief description of the different research designs and justification for the choice of case study design for this research. In Section 3.3, we discuss the research procedure and methods employed and provides the rationale for their selection. Furthermore, in Section 3.4, we describe the concepts of research reliability and validity and their related terminology within qualitative research as well as measures employed in this study to address them. Lastly, the chapter presents limitations of the research (Section 3.5).

3.1. Research strategy

Research strategy refers to plans, procedures and methods used to conduct research, from broad assumptions and conceptualisation of the research to detailed data collection and analysis (Bless, Higson-Smith and Sithole, 2013; Creswell, 2009; Wagner, Kawulich and Garner, 2012). Generally, there are two types of research strategies, qualitative and quantitative; however, there is increased use of a combination of the two strategies, which brought about the third strategy referred to as mixed methods (Bless, Higson-Smith and Sithole, 2013; Bryman, 2012, Creswell, 2009).

This study employed qualitative research strategy. Qualitative research strategy resides within the interpretivist paradigm, which emphasises gathering of rich data to obtain different meanings and interpretations of the same phenomena in different or same settings (Merriam, 2002). The strategy enables the discovery of new, deeper and intuitive understanding of specific occurrences and the factors that inform certain situations and it employs words rather than quantification for data collection, analysis and interpretation (Bryman, 2012). Furthermore, qualitative strategy allows the research to determine and examine factors underlying certain phenomena and establish people's

perceptions about certain issues (Yin, in Naidoo, 2011; Anderson, 2006). The strategy, however, has limitation of generalizability of results (Wagner *et al*, 2012).

Qualitative research strategy is often used in similar past studies such as Conaty (2012), Mavhiki *et al* (2013), Rantanen *et al* (2007), Rhodes *et al* (2012), Silva and Ferreira (2010), Sillanpää (2011) and Try (2007) to assess the six components and effectiveness of outcomes-based management systems on public service delivery, which resonate with this research. Prior studies, notably, Conaty (2012), Silva and Ferreira (2010) and Sillanpää (2011) have shown qualitative research strategy to be a more effective strategy to understand factors and challenges of results-based management systems from different settings, which resonates with the purpose of this research. In this regard, Silva and Ferreira (2010) determined success factors of outcomes performance management systems in three primary health centres, and Sillanpää (2011) discovered preconditions for outcomes-based performance management within the welfare services sector.

These studies identified critical success factors of the system at both institutional and broader government levels. Therefore, based on prior research, it is possible to assess and examine aspects that facilitate for the South African government's outcomes-based management (OBM) policy to achieve its intended outcomes and water supply government outcome in Madibeng and Rustenburg Local Municipalities using qualitative research strategy. Notwithstanding that, the sectors and settings in the studies by Silva and Ferreira (2010) and Sillanpää (2011) and this particular study are different, primary health care, welfare services and water sector are basic services. Thus, regardless of the limitations of the qualitative research strategy, its application in this research accrued the same benefits and adequately responded to the research question and purpose.

3.2. Research design

Bryman (2012, p. 45) defines a research design as “a framework for the generation of evidence that is suited both to a certain set of criteria and to the question in which the investigator is interested”. The choice of a research design involves among others, consideration of the conditions of the research participants, appropriateness of the

design to cover the key aspects of the research questions and address reliability and validity issues (Bless *et al*, 2013; Creswell, 2009).

There are five research designs; experimental, cross-sectional, longitudinal, case study and comparative designs, and each of the designs is considered in terms of the criteria for evaluating the research findings (Bless *et al*, 2013; Bryman, 2012). This study applied case study research design. Creswell (2007, p.73) defines case study as “a study of an issue explored through one or more cases within a bounded system (i.e. setting, a context)”. It entails an intensive and detailed analysis of a single case” (Bryman, 2012, p.66) for a deeper understanding of the problem (Barret and Walsham, 2004). Yin (2003) argues that case study research design takes three forms; it can be either exploratory, descriptive or explanatory (Yin, 2003). Each of the three can be based on a single or multiple cases, or compare two or more cases, in what is called comparative case study research design (Goodrick, 2014). This study employed comparative case study design to among others, pinpoint cross-case patterns of the two municipalities under study (Goodrick, 2014).

Qualitative past studies that had multiple cases such as this research adopted comparative case study design. Notably, prior studies by Hoque (2008), Rhodes *et al* (2011), Rantanen *et al* (2007), Silva and Ferreira (2010) and Try (2007) established factors affecting policy implementation and achievement of outcomes in results-based management systems at macro (government-wide) and micro (institutional) contexts worldwide by employing comparative exploratory case study design. Comparative case study design also allowed for comparison of implementation of different components of the policy within and across the two municipalities (Yin, 2003; Rantanen *et al*, 2007; Try, 2007). Furthermore, using this design accrued benefits of past studies by discovering issues about the two municipalities and amassing more information from each case (Rantanen *et al*, 2007).

Drawing from past studies such as Conaty (2012) and Rantanen *et al* (2007) Madibeng and Rustenburg Municipalities were rationally selected as two extremes, both being within the same District Municipality, with the former showing visible results and the latter struggling to reduce water supply backlogs. This enabled the research to compare

and establish crucial aspects in water supply provision in the two municipalities since 2009, and to assess the effectiveness of the policy.

3.3. Research procedure and methods

This section presents data collection procedures and methods employed in the research. Specifically, we present detailed discussion of data collection instruments (Section 3.3.1) as well as target population and sampling techniques (Section 3.3.2). The section proceeds by presenting ethical considerations (Section 3.3.3), data collection and storage (Section 3.3.4) as well as the data processing and analysis applied in the research (Section 3.3.5). Finally, the section concludes with a description of respondents in the research (Section 3.3.6).

3.3.1. Data collection instrument

Data collection instrument is a scientific tool used to solicit information and data needed to respond to research questions, achieve the research purpose and address the research problem (Silverman, 2010; Taylor-Powell and Steele, 1996). According to Silverman (2010), the reliability and validity of the research depend largely on data collection instruments, and it is thus important that they are appropriate to produce reliable and valid data. The design of a data collection instrument should be consistent with the research purpose and questions in order to collect appropriate data, assess and measure what it intends to assess and measure.

According to Bryman (2012), Flick (2014) and Wagner *et al* (2012), two types of data collection instruments are interview schedule and observation schedule. Interview schedule maybe structured, also known as a questionnaire, semi-structured or open-ended (Walliman, 2011). Wagner *et al* (2012) argue that interview guide is suitable for research studies that should be completed within shorter periods. Depending on the research problem and purpose, the researcher can use a combination of data collection instruments to increase research validity and reliability (Bryman, 2012).

This research employed a semi-structured interview schedule due to the shorter timeframes and to extract rich data from the participants (Wagner *et al*, 2012), which

could not be holistically achieved through observation. This allowed flexibility to get more information out of the interview, and for adjusting the order and flow of questions, adding more topics to those already in the interview schedule, probing and following up when necessary (Wagner *et al*, 2012).

Overall, many similar qualitative studies with multiple cases supported the use of semi-structured interviews to assess the effectiveness of outcomes-based management interventions, for example, Mavhiki *et al* (2013), Sillanpää, (2011) and Silva and Ferreira (2010), thus, this research would also benefit from applying semi-structured interview schedule.

3.3.2. Target population and sampling

According to Bryman (2012, p. 187), target population “is a universe of units from which the sample is to be selected”. The term units in the definition is employed because it is not necessarily people who are being sampled, the sample may come from a universe of nations, cities, institutions, etc. There is increasing use of senior and middle management public sector officials across all levels of government as target population in prior studies. The target population of most past studies, such as Conaty (2012) included senior government officials; Mavhiki *et al* (2013) included senior government officials and sectional managers; and Silva and Ferreira (2010) included senior and middle management staff at institutional, central and regional government levels, while Sillanpää (2011) included public sector managers. Drawing insight from past studies, the target population in this research also included senior and middle managers in national and provincial departments involved in the policy implementation processes in relation to the water supply outcome as well as officials from the South African Local Government Association, Madibeng and Rustenburg Local Municipalities.

In addition, different government institutions within and across the three spheres of government have a role to play in the achievement of government outcomes and water supply value chain; inter-sphere collaboration is therefore key to the success of the outcomes-based management policy and achievement of water supply targets. Hence, this research took a cue from past studies such as Silva and Ferreira (2010), Sillanpää

(2011) and Try (2007) included all relevant institutions across the three spheres of government, though the cases under study are the two local municipalities.

Most past studies argue that results-based management is stakeholder-oriented and citizen-centric and that their participation in the system is one of the success factors (Conaty, 2012; Rhodes *et al*, 2012; Verbeeten, 2008). However, a notable limitation of most prior studies is the exclusion of key stakeholders and citizens in their samples. To circumvent this limitation, in addition to government officials the research included the South African Local Government Association as a key stakeholder in local government and a member of outcome nine Ministerial Implementation Forum. Furthermore, in order to have citizen's views, the target population included citizens' representatives of the two Municipalities, namely, traditional leaders, youth and women representatives who resided in the two Municipalities for a minimum of five years. The research population was therefore, senior and middle management officials from the Department of Planning, Monitoring and Evaluation, Department of Cooperative Governance, Department of Water and Sanitation, North West Department of Cooperative Governance, National Treasury, South African Local Government Association, Madibeng and Rustenburg Municipalities and citizens in the two municipalities.

A sample is a sub-section drawn from the population, which is actually to be studied, and whose characteristics will be generalizable to the whole target population in the case of quantitative research (Bless *et al*, 2013; De Vos *et al*, 2011). According to Wagner, Kawulich and Garner (2012), there are two sampling techniques; probability and non-probability purposive sampling. This research utilised non-probability sampling.

Generally, similar past studies such as Conaty (2012), Mavhiki *et al* (2013), Rantanen *et al* (2007) and Try (2007) used the non-probability purposive sampling. As per prior studies, non-probability purposive sampling benefitted the research in that the researcher strategically selected institutions and interviewees based on their relevance and knowledge of the research topic, availability and willingness to participate in the research (Bryman, 2012; Wagner, Kawulich and Garner, 2012). Hence, the sample included decision makers, designers, implementers and beneficiaries of the policy in relation to the sub-outcome on water supply. This sampling technique consequently permitted the sampling of suitable community members who could communicate in

English due to limited financial resources for translations. From the population, the research sample was constituted of 32 respondents, of which 26 were government officials, 2 were from the South African Local Government Association and 4 were citizens' representatives. Of the 26 government officials, 13 were from national government, 4 from provincial government and 9 from the two municipalities.

3.3.3. Ethical considerations when collecting data

Research ethical considerations involve the researcher's commitment to protect the participants from physical or mental harm, or any other harm throughout the research process (De Vos *et al*, 2011). Bless *et al* (2013) argue that research unethical behaviour includes acts of misrepresentation of facts from research participants or dishonesty by the researcher, violating the subjects' privacy, sharing and releasing confidential information about the participants or revealing their identities and deception of participants. Moreover, to abide by research ethics, researchers should ensure that there is no harm to research participants, provide participants with complete information, not invade their privacy and obtain their informed consent.

This research adhered to the research ethics provided for by literature such as Morris (2015). In this regard, ethics approval was obtained from the University Ethics Office prior to the study. Participants were approached by email and telephones. In the case of government officials and those of the South African Local Government Association, emails, with the University's introductory letter, were sent to gatekeepers of different institutions to request permission to conduct research in their institutions and indicate the relevant divisions for the research. After approval was granted, relevant officials in the divisions provided by gatekeepers and their email addresses were identified. In the case of citizens, they were contacted individually to request their email addresses. Subsequently, each potential participant was then approached by email outlining the research and its purpose as well as the research process. As recommended by Morris (2015), the emails indicated that their participation in the research was voluntary, the interviews would take approximately an hour and they would be tape-recorded. Potential participants were further informed of their right to withdraw from the process at any time before or during the interview and there would not be any harm to them in this regard. In addition, they were informed that should they decide to withdraw from

the process, all the data collected from them would be discarded (Morris, 2015). The researcher further impressed upon potential interviewees that should they decide to participate, the researcher would safeguard their privacy, all the tape recordings, any form of information collected from them as well as their anonymity (Morris, 2015).

Taking a cue from Morris (2015), the research information sheet (Annexure A) and consent forms (Annexure B) were then emailed to those who agreed to participate in the study a week before the interviews. The information sheet explained the research and outlined the research purpose, research process, the areas that would be covered in the interview questions, the benefits of the research to the interviewees and their organisations, how the data collected from them will be utilised. The information sheet also assured the interviewees that there are no potential risks and harm in taking part in the research.

As proposed by (Morris, 2015), the interview process further conformed to the research code of conduct. In this regard, to reinforce the above-mentioned processes, prior to the interviews, the research information sheet and consent forms were handed over, read and explained to the participants to ensure that they have full understanding of the research and its processes, provide them with an opportunity to ask questions if necessary. The interviewees then signed the consent forms agreeing to the interviews being tape-recorded, thus written consent was obtained prior to the interviews. Moreover, the data collected from the participants were not divulged to others, their organisations and other research participants to protect their privacy. The agreements that were entered into with the participants were kept private and confidential, including assigning numbers to each participant's transcription rather than by name.

The researcher is a government official and works within the Planning, Monitoring and Evaluation division in the Department of Traditional Affairs, within Cooperative Governance and Traditional Affairs (COGTA) Ministry. The Ministry among others is responsible to ensure that local government performs and municipalities meet their statutory obligations on the provision of basic services, including *inter alia* domestic water supply, and it is the coordinator and lead Department for government outcome 9, which is the outcome under study. Based on the researcher's experience in the Ministry, she has pre-conceived ideas about the implementation of the outcomes management

policy on domestic water supply at municipal level. In addition, COGTA Ministry is funding the studies for the researcher. Moreover, the researcher stays in Madibeng Municipality, which is one of the cases selected for this research. However, the researcher was very objective and ensured that her stance, preconceived ideas and experiences of local government and Madibeng Municipality do not affect the research findings, analysis and results.

3.3.4. Data collection and storage

Taylor-Powell and Steele (1996) define data collection as a process of administering a data collection instrument in accordance with the determined data collection techniques. Learned from past studies which collected data using semi-structured interview schedule such as Rantanen *et al* (2007), Silva and Ferreira (2010) and Try (2007), interviews were tape-recorded after getting permission from the participants. The interviews started with the Department of Planning, Monitoring and Evaluation (DPME) as designers and custodians of the policy to get full understanding of the policy and its components, and the expectations of the Department in terms of implementation of the Policy in the different spheres of government in relation to the sub-outcome under study prior to interviews with other institutions. DPME interviews were followed by interviews with officials from other national departments, followed by provincial and municipalities' officials. The South African Local Government Association (SALGA) and citizens were interviewed last to validate and triangulate the findings from national, provincial and municipal officials (Try, 2007).

As per the past studies, interviewees were provided with the interview guide prior to the interview to decide which interview questions they wish to address at specific stages of the interview and to provide them with a strong role in deciding how the interview should proceed (Rantanen *et al*, 2007; Silva and Ferreira, 2010). Taking a hint from past studies, the interview guide constituted identical questions for all SALGA and government participants across the three spheres. The questions for citizens were slightly adapted to replace the outcomes management terminology with familiar terms to them (Silva and Ferreira, 2010; Try, 2007).

The interviews started with the researcher explaining the information sheet to the interviewees. In this regard, the title and purpose of the research, intended uses of the data, the duration of the interview as well as the mechanisms that the researcher had taken to protect the interviewees' confidentiality and privacy were discussed with all the interviewees. Subsequently, the interviewees were taken through the consent form and requested their signatures if they concurred with its content, of which they all did. Therefore, all the interviews were tape recorded as recommended by Zorn (nd.) and Magrath and Walsh (2012). The interviews were ended by asking the interviewees if they have other things they would like to share in relation to the research or ask the researcher, and requesting them if they were willing to be contacted should the researcher require additional information and for purposes of member checks (Magrath and Walsh, 2012).

Creswell (2009) purports that data storage is a critical element of any research study, and should receive more attention. In this regard, to keep track of the interviews and for their easy access, subsequent to transcriptions, data was organised in electronic data files per institution and per respondent. The data was password-protected and respondents identified by numbers rather than by names to protect their identity and for confidentiality purposes (Creswell, 2009).

3.3.5. Data processing and analysis

Berg (in Wagner, Kawulich and Garner, 2012, p.229) describes data analysis as the “process of data reduction (focusing, simplifying and transforming data), data display and conclusions/verifications”. It involves “editing, coding, classification and tabulation of collected data so that they are amenable to analysis” and searching for patterns of relationships that exist among data-groups (Kothari, 2004, p.122). It also involves deriving meaning out of the data through data interpretation and classification (Flick, 2014). Methods used for qualitative data analysis include grounded theory, phenomenological analysis, thematic, ethnography, content analysis and historical research (Bryman, 2012; Hsieh and Shannon, 2005; Wagner, Kawulich and Garner, 2012). This research employed qualitative content and thematic analysis.

Hsieh and Shannon (2005, p.1278) define qualitative content analysis as “a research method for the subjective interpretation of the content of text data through the

systematic classification process of coding and identifying themes or patterns”. Content analysis has three distinct approaches, namely, conventional, directed and summative; and they differ in terms of their analytical approaches. On the other hand, Vaismoradi *et al* (2013, p.400) define thematic analysis as a qualitative descriptive “method for identifying, analyzing and reporting patterns (themes) within data”. However, Sparker (2005) argues that the two data analysis methods have many similarities and both focus on coding and themes and have the same aim of analytically examining and fragmenting data into small units.

Like most of the past studies, this research applied the summative content analysis since it includes many key elements of thematic analysis (Sparker, 2005). Hsieh and Shannon, (2005) describe summative content analysis as a process of data analysis that involves exploring contextual usage rather than deducing meaning of certain words and content in text. It involves identification and quantification of specific content, words or phrases in the text to discover their underlying meaning. Hsieh and Shannon (2005) posit that the process of summative content analysis starts with the counting of specific content, words or phrases from text and proceeds to identifying latent meaning and themes.

Though some of the past studies used either thematic or content analysis, there is increasing use of a combination of the two techniques to increase the reliability and validity of the findings by prior studies. For example, Conaty (2012), Try (2007), Rhodes *et al* (2012) and Sillanpää (2011) combined the two data analysis techniques, and employed document analysis as a supporting method to triangulate the findings from interviews. Moreover, this combination allowed Rhodes *et al* (2012) to compare implementation of the performance measurement aspect of the outcome management policy in two institutions based on Bouckaert and Halligan Framework.

In preparation for data analysis, the interviews were transcribed verbatim, examined and edited for errors to ensure accuracy (Try, 2007). Subsequently, we examined the transcriptions to identify main issues, recurring ideas, implicit and explicit ideas on the research topic from each participant by summarising, paraphrasing data into original texts and producing overviews of the information collected from the respondents in order to have overall understanding of the data (Vaismoradi *et al*, 2013). As proposed by Vaismoradi *et al* (2013), this preparation phase for data analysis was focused more on

establishing meanings and context of different data sets as well as relationship between them. It included repetitively referring to the tape recordings and examining interviews notes to have more understanding and confirm the overviews from the transcriptions (Mosoge and Pilane, 2014).

As recommended for summative content analysis, the process of data analysis started with coding; and we manually searched for specific phrases and content, and their related terms from the transcriptions to come up with the codes (Hsieh and Shannon, 2005). The phrases and content searched came from the different aspects of the research questions and literature. They included the five factors of results-based management advocated by Hawke (2012). As suggested by Hsieh and Shannon (2005), this was followed by frequency counts for each phrase and content per transcription and related phrases. These phrases were then coded alongside the category of each interviewee. We then counted the occurrences of each of the phrases or content by category of each participant and compare them to the total number of phrases coded (Hsieh and Shannon, 2013). Subsequently, as suggested by Miles, Huberman and Saldaña (1994), similar codes were then clustered into one theme. From the coding and interpretation process, the following two themes emerged; success and hindrance factors for implementation of the South African government's outcomes-based management policy in relation to water supply. Both themes were sub-divided into four sub-themes; external, structural, managerial and technical aspects drawn from Hawke's five-factor results based management model (Hawke, 2012).

Data interpretation followed to make meaning and conclusions out of the coded data (Flick, 2014). Guided by Try (2007), the data from each institution and sphere of government were analysed separately, focusing on specific characteristics and contextual issues within each institution and sphere to search for within and across-case patterns. This process entailed examining similarities and differences in the responses of government officials in the same and different positions, institutions and government spheres, and those of citizens' representatives to establish possible explanations for similarities or differences and to make conclusions on each research question (Flick, 2014; Hsieh and Shannon, 2005; Vasmoradi *et al*, 2013). During this process, we condensed, summarised, produced overviews of the information collected from the respondents, and categorised the findings as external, structural, managerial and

technical aspects from Hawke's (2012) six-factor model. Presentation of the findings included comparisons with the results of past studies, literature review and secondary data sources to reach conclusions through comparing different data sources and texts (Flick, 2014; Try, 2007).

Subsequent to this process, findings were then analysed using the theory of change and results-chain framework developed in 2.6 (2.6.5 and 2.6.6) derived from the components of Sustainable Services at Scale (Triple-S) theory for water supply, Otley's Performance Management Framework, Public Value theory and Bouckaert and Halligan Performance Management Framework. In this regard, the analysis compared the research findings against the 'newly' developed theory of change and results chain framework to assess and examine aspects facilitating the South African government outcomes-based management policy to achieve its intended outcomes and government water supply outcomes in each of the two Municipalities by 2030.

3.3.6. Description of the respondents

Respondents refer to primary data sources for the research. The respondents in this research included senior and middle management government officials responsible for coordination of outcomes-based performance management policy, strategic planning, integrated development planning, water supply services, monitoring and evaluation, outcome nine coordination and data management who have been in their positions for five years. It also included citizens' representatives; youth, traditional leaders and women representatives.

The following tables present a description of the research respondents per institution, sphere of government, position and years of experience in implementing outcomes-based management in the specific institution:

Table 2: Description of research respondents at national Government Level

Institutions	Management Level		TOTAL
	Middle Management	Senior Management	
Department of Cooperative Governance	1	1	2
Department of Water and Sanitation	1	2	3
Department of Planning, Monitoring and Evaluation	2	2	4
National Treasury	2	2	4
TOTAL	6	7	13

Thirteen government officials participated in the research at national government level. Of the 13 officials, 6 were at middle management level (Deputy Directors). 7 officials were at Senior Management level, constituted of four Chief Directors and three Directors. The sample therefore provided a balanced spread and perspective from the operational and implementation to decision-making level.

Table 3: Description of research respondents at Provincial Government Level

Institutions	Management Level/Citizens		TOTAL
	Middle Management	Senior Management	
North West Department of Cooperative Governance	-	2	2
Provincial Treasury	1	1	2
TOTAL	1	3	4

Table 3 depicts that four provincial government officials participated in the research. Of the four officials, one was at middle management level and three at Senior Management level. Therefore, the sample was not balanced in terms of middle management and senior management levels but it provided a provincial perspective in terms of implementation of the policy.

Table 4: Description of research respondents at local government level including stakeholders and citizens

Institutions	Management Level/Citizens			TOTAL
	Middle Management	Senior Management	Citizens' representatives	
Rustenburg Municipality	2	2	2	6
Madibeng Local Municipality	2	3	2	7
South African Local Government Association (SALGA)	-	2	-	2
TOTAL	4	7	4	15

Table 4 depicts that 15 respondents represented local government perspective of the effectiveness of the policy on water supply. Of the 15 respondents, 9 (60%) were government officials from the two municipalities, 4 (27%) were citizens' representatives and 2 (13%) were SALGA officials. Of the 9 officials, 4 were at middle management and 5 at Senior Management level.

Table 5 below provides a breakdown of respondents by position, work experience in the implementation of outcomes-based management, age and gender

Table 5: Description of respondents according to position in the organisation, work experience, age and gender

GOVERNMENT SPHERE	INSTITUTION	RESPONDENT NUMBER	POSITION	WORK EXPERIENCE	AGE	GENDER
National Government	Department of Planning, Monitoring and Evaluation	1	Chief Director	6	40	Male
		2	Director	5	38	Male
		3	Deputy Director	8	46	Female
		4	Deputy Director	5	40	Male
	Department of Cooperative Governance	5	Director	6	42	Female
		6	Director	6	40	Female
	Department of Water and Sanitation	7	Director	7	44	Female
		8	Director	5	44	Male
		9	Deputy Director	5	40	Female

GOVERNMENT SPHERE	INSTITUTION	RESPONDENT NUMBER	POSITION	WORK EXPERIENCE	AGE	GENDER
	National Treasury	10	Chief Director	8	47	Female
		11	Director	6	43	Female
		12	Deputy Director	5	41	Female
		13	Deputy Director	10	48	Male
Provincial Government	North West Department of Cooperative Governance	14	Director	5	40	Male
		15	Director	6	49	Male
	North West Provincial Treasury	16	Director	6	41	Male
		17	Deputy Director	5	42	Male
Local Government	Madibeng Local Municipality	18	Director	6	N/A	Male
		19	Director	6	N/A	Male
		20	Director	5	N/A	Male
		21	Level 3	N/A	30	Male
		22	Level 3	N/A	31	Male
	Rustenburg Municipality	23	Director	N/A	N/A	Male
		24	Director	N/A	N/A	Male
		25	Special Workman	12	49	Male
		26	Special Workman	N/A	N/A	Male
	South African Local Government Association	27	Director	5	41	Male
		28	Director	5	46	Male
	Citizens of Madibeng Local Municipality	29	women representative	N/A	51	Female
		30	Traditional leadership representative	N/A	44	Female
	Citizens of Rustenburg Local	31	Youth representative	N/A	26	Female

GOVERNMENT SPHERE	INSTITUTION	RESPONDENT NUMBER	POSITION	WORK EXPERIENCE	AGE	GENDER
	Municipality	32	Traditional leadership representative	N/A	49	Male

All government officials in the study had five or more years of work experience in implementing the outcomes-based management policy.

3.4. Research reliability and validity measures

Bryman (2012) describes reliability as the consistency of a measure of a concept and that a measure is reliable if it is stable over time. He argues that research has internal reliability when respondents' scores on any indicator are related to their scores on the other indicators. Validity on the other hand, refers to whether an indicator and measurement techniques devised to measure a concept actually represent that particular concept or they represent something else; and if they measure what they are supposed to be measuring (Bless *et al*, 2013; Bryman, 2012). Due to the nature of qualitative research, there are debates about the use of the concepts of reliability and validity and their appropriateness in qualitative methods. Creswell (2009) argues that issues of reliability and validity do not carry the same connotation in qualitative research. Supporting this notion, Lincoln and Denzin (1994) instead argue for the use of trustworthiness of a research study, and proposed 'qualitative-oriented' concepts of credibility, dependability, transferability and confirmability as four measures of trustworthiness of a qualitative research, with the first three considered most critical (Lincoln and Guba, in Shenton, 2004).

Shenton (2004) is among many who affirm that to increase the credibility of the research results, researchers should derive line of questioning, data collection and analysis procedures from similar past studies. Taking a cue from this argument, this research applied summative content analysis and data collection methods utilised in similar qualitative studies by Rantanen *et al* (2007), Try (2007) and Rhodes *et al* (2012). In addition, application of thematic and summative content analysis of a combination of different data sources drawn from past studies to examine evidence from the interviews,

did not only improve trustworthiness and credibility, but also the transferability of the research results (Gibbs, 2007). The study further derived the interview questions from the theories and literature on outcomes-based management and outcomes-based water supply to ensure that the data collection tool measures what it intends to measure as recommended by Silverman (2000). This approach has allowed the researcher to compare and relate the research findings with those of similar studies, theory of change, results chain framework and theoretical frameworks for outcomes-management policy and water supply thereby increasing credibility of the study.

Guba (1981) and Brewer and Hunter (in Shenton, 2004) recommend triangulation to improve credibility of qualitative research, hence this research additionally used triangulation. Triangulation is the application and use of various data sources and methods in the same research (Bryman, in Morris, 2015). In this respect, the researcher used a wide range of participants at different levels across various institutions and three spheres of government. We further examined national, provincial and institutional policy implementation plans, reports and other documents to triangulate the findings and consequently increase trustworthiness of the study. In addition, analysis of within and cross-case patterns from all spheres of government by the research also permitted the emergence of specific patterns of each case, which were then searched in other institutions from other spheres, resulting in improved credibility, transferability and confirmability (Eisenhardt, in Try, 2007; Shenton, 2004). Member checks of the transcriptions with willing participants were also conducted through emails to bolster the credibility of research results as recommended by Lincoln and Guba (in Shenton, 2004).

The researcher documented contextual information of the research setting, all the research processes and procedures from conceptualisation to finalisation of the research, and provided as much information as possible about the two municipalities (Lincoln and Guba, in Bryman, 2012). In that way, the research produced a detailed and rich account of each Municipality to allow other researchers to make their own judgement about the transferability of the research findings to other contexts (Bryman, 2012, Yin, 2003). Furthermore, the researcher kept complete records of the data for all phases of the research process, including interview transcripts so that if necessary, other

researchers can establish if the research followed proper procedures in all the phases (Bryman, 2012).

3.5. Research limitations

The limitation of this study is that it examined two municipalities based on qualitative case study, the findings represent analytical rather than statistical view and therefore they cannot be generalised to other Municipalities in South Africa. Furthermore, since the research focused on assessing one element of government outcome 9, sub-outcome 1 which is ‘members of society have sustainable and reliable access to basic services’ and neither focusses on the whole outcome nor the entire sub-outcome, the results can neither be generalised to the whole government outcome 9 nor the entire sub-outcome.

Although case study method was used in the research, Shenton (2004) argues that the difficulty of this method to cross check information poses a limitation in the study because it relied on information from multi- cases rather than a large sample, which might result in subjectivity and unreliable results. Furthermore, semi-structured interviews used in this study might have suffered the limitation of some respondents not providing reliable information but rather what the researcher wanted to hear. To circumvent these limitations, the researcher probed using iterative questions and in cases where signs of contradictions were discovered, such data was discarded with possible explanations. Application of triangulation also addressed these limitations. Taking a cue from Shenton (2005), the researcher also kept an objective view during data collection and analyses.

Due to limited timeframes, it was not possible to do prolonged engagement and peer scrutiny, which are highly recommended to improve credibility of qualitative research findings (Shenton, 2004). In addition, because the study was to be completed within shorter timeframes it needed only those participants that were conversant with the research topic, hence it was limited to purposive sampling. We therefore could not apply random sampling which could have brought multiple perspectives as contended by Bouma & Atkinson (1995) and Stake (1994). In this regard, primary data sources in the research were limited to government officials, stakeholders and citizens’ representatives. Consultants, politicians, officials from North West Office of the Premier and other

stakeholders were not part of the study, and their views are equally important as key players in the intervention under study, and they might have held different views. In addition, the study could not access senior managers for water integrated planning and information management in the National Department of Water and Sanitation due to their unavailability, and thus missing their perspective. Furthermore, instead of the envisaged three SALGA officials, only two officials were available for interviews. The one official responsible for intergovernmental relations in SALGA could not participate in the study, and could have provided valuable information in relation to the intergovernmental aspects of water supply across the three spheres.

4. PRESENTATION OF RESEARCH RESULTS

The purpose of this research is to examine the aspects that facilitate the South African government's outcomes-based management (OBM) policy to achieve its intended outcomes and water supply government outcome in Madibeng and Rustenburg Local Municipalities.

To carry out this assessment, the study responded to the following research questions:

- What aspects facilitate for the South African government's outcomes-based management (OBM) policy to achieve its intended outcomes?
- What aspects facilitate for the South African government's outcomes-based management (OBM) policy to achieve its intended water supply outcomes in Madibeng and Rustenburg Municipalities?

This chapter first presents the findings on the aspects crucial to the South African government's outcomes-based management policy achieving its intended outcomes in 4.1; and secondly, the aspects crucial to the South African government's outcomes-based management policy achieving its intended water supply outcomes in Madibeng and Rustenburg Local Municipalities in 4.2. Simultaneously, we compared the findings with the results of past studies that explored these aspects. A key feature of successful implementation of outcomes-based management system at institutional level is that the macro (national) and micro (provincial) contexts should provide a conducive environment, and assessing the institutional level without looking at the two contexts would not reveal a true picture (Bester, 2012, Bourne *et al*, 2003, Calendar, 2011, Try, 2007). Thus, to respond to the research questions, in both 4.1 and 4.2, we started by presenting the findings on the implementation of outcomes-based management policy at macro level before zooming into the findings specific to each municipality.

As noted in Chapter 2, literature on results-based management has shown that there are six key aspects of results-based management system which can be used to assess the effectiveness of the system worldwide; external, structural, managerial, technical, cultural and behavioural (Bester, 2012; Bourne *et al*, 2003; Hawke, 2012). The research findings are presented on the first four aspects, which are the focus of the research.

4.1. Aspects crucial to the South African government's outcomes-based management (OBM) policy achieving its intended outcomes

Below are the findings on this focus area of the research starting with the national and provincial spheres and concluding with the two municipalities.

4.1.1. External factors

According to Hawke (2012), external factors include influences outside of government that positively or negatively affect implementation of outcomes-based management policy and they mostly include politicians in power or in the opposition, stakeholders and citizens. In several interviews with national and provincial government and SALGA officials, there was a unanimous view that political leadership in outcomes management is paramount, confirming the findings by past studies that one of the success factors for results-based management system is political leadership (Aly, 2015; Mavhiki *et al*, 2013; Try, 2007). This aspect emerged strongly from the findings, across all spheres of government. One senior official at national level, whose view was also echoed by all interviewees, except citizens, indicated:

'Politicians of different government institutions decide on what goes in the strategic plan of the Department or the integrated development plan of the municipality. Ministers, Premiers, MECs and Mayors decide on what gets or not implemented. It's their call, ... as bureaucrats we just follow'. If policy implementation fails, the public blames political leadership and not administrators...'

Related to the above notion, the issue of influence of politicians on implementation of the system came out strongly. Unanimously all interviewees viewed politicians in the implementation of the South African outcomes-based management as the make or break of the system. It emerged from the findings that there is strong political will at national level to implement the system, with some of the Ministers being political champions of the government outcomes and accounting to Cabinet. This finding signals an opportunity for success of system at national level as one interviewee, whose opinion was representative of many, indicated, *'...the outcomes approach is working, it will achieve its objectives because it has been pitched higher politically and is led by the President and Cabinet. The problem is to achieve the outcomes political champions of government outcomes depend on*

their political colleagues to cooperate'. The signing of delivery agreements between the Ministers and the State President was therefore viewed as a positive aspect.

However, citizens were more concerned about service delivery rather than the system. Representing most of the citizens' view, one indicated that *'we want service delivery, we do not care about whether a certain government system is implemented or not or if politicians like each other'* confirming the findings by Try (2007).

Many officials viewed the complexities around concurrent functions, interdependent stress across spheres and institutions of government in relation to policy implementation as an obstacle to the achievement of government outcomes. Representing the views of most government officials across all spheres on this issue, one respondent argues that:

"You must understand that government outcomes are not achieved by one institution, but by several institutions across the three spheres. But what is key to note is that these institutions are headed by politicians whose words are final on what can or cannot be implemented in their Departments. They have different priorities for their institutions. Let me say.... If the outcome is led by one Minister, it does not mean other politicians are accountable to that Minister. The Minister of each institution decides what is a priority for his or her institution'. What is a priority for a National Minister may not be regarded as a priority by the mayor in a certain municipality or Premier, or even the MEC. This poses a challenge in implementing the outcomes policy'.

Similarly, most respondents confirmed the view by Try (2007) that despite top executives in government institutions not having power to decide on whether the outcomes management policy is implemented in their institutions, they are key to the successful implementation of the system. Most interviewees were forthcoming on the political-administrative interface and associated challenges for the system. In this regard, one respondent indicated: *'At national level, even at provincial and municipal levels, heads of departments and municipal managers implement what Ministers, MECs or their mayors tell them to do. They may advice, but do not hold decision-making powers. Their leadership is mainly important at implementation level and ensuring that resources are available. Now, coming to outcomes-based management policy, Cabinet has decided on the policy and 14 government outcomes, and all national*

DGs should ensure that their strategic and annual performance plans are contributing to the outcomes, but the decision is taken at political level’.

There was a concern on the lack of shared visions by politicians across the three spheres, which was also highlighted as impeding successful implementation of the system. In this regard, one interviewee, whose view was representative of many respondents across all spheres indicated: *‘There is no shared vision by Ministers, Premiers, MECs and Mayors on the outcomes-based approach. Implementation of outcomes management approach by politicians at provincial or local government levels depends squarely on political will, it is like a gentleman’s agreement. If the Premier does not want to support delivery on a government outcome, no one can do anything about it. Remember that MECs are accountable to the Premier and not to the national Ministers. It is the same for mayors, they are not accountable to the Premier. Now, ...you must understand that ‘local government environment is very political... it is ruled by politicians’.*

Most municipal officials in both municipalities echoed a concern on this perception. They were of the view that power relations between politicians at national, provincial and local government and their different priorities stumble implementation of the policy thus supporting the findings by Conaty (2012) that inter-stakeholder relationships, tensions across priority objectives, power distribution and interdependent stress are amongst the key challenges in implementing results based management systems. Nevertheless, one municipal official held a divergent view and indicated that:

‘The ANC is the ruling party, and Ministers, MECs, Mayors Councillors are most likely to come from the ANC and so they push the same agenda. Outcomes-based management policy is an ANC policy to achieve the NDP, there is no way one member of the party can decide not to implement it because he or she is in a municipality or province or another institution. So, ...my view is that the policy is implemented in all government institutions and municipalities...’.

Congruent to the same view, from SALGA interviewees’ and municipal officials’ perspective, mayors do not play their role in the implementation of the outcomes-based management system at municipal level, thus supporting the view by national and provincial government officials on the importance of political leadership in the success of the policy. They argued that if the mayors were pushing for implementation of the policy in their municipalities, their municipal IDPs would reflect the government outcomes and there will be limited service delivery challenges.

Mayors play a critical role in outcomes management; their word is final in municipalities. So... you need them to commit and provide political direction in the implementation of outcomes management approach; ... unfortunately, they are not. The IDP is not necessarily focused on implementing government outcomes. They are more focussed on what they think will give them votes, even if that clashes with the National Development Plan and the MTSP'.

The issue of consequences for non-delivery of services by politicians was also raised, mostly by citizens, one of whom argued that *'until incompetent politicians are taken out of the system and the good ones are promoted, service delivery will continue to be poor'.*

On the issue of citizens' participation, there were divergent views between citizens and government officials. Officials and some of the citizens were of the view that participation is adequate through the integrated development planning processes. One citizen also favoured the level of participation during the development of the National Development Plan and IDP processes and indicated *'all citizens and civil society formations participated robustly on the National Development Plan, the issue is whether they agreed on its goals and strategies'.* However, most of the citizens did not view their participation as effective. All interviewees could not confirm the participation of stakeholders in the development of strategic plans of individual Departments at national and provincial levels, except for intergovernmental structures.

4.1.2. Structural factors

In line with Hawke's (2012) definition, structural factors include legal, regulatory, institutional, organisational structures. The study by Hawke (2012) found that one of the positives of the Australian results-based system is the strong regulatory and legislative framework. Similar to this notion, while recognizing the flaws in other areas of implementing the South African outcomes-based management policy, all government officials, SALGA and citizens acknowledged the richness of regulatory environment for implementation of the policy. They argued that the National Development Plan, National Treasury Frameworks for strategic planning, managing performance information, budgeting and financial management legislation all provide fertile ground for implementation of the policy. Furthermore, many were of the view that the country

has effective institutional mechanisms to implement outcomes-based management policy. Nevertheless, they levelled criticisms at poor implementation, monitoring and evaluation of legislation. One of the respondents, indicated that, *'the country has best policies, what is critical is implementation, monitoring and evaluation of these pieces of legislation and policies'*.

Notwithstanding some of the challenges most interviewees highlighted on institutional arrangements for implementation of outcomes management policy, they all acknowledged that there are structures and institutional framework in place for implementation of outcomes-based management policy. Most interviewees viewed National Treasury, Office of Auditor General and the Ministry for Planning and Performance Monitoring and Evaluation as critical institutions for the success of outcomes management at national level.

Another positive view, in relation to the national sphere of government, which was shared by many participants was that the South African government's outcomes-management policy is anchored by well-established and operational intergovernmental structures such as Forum of South African Directors- General, Ministerial Implementation Forums, Minister and members of Executive Councils (MINMECs) and integrated development-planning forums at municipal level. However, on the same issue, in line with Malan (2012) and findings by Conaty (2012) and Rantanen *et al* (2007), many participants were concerned that decisions taken in these structures are not binding. They argued that implementation of decisions depends on political will, and therefore confirming the findings from past studies that although intergovernmental public sector models are ideal for outcomes management, they create challenges, which should be managed effectively (Aly, 2015, Conaty, 2012). One respondent stated:

[There are robust intergovernmental forums in all spheres of government where plans and reports on government outcomes are discussed. These structures facilitate implementation of outcomes-based management approach. For instance, we have FOSAD (Forum of South African Directors-General), MINMECs (Minister and members of Executive Councils), Inter-ministerial forums... Ministers also sign performance agreements with the President. The challenge is that decisions in these

forums are not binding. Political heads of different institutions decide on their priorities].

Findings from past studies, point out that results-based management systems succeed in countries where there is a long-term plan, medium term plans and institutional arrangements for planning, performance and data management, monitoring and evaluation aligned to budgetary systems (Pazvakavambwa and Steyn, 2014; Shangahaidonhi, 2013). In this regard, all national and some provincial government officials recognised the National Development Plan and Medium Term Strategic Frameworks as structural tools for implementation of the policy at institutional level across all spheres of government. On the contrary, most local government officials did not mention these documents in their responses; instead, the majority of them felt the integrated development plan (IDP) is a critical tool, while others argued that the Provincial Growth Plans take precedence. In this regard, one provincial government interviewee argues, *'the IDP reflects the views of the citizens on the ground and therefore the Provincial Growth Plans and all government institutions, including public entities across the three government spheres, should be guided by municipal IDPs'*.

However, at institutional level it appeared that different institutions across and within spheres were at different levels in terms of institutional performance monitoring and evaluation and data management systems, with most of the institutions having policies and electronic systems for collection and analysis of data. A limited number of the interviewees at national and provincial levels were confident that management uses monitoring and evaluation information for strategic planning or decision-making. However, there was a unanimous notion that monitoring and evaluation information is mostly for compliance so that they do not get qualified audit outcomes, as put by one interviewee, *'Departments have these systems mainly to comply with legislation, get higher MPAT (management performance assessment tool) scores and for clean audit outcomes'*.

The findings showed that most of the national and provincial government Departments in the study have performance management policies and functional electronic systems for collection and verification of performance data on their Annual Performance Plans. However, secondary data sources did not indicate strong data analysis and utilisation of performance information. Aligned to the recommendation by Sillanpää (2011), one of

the national Departments use performance data to review the plans and put emphasis on the situational analysis for planning. All interviewees in this institution confirmed that *'the Department strategic planning sessions start with the analysis of previous performance and challenges within the sector, and that informs the strategic objectives and programme performance indicators and targets'*. Hence, this aspect also points to managerial aspect of outcomes-based management.

4.1.3. Managerial factors

Managerial component of outcomes-based management relates to the role of managers in government, alignment of policies and plans, intergovernmental and inter-organisational factors (Hawke, 2012). At the heart of managerial control is strong alignment and integration of planning and budgeting throughout implementation to ensure shared vision, which the South African government's outcomes-based management policy acknowledges and prescribes (Bester, 2012; Wachira, 2013; Yereven and Mkhitarian, 2009).

On the managerial aspects of the South African outcomes-based management, the findings of this study were equally critical as those of many past studies such as Aly (2015), Goh (2012), Hawke (2012) and Siddiquee (2010). The issue of misalignment of planning cycles for municipalities and provincial and local government was raised by many as an aspect that poses a risk to the success of the system. For the outcomes-based management to achieve its intended outcomes, one municipal interviewee suggested that planning cycle for municipalities should be the same as for national and provincial government'. He indicated that the fact that *'the financial year for municipalities starts in July and ends in June, while for National and Provincial government starts in April and ends in March makes it impossible for alignment of plans across all spheres as required by the policy'*.

One success of the policy, expressed mostly by national and provincial senior managers, was the strong alignment of plans at national level. However, they levelled criticism at the misalignment between budgeting and planning and that plans should inform the budget not the other way round. They argued that it is not possible to achieve full alignment of plans because budgets are allocated per institution not per government outcome. Supporting this view, provincial managers reasoned that strategic plans at national and provincial levels do not include outcomes targets and indicators, because

there is no outcomes-based planning and budgeting per sector. One interviewee representing this notion purported that *'national government departments to a greater extent align their plans to government outcomes, but aligning national plans to provincial and municipalities plans is a challenge. The challenge is that Departments get their individual budgets which forces them to prioritise and fit their plans within the limited budget, alignment therefore in most cases goes out of the window'*. Related to the same issue, there was no indication that during strategic planning, there is consideration for citizens' well-being indicators or preferences, except to a lesser extent at municipality level.

A study by Verbeeten, (2008) found that one of the challenges of results-based management in organisations where a variety of stakeholders contribute to the outcomes is the difficulty of setting targets and indicators. Similarly, most of the participants were of the view that joint sector planning for government outcomes across the three government spheres is ineffective, and has forced individual institutions to focus their plans on activities and outputs rather than outcomes. In addition, while most national government officials indicated the inadequate involvement of local and provincial government in national government planning, equally, the municipal officials indicated that national and provincial government do not adequately participate in the municipal integrated development planning processes. Tied strongly to political leadership and cooperative governance, one municipal official indicated that *'the whole outcomes management approach requires agreement at political level to align our plans and to have robust sectoral planning, set targets and indicators jointly, whereby we all commit to targets and indicators based on our different mandates. The absence of sectoral plans for government outcomes has rendered the whole approach ineffective'*. Most participants shared this view and acknowledged that most departments do not put too much emphasis neither on outcomes nor the effect of their strategic plans to citizens, but rather on achieving the targets so that they do not have to explain poor performance to Parliament, Legislatures and Municipal Councils.

Tied to the above view, several officials from national and provincial government indicated the complexities of balancing effective implementation of outcomes-based management and the value placed on clean and unqualified audits and accounting to parliament. Representing this view, one provincial government interviewees indicated *'outcomes- based approach is a good thing on paper, but Ministers and management want their*

departments to get clean or unqualified audit outcomes. If they have outcome targets or indicators, they have many dependencies on municipalities or other institutions and they will not achieve them or produce evidence that we achieved them, ...and the Auditor General wants evidence. Therefore if we strive for outcomes targets, they will affect our performance on the annual performance plan, the Auditor General will also be on our case for poor achievement and lack of evidence. Hence we resort to the easier option of activity and output indicators..., until the intergovernmental system works and we have figured out the type of evidence we can produce for outcomes, we will continue this way". Related to this view, a national government interviewee indicated the dependency on the budget for individual departments, and argued that *'government institutions set targets and indicators based on their budgets'*.

Similar to the findings by Fryer *et al* (2009), generally, across the three spheres of government, the aspect of data management appeared to be one of the strongest aspects on the managerial component of the South African outcomes-based management policy at national level. Both SALGA and almost all government interviewees across the three spheres cited the effectiveness of data management systems as a strength in the implementation of the South African outcomes based management policy. They cited Statistics South Africa, Department of Planning, Monitoring and Evaluation, National and Provincial Treasuries as key institutions in relation to financial and non-financial data management. However, most interviewees did not think this aspect is effective in individual departments.

From government officials' perspective, most interviewees believed that the tradition of evidence-based performance reporting and performance auditing, strengthened by the availability of Internal Audit Sections and Audit Committees in all government Departments across the three spheres has yielded successes. Supporting the notion by Fryer *et al* (2009), some interviewees indicated there are quarterly and annual reporting on non-financial information in the annual performance plans, as well as monthly, quarterly and annual financial reporting to Treasury. Moreover, though few, some officials cited the effectiveness of the Office of the Auditor General as another significant success factor of the policy implementation processes. They reasoned that Auditor General's systems of financial and non-financial performance data verification ensure that performance data on annual performance plans by all state institutions at national, provincial and local government levels is reliable, complete and accurate. On

the other hand, most of the citizens favoured the work of the Office of the Auditor (AG) General. In this regard, one citizen advanced, *'the AG reports of the municipality are helpful in holding the municipality accountable in case they did not deliver what they promised and if there is corruption and maladministration of public funds. The Office forces evidence-based reporting'*.

Confirming the findings and supporting the recommendations by Siddiquee (2010), most participants were concerned about the misalignment between the human resource practices and outcomes-based management. Most acknowledged challenges of applying outcomes-based management on employee performance management system. One employee contended that *'the current employee performance management and development system is focused on individual employees and outcomes are achieved through collaborative effort not a single employee'*. She suggested reforms to align employee performance management to the outcomes approach. However, secondary data sources indicated that in few institutions, to a certain extent, there is alignment between employees and the organisational performance management systems.

4.1.4. Technical factors

Technical factors of results-based management are skills, knowledge, resources and capacity (Hawke, 2012). Similar to past studies by Siddiquee (2010) Mavhiki *et al* (2013), the findings revealed that institutions involved in this study within and across spheres are at different levels in this aspect.

When asked about capacity aspects of outcomes-based management, all government officials were of the view that generally, at national level, there is capacity for strategic planning, monitoring and evaluation and data management. However, similar to the findings by Mavhiki *et al* (2013) on the Zimbabwean results-based management system they all acknowledged that most of the national and provincial Departments as well as municipalities do not have adequate capacity for evaluations and data analysis. Supporting this finding, national and provincial government interviewees shared the view of one SALGA official that:

'most municipalities and provinces do not have effective monitoring and evaluation, and data management systems. Staff dedicated for data management in municipalities do not have skills in this area. Comparatively, I think national has data analysis skills than municipalities and provinces. In most municipalities, data

management and monitoring and evaluation systems are still at development stage, but most rural municipalities are the worst’.

The findings of the study by Silva and Ferreira (2010) pointed to poor knowledge, understanding, and application of key aspects of outcomes-performance management among staff members. It emerged from the findings that various institutions within and across spheres have different understanding of outcomes-based management. DPME interviewees’ knowledge and understanding was in sync with the policy and literature on success factors of outcomes-based management such as the significance of skills for developing theories of change, results chain frameworks, indicators for government outcomes and sub-outcomes (Pazvakavambwa and Steyn, 2014, Thomas, 2011, Adaptation Fund Board, 2009, Boyne, 2003, Bourne et al, 2003). However, the other national government officials, provincial and municipal level interviewees downplayed these aspects.

Interestingly, all the interviewees across all spheres, except the DPME interviewees were not conversant with the content of South African Policy on outcomes-based management called ‘Improving Government Performance: Our Approach’ which should inform strategic planning, monitoring and evaluation processes. When asked about implementation of the section in the policy document on sector planning and development of results chain frameworks by their Departments and municipalities, they acknowledged that they were not aware of the existence of the policy document. In this regard, most government officials in the study across all spheres, with the exception of the DPME and few other officials confused the 14 government outcomes and the National Development Plan with the outcomes-based management policy. One national government official’s response, which represented the general response of all government interviewees, was, *‘honestly, I have never seen the policy but I know the MTEF document with 12 and 14 government outcomes and the National Development Plan’*. Similarly, no municipal interviewees were conversant with the policy.

Evidence from literature advocate that effective results based management require capacity and technical skills to develop performance indicators, measure the indicators, analyse data and communicate the results (Fryer *et al*, 2009). Past studies by Sillanpää, (2011) further found that capacity for developing different kinds of indicators inclusive

of input, activity, output, outcome and impact indicators, and short term, medium term and long term indicators as well as instruments for measuring the indicators during planning are critical success aspects of outcomes-based management. In line with these findings, all government interviewees were forthcoming with perceived institutional flaws in the area of institutional capacity for development of measurable indicators, theories of change and results chain frameworks, which according to one provincial government interviewee affects effective monitoring and evaluation of government outcomes. Related to the aspect of capacity building, all government officials' interviewees across all spheres confirmed that they never attended any training on outcomes-based management from their institutions or government.

4.2. Aspects crucial to the South African government's outcomes-based management policy achieving its intended water supply outcomes in Madibeng and Rustenburg Municipalities

To respond to this focus areas of the research, all participants, were asked the same questions, which were based on the key components of sustainable water supply, advocated by the water supply literature and theoretical frameworks.

4.2.1. External Factors

The deduction from the literature on water supply and result-based management systems, is that external factors for results-based water supply include among others, the influence of politicians in power, politicians in the opposition, other stakeholders and citizens (Ameyaw, Chan and Owuso-Manu, 2016; Hawke, 2009; Schutte, 2001).

Most of the respondents at national and provincial level were positive that Rustenburg Municipality is strong on political leadership. A prominent view from interviewees, albeit one citizen from Rustenburg Municipality was that the Municipality had committed political leadership to deliver on water supply targets, which Ameyaw, Chan and Owuso-Manu (2016) regard as a critical success factor in water supply. This was also an aspect identified as the Municipality's strength by national and provincial Departments involved in water supply value chain.

Rustenburg officials and citizens' interviewees recognised the role played by traditional leadership in the delivery of water services in Rustenburg. Most officials in national level also identified this issue as a strength. For instance, when asked about external factors that enhance or hinder sustainable water supply, one of the Rustenburg municipal officials indicated that *'politically, there is commitment to ensure that all households in the municipality have water. But also, our traditional councils because of their financial muscle, they contribute financially to the services and we have formal partnerships with some of the traditional leadership councils. This does not apply to water services only but to other municipal services'*. The traditional leaders' representative who participated in the study also echoed this view.

Despite the positivity above, there was a shared view by national, provincial and municipal interviewees on the negative influence of political factors on water supply. One of the provincial interviewees indicated that *"water supply predicaments in the two municipalities are made worse because sometimes mayors do not prioritise water supply and have different focusses"*. This aspect was also identified by SALGA official, though differently, who indicated that 'the priorities of politicians at national, provincial and municipality level on water supply are different, *'sometimes politicians in the two municipalities instead of prioritising water supply, they may prioritise graveyards because they will win them votes'*. However, there was a contradictory view, which mentioned that *'part of the Municipal Water Infrastructure Grant from national government cannot be used for any other thing by the two municipalities but for municipal water infrastructure to ensure that the national priorities on water supply are met'*

From the national and provincial officials' perspective, Madibeng Municipality had politically-driven challenges which had been affecting water supply services. Corruption by politicians was identified as a hindrance to water service delivery in Madibeng by all interviewees. One Madibeng citizen levelled criticism at *'corrupt politicians and political infighting with no interests for citizens'* as contributing to the water crisis in Madibeng.

Rogers (2013) argue that socio-economic attributes of local users affect financial health and water supply infrastructure. Few officials from Madibeng Municipality confirmed the issue of citizens attributes as one of the external factors on water supply. These officials were unanimously concerned about the absence of citizens' involvement and empowerment in assisting the Municipality to root out vandalism of water infrastructure

and reporting water leaks as one of the critical success factors in water supply, as advocated by Schutte (2001). In this regard, one municipal interviewee believed *'Madibeng water infrastructure is damaged during water service delivery protests and citizens do not support the municipality to protect it'*.

The findings show that providing full access to water services to all citizens as per the legislation remains a challenge in the two municipalities. Aligned to the notion by Beyene (2012), for both municipalities, the challenge of informal settlements came out strongly as one aspect that affect water services planning and a contributing factor for not meeting their legislated obligations. One interviewee representing the view of most officials in both municipalities indicated *'it is difficult to service informal settlements, because they are unpredictable and we cannot plan for them. ..., we never know when and where they will erupt. They are just mushrooming everywhere'*.

4.2.2. Structural Factors

Structural factors for sustainable water supply include legislation and regulation, organisational structures and existence of a dedicated water services (Ameyaw, Chan and Owuso-Manu, 2016; Gouais and Wach, 2013).

Unlike the findings of the study by Gouais and Wach (2013) in the public sector of thirteen countries, all interviewees, albeit citizens, were equally positive on the robustness of the South African legislation and regulations on water supply across the three spheres of government. One national department interviewee believed *'there are many credible national, provincial and municipal legislation, strategies, policies, guidelines and programmes available to facilitate outcomes-based water supply within the local sphere, and municipalities are governed through a complex yet robust legislative and regulatory framework on provision of water services'*. However, the concern raised mostly by citizens and some of the government officials across all institutions was on the effectiveness of implementation of legislation. Part of the challenge in both municipalities was attributed to what one provincial interviewee summed up as *'lack of infrastructure maintenance and operations, ineffective asset management, in-migration, mushrooming informal settlements and fast pace of urbanisation'*. Echoing the same sentiments, one municipal interviewee argued that *'despite all these pieces of legislation and regulatory frameworks, municipal performance on water services in most*

instances is far from optimal, not only in Madibeng but many other municipalities.' He was of the view that this aspect would result in the two municipalities not achieving the sub-outcome on water supply by 2030.

At national government level, most of the interviewees from the Department of Water and Sanitation were of the view that the organisational structures adequately cater for their role in respect to water supply. Interviewees from the national and provincial Departments of Cooperative Governance were of the view that the organisational structures need to be strengthened to improve their coordination, support and monitoring role in relation to water supply by municipalities. In addition, in relation to the National Department of Cooperative Governance (DCOG) organisational structure, one interviewee indicated that there were inadequacies that were addressed during the review of the structure to align it to the five priorities of the Back-To-Basics Approach. He believes that *'the alignment of the organisational structure to the B2B in 2015 has strengthened the role of the Department in monitoring of municipalities performance on all aspects of service delivery, including delivery of water services'*.

Organisational structures of both municipalities reflect that there are dedicated departments for water supply and sanitation services. However, the findings show that Rustenburg Municipality reviewed its organisational structure in 2015 to align it to the National COGTA Back-to-Basics priorities and has divided Water and Sanitation Services into separate divisions, each with its own staff to ensure that there is dedicated focus to access to both services. Noteworthy, one of the interviewees from Rustenburg Municipality indicated that *'the review of the Municipality's structure was initiated by the Mayor who wanted it to respond to the National COGTA Back-to-Basics priorities and national outcomes for water supply'*, showing interconnectedness of the external and other aspects of water supply and shared vision with national government priorities on water supply. In comparison, Madibeng officials indicated that the Municipality organisational structure had sanitation and water supply services combined into one division.

It also emerged from the findings that both municipalities have robust integrated development planning and performance reporting structures, which include citizens and stakeholders in the planning processes, as well as structures to account to the citizens, which is a strong element for implementation of outcomes-based management policy. However, most citizens in both municipalities pointed to the fact that these structures

are not effective, but are just for compliance. For example, one Madibeng citizen alluded that: *[yes, we participate in the IDP forums, however, they are just formality. What we say is not taken seriously by municipalities, our ward councillors are also not taken seriously, because the municipality decides on what we want and not on what we say we want, that is the reason, we do not have water after 22 years of democracy]*.

4.2.3. Managerial Factors

Gouais and Wach (2013) assert that managerial factors in water supply include intergovernmental relations for water services, water sector planning, financial planning for full life cycles costs, reporting, monitoring and evaluation of water services, asset management, recognition and promotion of alternative service provider options.

While recognising the flaws on other aspects, national departments' interviewees acknowledged that one of the strengths tied to managerial aspects of water service delivery is working intergovernmental structures that coordinate joint planning, implementation and monitoring of water services. In this regard, one interviewee's perspective was that the COGTA MINMEC, Technical MINMEC and Implementation Forums for Outcome 9 are effective in this regard.

None of the two Municipalities, National and Provincial Departments in the study had results chain frameworks, theory of change or logic models for the sub-outcome despite that they are regarded as the basis for water sector planning by theoretical frameworks for sustainable water services (Schouten and Moriarty, 2013, Gouais and Wach, 2013, Moriarty *et al*, 2013). One interviewee argued that *'these tools are more academic and not practical. They are not necessary since there is the MTSF plan on the sub-outcome and the Department's annual performance plan caters for that.'* On the same issue, all interviewees were of the view that there is no project based planning for water supply at different levels, nevertheless they acknowledged that it is critical to map out activities leading to achievement of the targets, thus supporting the recommendation by Gouais and Wach (2013).

The other notable managerial aspect, which appeared to be a success factor in Rustenburg Municipality, is the availability of performance management policy that was recently reviewed. The policy institutionalises performance management within the

municipality, and it is aligned to the nationally established regulatory framework for local government, such as Municipal Finance Management Act and Municipal Systems Act. All officials in the municipality were in favour of the digitised performance management tool, which according to them improved water services performance monitoring and data management.

On the same issue, it was interesting that while one of the interviewees from Madibeng Municipality strongly believed the municipality has effective planning, monitoring, evaluation and data management systems for water services, national and provincial officials' and some of the Municipality's officials held a different view. They argued that Madibeng Municipality data management system is not effective. One provincial interviewee, whose view was shared by many, believed "*... though Madibeng has performance management divisions, they are still at trial and error stages and the data cannot be relied on, hence National Department of Water and Sanitation is supporting the municipality in this area from 2016*".

Schutte (2001) regards key managerial aspects of water service delivery as credibility of the institution with the community, developing customer-service oriented institutional culture, ensuring reliable water supply, community empowerment and involvement and creating an institutional culture where all employees focus on maximising revenue generation and collection and minimising losses. When asked about their perceptions on the credibility of their Municipality, Madibeng citizens remarked that it is lacking credibility with the community. One of Madibeng citizens believed that *'there is a lot of distrust between citizens and the Municipality because of its rampant corruption, poor service delivery, questionable water supply and the unconcerned officials who are not doing their work*. Similarly, most of Rustenburg Municipalities citizens were also critical of the credibility of their municipality in relation to corruption and poor customer service in the Municipality, however, none of them were concerned about unreliable water supply services.

4.2.4. Technical Factors

Technical aspects on water supply include skills, human resources, water infrastructure, budgets and alternative service providers' options such as public private partnerships (Gouais and Wach, 2013).

Both municipalities appeared to be weaker in this element. Generally, there was agreement on the weaknesses in relation to the technical factors. All government officials at national, provincial and municipal levels were of the view that both the two Municipalities have backlogs in replacing old water supply infrastructure due to inadequate skills and operational budgets for new infrastructure. These criticisms were shared by almost all officials across the three spheres, and they were sharply raised by one national official who believed *'the lack of infrastructure operations and maintenance and asset management remains a challenge in the two municipalities'*. However, he was hopeful that *'the establishment of the Project Management Office by the Department of Water and Sanitation, the Municipal Infrastructure Support Agent and the Municipal Water Infrastructure Grant will address the water supply reliability and infrastructure in the two municipalities'*. Officials from both Municipalities and provincial officials also perceived these interventions as positive towards addressing technical challenges of water service delivery in municipalities. On the same notion, one municipal interviewee believed that *'since there is great shortage of water engineers in both municipalities, the Project Management Office will close the skills gap and inject capital in both municipalities to upgrade and maintain water supply infrastructure'*. Both municipalities' officials and citizens commended support by the Department of Water and Sanitation in the development of credible Water Service Development Plans of the two Municipalities.

Though most of Madibeng Municipality's officials believed that they will achieve the 2030 target, there were few of the municipality's officials who held a divergent view. In addition, despite the above-mentioned national initiatives, all national and provincial interviewees inclusive of citizens were of the view that Madibeng Municipality will not achieve the 2030 NDP target on water supply due to a range of other factors. Remarkably, most interviewees backed their stance on the fact that although Madibeng Municipality has huge and increasing water supply backlogs, and cite budget constraints, it has a trend of not being able to spend its allocated municipal infrastructure grant (MIG). They also reasoned that the Municipality's general underspending in the past five years make them not to believe that the municipality will achieve this target. One of the interviewee indicated that *'Madibeng does not have capacity to spend its budget because of shortage of skills not only for water service development planning, budgeting and project management, but also management and leadership'*.

On the other hand, albeit most citizens and interviewees at national level believing that Rustenburg will also not achieve the water supply target by 2030, there were few, particularly at provincial and municipality level, who argued that the Municipality will achieve its target by 2030. One of whom held a view that *'though Rustenburg Municipality has water infrastructure backlogs and challenges and a sizeable number of households are still without water, the MISA intervention on water sector master planning will address them and it will achieve its targets. The only challenge for it will be servicing informal settlements'*.

4.3. Conclusion

This chapter has presented the findings in the context of external, structural, managerial and technical aspects facilitating or hindering achievement of the intended outcomes of outcomes-based management policy and intended outcomes on water supply. The findings revealed both weaknesses and strengths at national, provincial and institutional levels. The chapter also compared implementation of outcomes-based management in respect of water supply in Madibeng and Rustenburg Municipalities on the four components and found that there are pockets of excellence at varying levels, differences as well as similar strengths and weaknesses in the two municipalities. It was evident that the four factors intersect and there is interconnectedness of the macro, micro and institutional factors which requires the system to work at all levels to achieve the intended outcomes on water supply.

5. DISCUSSION OF RESEARCH FINDINGS

This chapter discusses and the research findings we presented in chapter 4. It mainly employs the theory of change and results chain framework developed and theoretical framework discussed in Chapter 2 (in Section 2.6) to analyse the research results. The discussion is divided into two sections according to the research questions. In the first section (5.1), we focus our discussion on aspects crucial to the South African government's outcomes-based management (OBM) policy achieving its intended outcomes. The second section focuses on aspects crucial to the South African government's outcomes-based management policy to achieving its intended water supply outcomes in Madibeng and Rustenburg Municipalities. The analysis in both sections focusses on four aspects of the five-factor model of results-based management suggested by Hawke (2012).

5.1. Aspects crucial to the South African government's outcomes-based management (OBM) policy achieving its intended outcomes

One of the research questions intends to assess the aspects that facilitate achievement of the intended outcomes of the South African government's outcomes-based management (OBM) policy. This section discusses and analyses the research results on the external, structural, managerial and technical aspects to respond to this research question.

5.1.1. External aspects

According to the theory of change and results chain framework for outcomes-based management, there should be effective intergovernmental relations to ensure political commitment and leadership, manage interdependent stress and produce fertile grounds for achievement of government outcomes. Aly (2015), Mavhiki *et al* (2013), Rhodes *et al* (2012) and van Der Waladt (2014) support this notion and argue that success of the outcomes approach requires political champions and accountability. The findings diverge from the theory of change and found that there are ineffective intergovernmental machinery to address lack of accountability and power relations

among political leaders. In this regard, the positive aspect in line with the Theory of change is the commitment and accountability at Presidential and Cabinet level.

The results-chain framework advocates that one of the five central aspects of outcomes-performance management is consequence management and reward systems for achievement or non-achievement of performance targets (Ferreira and Otley, 2009). Contrary to this notion, the findings did not demonstrate that there are incentives or consequences for poor or competent politicians across all spheres for achieving or not achieving the outcomes. This poses a risk as some politicians may choose not to implement without consequences and compromise achievement of the government outcomes.

According to the Theory of change, active citizenry is one of the key external factors in the implementation of outcomes-based management (Gouais and Wach, 2013; Moriarty *et al*, 2013; Schouten and Moriarty, 2013). The theory argues that active participation of citizens in the entire water supply value chain facilitates successful implementation of outcomes-based management system. Shangahaidonhi (2013) echoes the same notion and suggests that countries that succeeded in implementing results-based management has recorded active participation of citizens and other role players in the three phases of the system; results-based planning phase, implementation, monitoring and evaluation.

At national level, there was consensus that South African citizens participated in the development of the National Development Plan. The findings also demonstrated that legislation allows for citizens' participation in the IDP processes, citizens participate in the development and review of municipalities' integrated development plans, however, it was not evident whether the participation is effective. However, on the divergent path of the theory of change and recommendations by past studies, there was no demonstration of citizens' and stakeholders' participation at institutional level in National and Provincial Departments.

5.1.2. Structural aspects

According to the results chain framework for outcomes-management policy, the preconditions for success in terms of structural aspects are well-established regulatory

frameworks, institutional mechanisms and policies for outcomes-based management. Generally, the South African government occurred to be very strong in this aspect across all spheres of government at policy level, but weaker at institutional level. In this regard, it was evident that there are strong institutions and policies that anchors implementation of the outcomes-based management policy. Institutions such as National Treasury, Office of the Auditor General and Department of Planning, Monitoring and Evaluation have strengthened the system structurally in relation to regular collection and analysis of both financial and non-financial performance information, strategic planning processes, and ensuring credibility of the information on government outcomes. Therefore, the South African government is strong on structural factors, which is one of the critical outputs in the results chain framework. However, the success of the system is threatened by the general weaknesses of monitoring and evaluation at institutional level.

The theory of change advances that one of the critical outputs for outcomes-based performance management systems is that at macro level and all institutions across all spheres operate at Bouckert and Halligan's performance governance model or at least at performance management model (Jones *et al*, 2015). The research results indicate that the performance management systems of national and provincial departments in the study and Rustenburg Municipality, albeit Madibeng, are in harmony with the theory of change on this aspect and operate at performance management model, at least largely. This success can be attributed to the availability of robust national regulatory frameworks for performance management, and thus confirms the assertion by Gouais and Wach (2013) and Schouten and Moriarty (2013) that robust national regulatory frameworks provide a conducive environment for the success of results-based management system at all government levels.

In addition, performance information is used for policy decisions and stakeholder discourses and for new interventions to improve performance. For example, performance reports on each outcome are tabled at Cabinet and various stakeholder forums. Evidence of the use of performance information for learning and improvement is apparent from the recently established Project Management Office and the Municipal Infrastructure Support Agent to support municipalities to deliver basic services.

Nevertheless, the absence of a bottom-up approach in planning, involvement of citizens in the development of performance measures as well as the absence of civil society and citizens' wellbeing indicators and preferences is still a challenge, (Jones *et al*, 2015). This flaw has resulted in government not being fully responsive; hence, we located the country's national outcomes-based performance management model at performance management and not at performance governance level (Jones *et al*, 2015).

5.1.3. Managerial aspects

According to the theory of change and results-chain framework for outcomes-based management, preconditions for successful implementation of the policy include functional intergovernmental machinery, effective coordination of stakeholders at all levels and sectoral planning; and alignment of national, provincial and local government plans (Rogers, 2013). The results-chain framework, supporting Siddiquee (2010), also indicates that strong alignment and integration of planning and budgeting is significant. On the contrary, the findings shows that South African Government policy diverged from the theory of change and results chain management in this regard. Instead, the research confirmed Malan's (2005) findings that there are difficulties of intergovernmental coordination in South Africa, which resulted in weak alignment and coordination of plans within and across spheres and weak systems for sectoral intergovernmental planning and performance reporting. Similarly, this challenge extends to participation of national and provincial spheres in the integrated development planning processes, which is critical aspect, as it is a plan closest to service delivery with citizens' inputs. Furthermore, on divergent path from the theory of change is misalignment between budgeting and planning for government outcomes, whereby the budgeting processes are not outcomes-based but institutionally based, and thus the budget informs the plan, which is an anomaly according to the results chain framework and theory of change for outcomes-based management.

Another managerial aspect relates to planning and performance measurement (Hawke, 2012). According to the results chain, the success of outcomes-based management requires effective processes of setting performance targets that indicate the expected levels and standards of performance (Ferreira and Otley, 2009). Similar to other studies, the findings have shown that setting measurable indicators and targets is a general challenge, particularly for national government Departments with concurrent function,

or policy-oriented Departments, but easier for municipalities and provinces as implementers. This was because municipalities deliver services directly, while the national and provincial spheres provide coordination and support role, which presents difficulties to measure in qualitative and quantitative form.

According to the results-chain framework, public value creation and citizens' well-being indicators are significant success factors for outcomes-based management (Moore, 1995). Alongside this view, is the assertion from the theory of change and results-chain framework that strategic planning processes should apply a bottom-up approach in order to include quality, quantity and citizens' well-being indicators for public value creation (Try, 2007; Moore, 1994; Moore, 1995). Though to a certain extent, municipalities in the study use the integrated development plans to address this aspect, there are many flaws regarding effective public value creation. This was also evident through the review of the IDPs, which are silent on citizens' well-being indicators. The IDP do not inform national and provincial plans, showing a lack of bottom-up approach to planning.

5.1.4. Technical aspects

According to the Theory of change, operational capacity to implement all aspects of outcomes-based performance management lead to achievement of set outcomes. This aspect was identified as a success factor by most literature on outcomes-based management, which advanced that without adequate resources and institutional capabilities, outcomes-based performance management systems collapse (Sillanpää, 2011; Mavhiki and colleagues, 2013; van der Waltd, 2014). According to the findings, though stronger in some of the national departments, the system is weaker at institutional level on this aspect, and monitoring and evaluation as well as data analysis skills are not prioritised. This was compounded by limited budgets and austerity measures that have hindered employment of additional staff in these areas, and poses a risk to the successful implementation of the policy.

5.2. Aspects crucial to the South African government's outcomes-based management policy achieving its intended water supply outcomes in Madibeng and Rustenburg Municipalities

This section discusses and analyses the research results on the external, structural, managerial and technical aspects to respond to the research question on 'what aspects facilitate for the South African government's outcomes-based management to achieve its intended outcomes on water supply'? We limit our discussion to external, structural, managerial and technical aspects.

5.2.1. External aspects

According to the Theory of Change, politicians, private sector, consumers, service providers and independent water supply oversight bodies influence successful delivery of water supply. The findings indicated that Madibeng Municipality is weaker on this aspect while Rustenburg is stronger. Despite that, Rustenburg Municipality has a challenge of meeting water services provision in informal settlements, the findings demonstrated that the municipality's ability to meet its legislated service levels and standards in formal settlements is due to political will. Therefore, the findings confirm the theory of change assertion on the relationship between strong political commitment and water supply services.

Regarding other external aspects influencing water service delivery, the benefits of partnerships is evident in both municipalities, but stronger in Rustenburg. Worth noting is the formal partnership between the municipality and traditional leadership councils in the provision of water supply, supporting the view by Doe (2007) that working partnerships are central to addressing the challenges of water supply. The successes recorded in the findings in relation to Rustenburg municipality might also be as a results of active citizenry in the form of community oversight forums (MUNWATCH), and the failures in Madibeng might be the absence of these features, which according to Marx *et al* (2008) are critical success factors in water service delivery.

5.2.2. Structural aspects

According to the Theory of Change, availability and implementation of well-established regulatory framework for water supply at national level is a critical aspect for sustainable water service delivery (Smits *et al*, 2013; Rogers, 2013; Schouten and Moriarty, 2013; Gouais and Wach, 2013). The results show that the South African government is strong on this aspect. There is national legislation on water supply starting with the Constitution of the Republic of South Africa providing access to clean and reliable water as a basic human right, followed by different pieces of national legislation on water supply. However, the findings show that implementation of legislation is a challenge, hence providing full access to water services to all citizens (in formal and informal settlements) as per the legislation remains a challenge in the two municipalities. Nonetheless, the inability of the two municipalities to meet their legislated water services standards in informal settlements is understandable based on the complexities from a planning perspective; and it confirms the findings of prior studies and literature on the difficulties on water supply services brought about by in-migration, population growth and urbanisation (Marsden, 2014; Moe, 2009; Mulwa, 2013).

The theory of change indicates the significance of alignment of organisational structures with the water supply value chain and national policy contribute to successful water services (Rogers, 2013; Schouten and Moriarty, 2013). Hawke (2012) concurs with this view and indicates that, at institutional levels, organisational structures play a critical role in the implementation of outcomes-based programmes. Worth noting is that organisational structures in South Africa are the responsibilities of political heads of institutions (Department of Public Service and Administration, 2016) and thus this aspect relates to political commitment. A positive aspect in relation to this aspect was found to be the alignment of organisational structures of most of the national and provincial Departments with the water supply value chain in relation to their roles of support, monitoring and coordination of municipalities and the water sector, signaling political commitment at these levels. Nevertheless, an important deviation from this path in the Department of Cooperative Governance was associated with regular changes in political and administrative leadership (Directors- General), which has affected the finalisation of the organisational structure, confirming the interface between structural, external and managerial factors as highlighted by Hawke (2012).

Specific to Rustenburg and Madibeng Municipalities, the former is in harmony while the latter is out of sync with the theory of change. For example, secondary data sources indicated that unlike the organisational structure of Madibeng Municipality, Rustenburg's organisational structure is aligned to National legislation, the national Back-To-Basics pillars and government outcome 9; alongside national priorities, it separated sanitation and water supply divisions for dedicated focus on each. Given the noted successes and failures of the two municipalities, the findings confirmed the theory of change and other assumptions from the literature that there is correlation between successful delivery of water services by municipalities and organisational alignment with national policies and priorities (Gouais and Wach, 2013; Hawke, 2012; Lockwood and Smits, 2011; Schouten and Moriarty, 2013).

5.2.3. Managerial aspects

Managerial aspects of outcomes-based water supply include effects of leadership, alignment and coordination of the water sector plans; processes for planning, administration and control as well as organisational change management from output oriented to results-oriented (Hawke, 2012; van Der Waldt, 2014).

According to the Theory of Change and results chain framework one of the pre-conditions for outcomes-based water services is learning and adaptive management and public sector institutions and administrative leadership that have adopted a service delivery approach (Gouais and Wach 2013; Roberts, 2012; Rogers, 2013; Schouten and Moriarty, 2013). The findings have shown that the two Municipalities are at different levels in terms of learning and adaptive management, while Madibeng is at the negative end of theory of change, Rustenburg is strong and on the positive path. Findings from secondary data portrayed Rustenburg to be service delivery oriented, and that it has adaptive and innovative management, evident from its introduction of technological innovations, the digitised water management system, which has improved real time water services monitoring, water services data management and service delivery (Naidoo, 2017).

According to the theory of change and results chain framework, public value creation for outcomes-based water supply requires fair and equitable distribution of water services to all citizens (Mobberely and O'Flynn, 2014), legitimacy and support by citizens, and water services that meet citizens' expectations, hence their involvement is crucial (Moore, 1995). The findings, particularly from citizens' perspective, have indicated that both municipalities are not doing well on public value creation, though at different levels and on different issues. While Rustenburg citizens were supportive of the municipal services but more concerned about operational capacity of the municipality to deliver reliable access, Madibeng's woes were the lack of citizens' trust and support in the municipality. However, on the aspect of effective involvement of citizens and all stakeholders at different stages in the water supply life cycle there was an acknowledgement from citizens that there are formal platforms for citizens' involvement as suggested by the theory of change (Rogers, 2013). Nevertheless, the contentious issue, which citizens raised sharply, was if there is value addition of their participation, and they questioned the effectiveness of ward committees in this regard.

One notable finding from document review is the value of social capital in Rustenburg, where citizens organised themselves into water services community structures to hold the municipality accountable on water services, MUNWATCH (Marx and colleagues, 2008). This aspect appeared to have strengthened citizens' participation and eventually facilitated some of the recorded successes in the municipality, hence the view by most citizens, including traditional leadership that they participate effectively in the municipal processes as suggested by Beyene (2012). In addition, as recommended by Beyene (2012), the establishment and training of Water and Sanitation Community Forums in Madibeng; an intervention by the National Department of Water and Sanitation (Department of Water and Sanitation, 2015), was appreciated as a step in right direction towards capacitating communities to support the municipality. Recognising that the two municipalities have different contextual factors, these structures present an opportunity for both municipalities to reduce water losses, increase tariff collection and improve their water services as recommended by the theory of theory of change.

The results-chain framework emphasises the significance of involvement of citizens and stakeholders in the setting of water services targets and indicators and the entire water services life cycle (Rogers, 2013; Moore, 1995). Both municipalities are not effective in

this area. It is clear from the findings that though the participation of stakeholders is inclusive, it does not go as far as them being involved in the setting of targets and indicators, and involvement in performance monitoring and evaluation. It is mainly to adopt integrated development plans ‘developed by consultants’ as one citizen emphasised. Administrative and political leadership develop indicators for citizens, thus not consistent with the results-chain framework.

One element under managerial aspects is institutional performance management systems for water services (Ferreira and Otley, 2009). According to the results chain framework, three of the five central elements of performance management are identifying the main organisational objectives as well as methods and tools to be used for measuring the level of achievement of each objective; development and implementation of strategies and plans, inclusive of evaluation and performance measurement processes for their implementation; setting of performance targets and the level at which they are set (Ferreira and Otley, 2009). It was evident both municipalities meet the requirements in theory of change in so far as identifying the main organisational objectives, development and implementation of strategies and plans. The aspect facilitating this aspect is because there are national regulatory frameworks and guidelines for municipal planning and performance information management such as the Municipal Finance Management Act (Republic of South Africa, 2004). In line with the results chain management framework, both municipalities have integrated development plans, and water services development plans, which they are implementing. However, they are at different levels in terms of effective methods and tools for performance measurement of each objective and evaluation systems, the one struggling more is Madibeng and Rustenburg is assisted by its digitised water services management system which enhanced its use of information for decision making and service improvements.

According to the theory of change, performance management should explain in specific terms what constitute performance on each strategic objective to achieve effective monitoring, evaluation and learning and to improve water services performance (Ferreira and Otley, 2009). There are shortcomings in both municipalities regarding this aspect, though at different levels. Madibeng has weaker monitoring and evaluation systems, while Rustenburg has stronger monitoring but do not conduct evaluations. Nonetheless, Rustenburg Municipality’s digitised water management system to a greater

extend has changed the picture and is addressing most of the anomalies in relation to water services monitoring and credibility of data.

One of the outputs in the theory of change are organisational reward systems, which emphasises that excellence, and mediocrity from political and administrative sides should be rewarded or punished respectively (Ferreira and Otley, 2009). In both municipalities, consequence management was not applied for non-delivery of water services, though there were employee performance appraisal, the findings show that the system was regarded as not effective. There are no incentives or reward system for politicians, which compound the challenges within municipalities. The incentive is dependent on the moral ground of their political parties if they reward good or poor performance of their 'deployed cadres'.

According to the results chain framework, one of the aspects facilitating achievement of the South African outcomes-based water supply is that all institutions across all spheres should be operating at Bouckaert and Halligan's performance governance model or at least at performance management model (Jones *et al*, 2015). Based on the findings, Madibeng Municipality has deviated from the results chain path and is operating at the basic level in relation to outcomes-based water supply; performance administration model because of the shortcomings in relation to incorporation and use of data for performance improvement. On the positive side, in comparison to Madibeng, Rustenburg Municipality's performance management system is at performance management model and therefore consistent with the results-chain framework, albeit its lack of appetite for public value creation. In this regard, empirical data, literature review and secondary data demonstrated that Rustenburg Municipality collects, analyses, uses and incorporates performance information for improvements. Hence, Naidoo (2017) argues that the digital system has resulted in improved operations, reduction in the number of illegal connections and faulty meters, improved provision of sustainable water services to the citizens, and it has improved the municipality's revenue collection among others.

5.2.4. Technical aspects

According to the theory of change and results chain framework, institutional capabilities and capacity for outcomes performance management and water supply (financial, technical, human and technological resources, skills and infrastructure) are crucial aspects for the success of water services (Gouais and Wach 2013; Roberts, 2012; Rogers, 2013; Schouten and Moriarty, 2013).

A notable deviation from the theory of change in this aspect is shortage of skills, resources and ageing infrastructure in both municipalities. On the other hand, a positive aspect aligned to the theory of change is that at national level, there are interventions to strengthen technical aspects to support municipalities to improve water infrastructure, such as municipal water infrastructure grants (MWIG), establishment of the Municipal Infrastructure Agency (MISA) and Project Management Office.

5.3. Conclusion

In conclusion, the South African outcomes-based management has both strengths and weaknesses in the four components. However, the analysis shows that there are two aspects that anchor the policy's success and achievement of its intended outcomes and its water supply outcomes; political commitment and functional intergovernmental machinery. To the detriment of the system, these two are on a divergent path of the theory of change and results chain framework. All the other aspects such as public value creation, capacity, performance culture, sectoral planning are dependent on these two; they therefore hold the key to success. On the positive, notwithstanding Madibeng, all the Departments at national and provincial levels and Rustenburg Municipality operate at performance management model, presenting an opportunity to be at advanced level, but also pointing to the lack of appetite for public value creation by government institutions. The neglect of public value creation, which is dependent on political will misses the benefits of public trust and support as portrayed in the theory of change.

6. SUMMARY, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter summarises the research, considers the findings made by the study and concludes by linking the purpose of the research outlined in chapter 1 to what the study achieved. Based on the conclusions, we highlight limitations of the research and recommend solutions to the research problem and for future studies.

6.1. Summary

Despite successes in the South African outcomes-based management system in some municipalities, many municipalities have challenges of implementing the system in relation provision of basic services in general (van der Walddt, 2014), and water supply in particular (Department of Cooperative Governance, 2014). Nationally, government is facing difficulties regarding provision of access to water and its reliability standards since 2014. Undesirably, non-implementation of outcomes-based management negatively affected the performance of Rustenburg and Madibeng Municipalities to meet their statutory obligations for water supply (Smith, 2009; South African Human Rights Commission, 2014). However, preliminary analysis has shown that although Rustenburg has challenges, it reduced its water backlogs from 2009 to 2014; whilst Madibeng Municipality's water supply backlogs have increased despite that the two municipalities are within the same District Municipality.

The purpose of this study was to assess the aspects that facilitate for the South African government's outcomes-based management (OBM) policy to achieve its intended outcomes and water supply government outcome in Madibeng and Rustenburg Local Municipalities. The study however, did not focus on the entire local government nor the sub-outcome, but the two Municipalities and water supply part of the sub-outcome. Similarly, we limited our research to process evaluation of the intervention.

To undertake this assessment, the study responded to the research questions; what aspects facilitate for the South African government's outcomes-based management policy to achieve its intended outcomes; and what aspects facilitate for the South

African government's outcomes-based management policy to achieve its intended water supply outcomes in Madibeng and Rustenburg Municipalities?

To respond to these questions, we undertook process evaluation. We further employed qualitative research strategy, comparative case study research design, document review, literature review and semi-structured interviews. The study also employed the theory of change and results-chain to analyse the research results. Thirty (32) interviewees participated in the research. Participants were selected through purposive sampling and were drawn from national government, provincial government and the two municipalities to obtain a full picture of the effectiveness of policy implementation processes in relation to the sub-outcome on water supply. The other participants in the research were citizens' representatives as well as officials from the South African Local Government Association (SALGA). The population ranged from middle management to senior management. The interviews were conducted between December 2015 and February 2016.

Informing the above approach was the fact that we identified that there are limited studies that assessed the South African government's outcomes-based management system on water supply against the theory of change and results-chain framework to address the same problem. Further, the literature review showed that to a limited extent, most past studies excluded citizens as data sources, though they are the beneficiaries of government services. Therefore, the significance of this study is that it attempted to address these limitations. Furthermore, since the South African government's outcomes management is an unexplored area and was recently introduced, a process evaluation study of the policy was selected to inform future outcomes and impact evaluations.

The findings showed that the aspects of the South African government's outcomes-based management policy that were consistent with the results chain framework were political commitment at national level, national regulatory frameworks and institutional mechanisms and to a lesser extent, performance management systems. Notwithstanding some of the noted weaknesses at institutional level, the South African government outcomes-based management appeared to be strong on structural aspects at macro levels, which provides an opportunity for achievement of the government sub-outcome on domestic water supply. It appeared that the policy has strong political leadership and

accountability mechanisms for the government outcomes at macro level being led by The Presidency and national Ministers accounting on the outcomes at Cabinet level. However, it appeared that these two aspects do not cascade down to the micro and institutional levels across the three spheres of government, particularly in municipalities.

On the negative side, the results showed that the South African government is weak on most of the managerial and technical components of the six-factor model of outcomes-based management outlined by Hawke (2012). Most of the elements in the technical and managerial aspects diverged from the theory of change (ToC) and results chain framework (RCF). Notably, two aspects that are key to the success of the system were on divergent paths with the ToC and RCF, namely, intergovernmental machinery and political commitment at local government level. Another worrying factor across all the spheres and institutions was the lack of capacity to implement the system and the absence of public value creation culture. These are the central issues hindering the success of the South African government's outcomes-based management policy to achieve its intended outcomes across the three spheres.

As noted, functional intergovernmental machinery is one of the necessary preconditions for the success of the system according to the theory of change. However, it was found to be on the negative due to poor coordination; misalignment and linkages of plans at national, provincial and municipality level, which was also exacerbated by different planning cycles for municipalities, national and provincial governments, which makes linkages and integrated planning complex. Furthermore, other managerial aspects not consistent with the theory of change and results chain framework were setting of measurable outcome indicators and targets and measurement tools, which is similar to the findings of most past studies such as Conaty (2012) and Try (2007).

Specific to implementation of outcomes-based water supply in Madibeng and Rustenburg Municipalities, Madibeng appeared to be struggling on all the four factors assessed, while Rustenburg was struggling on some aspects of managerial and technical factors. It can be argued that the contextual factors in the two municipalities make them to progress at different levels in relation to addressing water backlogs and achieve the water supply sub-outcome by 2030 as envisioned by the National Development Plan. Political aspects, informal settlements and technical aspects in Madibeng are the

main impediments. In comparison, Rustenburg appeared to be strong on structural and external factors, but also shares similar technical and informal settlements challenges. The other main aspect notable in both municipalities is the lack of accountability for outcomes and consequence management at both political and administrative levels.

Noteworthy from the findings, one success factor of Rustenburg Municipality, which is at the helm of the theory of change, is innovative and adaptive management in the Municipality. This aspect provides an opportunity for achievement of the intended water supply outcome in Rustenburg. Madibeng on the other hand is failing on this aspect. Also worth noting from Rustenburg Municipality on the managerial aspects is that it has better performance management system assessed against Bouckaert and Halligan Framework (Jones *et al*, 2015).

Both municipalities are weak on technical aspects of outcomes-based water supply when assessed against the theory of change and results-chain framework. They both have challenges of skills, financial resources and ageing infrastructure.

One significant finding in relation to Rustenburg municipality is that, despite its innovations and better performance management systems, it has been increasing access to water by less than 2% since 2010; signalling potential risk to the achievement of the water supply targets in the Municipality, therefore it should accelerate the pace. On the other hand, Madibeng's water supply backlogs increased. Therefore, notwithstanding that, Rustenburg Municipality has some pockets of best practices on the external, managerial and structural factors; it may also not achieve the 100% access by 2030.

Positively, the research results revealed the establishment of the Project Management Office for the sub-outcome on water supply, which has prioritised Bojanala District, under which Madibeng and Rustenburg Municipalities fall. The other initiative is the Municipal Infrastructure Support Agent, which was established to provide technical support to struggling municipalities in relation to infrastructure. Recently, government introduced the Back-To-Basics initiative and Management Performance Assessment Tool for local government to strengthen service delivery and governance systems of municipalities. A combination of these initiatives and improved capacity and technical skills in the performance management, monitoring, evaluation and water services

departments of the two municipalities as well as a conducive political environment might assist the two municipalities to achieve the sub-outcome by 2030.

6.2. Conclusions

The analysis revealed that there is a notable disjuncture between the theory of change and results chain framework in all the three spheres of government on technical and managerial aspects, and to a limited extent, external factors. A positive factor is that the South African government's outcomes based management is stronger on most of the issues on the structural aspects particularly at macro level. It appeared that, weaknesses in the technical and managerial aspects poses dire consequences for achievement of the South African government's water supply outcomes by 2030. Despite that, some of structural aspects are stronger at national level; they require skills and resources (technical aspects) to anchor them. Besides, they are only effective at macro level, weaker at institutional levels and lacking in most of the institutions involved in the study across three spheres. Similarly, despite that nationally, there is political will and commitment, external factors seemed to be on shaky grounds due to the ineffective intergovernmental machinery and citizens' involvement for water supply.

A further disturbing feature of the South African outcomes-based management is its absence of public value creation across all levels. However, the integrated development-planning model presents a fertile ground to address this issue. Furthermore, based on Bouckaert and Halligan Performance Management Framework, a promising aspect of the South African outcomes management system on water supply, tied to managerial aspects, is the functional performance management systems at macro and institutional levels. Though Madibeng is operating at the basic level, it became evident that most institutions and Rustenburg Municipality operate at performance management level. It will also be ideal and of benefit to the outcomes-based management system if all institutions of government across the three spheres will operate at the level of performance governance model.

In conclusion, managerial and technical aspects at institutional level limit the feasibility of the South African Government achieving its intended outcomes and water supply outcomes in both municipalities. Without immediate government interventions to

ensure that the intergovernmental mechanisms are effective, there is political commitment, a culture of public value creation across all spheres and technical aspects are addressed, the policy will not achieve its intended outcomes and water supply government outcomes by 2030.

6.3. Limitations

The limitation of the study is that it applied qualitative strategy and case study design and therefore the results cannot be generalised to other local municipalities. The case study method poses a limitation of subjectivity and unreliable results because it depends on fewer people rather than a sample (Hodkinson and Hodkinson, 2001, Bell, 2005). Further, semi structured interviews have limitations that some of the respondents might not provide reliable information; while purposive sampling might have denied the research the multiple perspectives and benefits of random sampling (Bouma and Atkinson, 1995; Stake 1994). To address these limitations, the study applied triangulation and used multiple data sources to cross check information within and across spheres as well as within and across institutions in the study.

In addition, politicians across all the three spheres and some key officials from the National Department of Water and Sanitation, North West Office of the Premier and South African Local Government Association were unavailable. Therefore, the study missed a political perspective and some valuable information on the South African Government's outcomes-based management policy.

6.4. Recommendations

Similar to Silva and Ferreira (2010), based on the results, the study recommends strengthening of intergovernmental mechanisms and its associated sectoral planning across the three spheres and municipalities. There are lessons from the national government sphere where the system is to a greater extent working in relation to alignment of plans, accountability and reporting to Cabinet on the government outcomes, the same model could be applied at provincial and municipality level to improve political accountability at municipal level. Related to this recommendation, is

the institutionalisation of consequence management and incentives, not only for administrators, but also for politicians across the three spheres.

As recommended by past studies, such as Silva and Ferreira (2010) and Sillanpää (2011), the above recommendation, also requires functional institutional mechanisms of clarifying performance expectations, indicators and targets for each national and provincial government department, public entity and municipality over the MTSF period and at the end of 2030, in relation to the water supply sub-outcome. This process should be informed by valid baseline data for each municipality. A Sector plan should be developed for the water sector out of this process, clarifying input, activity, outcome and impact indicators and targets for each role player. Sector planning process should be inclusive of citizens' representatives and other key stakeholders. Emanating from the sector plan all the national and provincial Departments contributing to the outcome should develop their 5-year and annual performance plans aligned to the targets and indicators in the sector plan.

The sector plan should then be anchored by outcomes-based budget allocations for each role player aligned to the expected deliverables for each institution contributing to the water supply sub-outcome as outlined in the sector plan for water supply rather than allocated per institution. This model will facilitate alignment of planning within and across the three spheres, as well as vertical and horizontal coordination of government planning and reporting. To ensure that the model is operationalized, the Public Finance Management Act, Municipal Finance Management Act, government planning and performance management frameworks should be reviewed to synchronise the planning and reporting cycles, financial years of national, provincial and local government to facilitate outcomes-based budgeting and include sectoral planning and performance reporting as mandatory across government. In addition, to strengthen managerial aspects, project-based planning emphasising application of theory of change and results-chain for each government outcome and sub-outcome at national, provincial and municipal levels should be mandatory to facilitate effective monitoring and evaluation of projects across government. This calls for reforms in employee performance management systems to align them to the outcomes management policy.

All role players should report and be accountable to Cabinet, with parliament providing an oversight role, and the Office of the Auditor General auditing compliance with regulatory frameworks. In addition, instead of Parliament being concerned only about tabling of strategic plans, quarterly and annual reports of individual national departments, a model of also tabling sector plans and sectoral annual reports should be explored.

The integrated development plans of municipalities are by law supposed to be a product of an inclusive process of all stakeholders and citizens, thus presenting a window of opportunity for public value creation and its associated benefits as recommended by Moore (1995) and Try (2007). Therefore, if there is full compliance by municipalities as advocated by Smits and colleagues (2013) in the Triple-S theory, it is a plan that should inform sector plans, strategic and annual performance plans and budget allocations of national and provincial departments contributing to this sub-outcome. In this regard, it is recommended that, as a way of strengthening coordination, alignment and sector planning mechanisms, it should be mandatory that strategic and annual performance plans of national and provincial Departments, which contribute to the sub-outcome, should also be informed by the municipalities' integrated development plans.

Further, it is recommended that in Municipalities where there is no capacity to spend their budgets and there are political factors involved, such as Madibeng Municipality, there should be review of legislation to empower the Minister of Water and Sanitation to provide the whole value chain of water provision. In the same context, as suggested by Mavhiki and colleagues (2013), a capacity-building programme for outcomes-based management should be designed for all levels of management and implementers of the system in all spheres of government to empower them on outcomes-based planning, including indicators development, performance measurement, outcomes-based employee-performance management and outcomes-based budgeting. The programme should also strive to inculcate the outcomes performance culture at all levels and spheres of government. Similarly, as recommended by Marx and colleagues (2008) and confirmed by the findings in Rustenburg Municipality, there should be robust community capacity building programmes on water services.

There are lessons from Rustenburg Municipality's successes, regardless of its challenges, which might be tested in other municipalities, particularly on water services data management systems and political factors.

The study assessed aspects facilitating for the South African government's outcomes-based management policy to achieve its intended outcomes and water supply outcomes on four of the six factors affecting success of the policy, the external, structural, managerial and technical components and not the cultural and behavioural components of results-based management outlined by Hawke (2012). There would be merit for future research on implementation of the South African outcomes-based management policy on the water supply outcome focusing on all the six components to have a holistic picture of the effectiveness of the policy. Further, future research should also consider exploring an ideal model for integrated development plans of municipalities to be an integral part of planning at macro, micro and institutional levels.

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APPENDICES

Appendix 1.1: Consent Form and Interview Guide

Research Title: Effectiveness of outcomes-based management policy on domestic water supply in Local Government

Name of researcher: Ms RS Mogaladi

Position of researcher: Student at WSG

Contact phone of researcher: 0836370153

A: Consent Form

Please initial box if you agree to the statement before proceeding with the interview

1	I understand that I have read and understand the information sheet for the above study and have had the opportunity to ask questions	
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reasons	
3	I agree to take part in this study	
4	I agree to the interview and for the interview session to be tape-recorded	
5	I agree to the use of anonymised quotes in publication of the research report	

Name of Participant

Date

Signature

Name of Researcher

Date

Signature

Semi-structured Interview Guide Questions for Municipalities, National and Provincial Departments and South African Local Government Association

Part A: Aspects facilitating achievement of the South African government's outcomes based management policy's intended outcomes across all spheres

- (a) What is your view on the effect of external factors (such as politicians in power and those in the opposition) on the successful implementation of outcomes-based management in relation to achieving its intended objectives and the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on your response as well as the national, provincial and your Department's external aspects and political issues.
- (b) What is view on the positive and negative factors in relation to legal, legislative and regulatory environment at national and provincial levels? Do you think the regulatory environment for outcomes based management policy at national and provincial level are effective to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on the national, provincial and your Department legislative and regulatory factors.
- (c) What is view on the positive and negative factors in relation to technical factors (skills, resources, capacity) at national and provincial levels? Do you think the regulatory environment for outcomes based management policy at national and provincial level are effective to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on the national, provincial and your Department legislative and technical aspects.
- (d) What is view on the positive and negative factors in relation to managerial factors (role of managers, such as alignment of policies, priorities and plans, sectoral planning, intergovernmental relations issues, monitoring and evaluation systems) at national and provincial levels? Do you think the managerial environment is conducive for outcomes based management policy at national and provincial level to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on the national, provincial and your Department managerial aspects.
- (e) In your view, do you think your Department's organisational structure is well configured to implement and support municipalities to implement and achieve

the outcome-based management policy's intended outcome on 100% access to water supply by 2030?

- (f) In your view, do you think Madibeng's and Rustenburg's organisational structures are well configured to implement outcome-based management policy's intended outcomes by 2030?

PART B: OUTCOMES-BASED WATER SUPPLY IN RELATION TO MADIBENG MUNICIPALITY

- (g) What is your view on external aspects (such as politicians in power and those in the opposition) in Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (h) What is view on legal, legislative, policy and regulatory environment (policies, frameworks) of Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (i) What is view on managerial aspects (such as role of management of the municipality, alignment of municipal policies and plans to national and provincial, intergovernmental and inter-organisational factors) of Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (j) In your view, does Madibeng Municipality have adequate and requisite technical capacity (such as skills, financial and human resources) for effective implementation of outcomes-based management principles?
- (k) What is your view on participation of citizens and stakeholders in the development, implementation, monitoring and evaluation of integrated development plans and water service development plans in Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

- (l) How do you view the participation of national and provincial departments in the IDP and water service development planning processes of Madibeng Municipality?
- (m) In your view, do you think Madibeng Municipality's organisational structure is well configured to implement outcome-based management policy's principles and to achieve its intended outcome on 100% access to water supply by 2030?
- (n) In your view, would you say Madibeng Municipality is service delivery oriented? Please elaborate on your response.
- (o) Do you think Madibeng Municipality will achieve the government sub-outcome on 100% access to domestic water supply by 2030? Kindly elaborate on the factors that will hinder or facilitate achievement of the sub-outcome by the municipality.

PART C: OUTCOMES-BASED WATER SUPPLY IN RUSTENBURG MUNICIPALITY

- (p) What is view on external aspects (such as politicians in power and those in the opposition) in Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (q) What is your view on legal, legislative, policy and regulatory environment (policies, frameworks) of Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (r) What is your view on managerial aspects (such as role of management of the municipality, alignment of municipal policies and plans to national and provincial, intergovernmental and inter-organisational factors) of Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (s) In your view, does Rustenburg Municipality have adequate and requisite technical capacity (such as skills, financial and human resources) for effective implementation of outcomes-based management principles?

- (t) In your view, does Rustenburg Municipality have adequate and requisite water services supply technical capacity (such as skills, financial and human resources) to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (u) What is your view on participation of citizens and stakeholders in the development, implementation, monitoring and evaluation of integrated development plans and water service development plans in Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?
- (v) How is the participation of national and provincial departments in the IDP and water services development planning processes of Rustenburg Municipality?
- (w) In your view, do you think Rustenburg Municipality's organisational structure is well configured to implement outcome-based management policy's principles and to achieve its intended outcome on 100% access to water supply by 2030?
- (x) In your view, would you say Rustenburg Municipality is service delivery oriented? Please elaborate on your response
- (y) Do you think Rustenburg Municipality will achieve the government sub-outcome on 100% access to domestic water supply by 2030? Kindly elaborate on the factors that will hinder or facilitate achievement of the sub-outcome by the municipality.
- (z) What are your general recommendations for the two municipalities to achieve this target by 2030?

B2: Semi-structured Interview Guide Questions for Citizens' representatives in Madibeng and Rustenburg Municipalities

- a) What is your view in relation to provision of water supply by your municipality?
- b) What is your view on participation of citizens and stakeholders (including national and provincial government as well as District Municipality) in the development, implementation, monitoring and evaluation of integrated development plans and water service development plans in your Municipality?
- c) Do you think your municipality will achieve 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on your response?

- d) What would you say are the positive aspects (if any) in your municipality that will facilitate achievement of 100% access to water supply by all its citizens by 2030?
- e) What would you say are the negative aspects (if any) in your municipality that will hamper achievement of 100% access to water supply by all its citizens by 2030?
- f) What would you recommend should be done for effective implementation of the outcomes-based management policy and water supply by government; and why so?

Appendix 1.2: Transcribed interview

PART A: ASPECTS FACILITATING ACHIEVEMENT OF THE SOUTH AFRICAN GOVERNMENT'S OUTCOMES BASED MANAGEMENT POLICY'S INTENDED OUTCOMES ACROSS ALL SPHERES

Question: What is your view on the effect of external factors (such as politicians in power and those in the opposition) on the successful implementation of outcomes-based management in relation to achieving its intended objectives and the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on your response as well as the national, provincial and your Department's external aspects and political issues.

Response:

At national level, I think we are one of the world leaders. Well, we are doing extremely well. The President provides the leadership and National Ministers leading the outcomes sign delivery agreements and report to Cabinet on the outcomes. So..., I can say Ministers also provide that political leadership at departmental level, they also have MINMECS and Ministerial Implementation Forums to track progress on outcomes. What I am not sure of is the provincial and local government level. But premiers participate in the PPC, not necessarily accounting for the outcomes, but I think it can be explored.

I think accountability at the level of Mayors in municipalities is lacking, if they were also signing performance agreements to force them to account, but they are accountable to nobody. The fact that they have an autonomous status also makes them untouchable and they do not even account to their citizens. The same way as Ministers that lead outcomes account to and sign delivery agreements with the President there must be a similar thing at municipal level. I checked the two Municipalities IDPs, one has aligned, and the other one has not aligned with the outcome 9 delivery agreement. This means it did not align with the MTSF and National Development Plan, the blue print of government and you ask yourself, what then informs their planning if it is not talking to NDP and MTSF, because a delivery agreement facilitates this alignment. DGs and Ministers are held accountable for achievement of outcomes, who holds mayors accountable?

To make matters worse the politicians at municipality level do not account to Provincial COGTA or National. Sometimes politicians at local level instead of prioritising this sub-outcome they prioritise something else that will win them votes and divert the money, we cannot help it, this is a very politicised environment than national and provincial spheres. Also political in-fighting affect effective implementation of the policy.

Local government is a grey arear, it is dominated and largely influenced by politicians, and they have different views and priorities, from a political view, what administrators plan may not be what they want, you can see how challenging it is for officials, they speak different languages with councilors. There are also a lot of political

deployment high at this level than in any other sphere of government, some politicians even go to an extent of interfering in management appointments

As a Department our political leadership is committed to the course of outcomes-based policy and wants it achieved, because they have to account to the President, so there are no political challenges. We must just implement and also account to our Minister to report to Cabinet.

Question: What is view on the positive and negative factors in relation to legal, legislative and regulatory environment at national and provincial levels? Do you think the regulatory environment for outcomes based management policy at national and provincial level are effective to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on the national, provincial and your Department legislative and regulatory factors.

Response: *Well, I think we are doing well on legislation. I mean it is common knowledge that South Africa has the best legislation and policies, there is no doubt about it. The issues that is thorny is implementation. Look, if you will go to the Department of Water and Sanitation, they have legislation, the best and benchmarked with the best, that is why we achieved the millennium development goals. Even for this outcomes approach we have many national regulations from Treasury, DPSA (department of Public Service and Administration) and DPME (Department of Planning, Monitoring and Evaluation), for all sorts of things on planning, monitoring and evaluation, reporting. So we are doing well.*

Provinces are also bound by the same legislation. Municipalities have also robust local government legislation, governing the way they do things, so I don't think there are any better that we can do than we are. Like I said, the issue we need to tighten is to comply and implement the legislation. If we were implementing exactly what the legislation says, we were going to be a 1st world country in the Africa, yes, seriously it is true.

Question: What is view on the positive and negative factors in relation to technical factors (skills, resources, capacity) at national and provincial levels? Do you think the regulatory environment for outcomes based management policy at national and provincial level are effective to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on the national, provincial and your Department legislative and technical aspects.

Response: *People do not use the monitoring systems because they do not know how to use them. They are very subjective in terms of performance reporting. The reports do not show the linkages with the MTSF indicator and targets in their plans, they will report on something else that is not in the plans. I think having measurable targets and indicators is a skill that we need to teach every official. We need to plan such kinds of training.*

Most of the people, are not technocrats, and people who do reporting, do not understand different levels of reporting and indicators, there is reporting at project level, reporting at programme level and at policy level. Outcomes approach includes all these three, but when people report to Cabinet, they want to report at project level and not at policy level, that is a challenge. Capacity development on monitoring and evaluation, reporting and data analysis is necessary, people are not capacitated enough to do data analysis, let alone statistical analysis of the data they collect on outcomes, there are no skills for monitoring and evaluation, instead when they report, they sometimes use their discretion and the data does not talk to the information.

Most Departments at both provincial and national level sometimes align for compliance purposes and to have higher scores for Management Performance Assessment Tool (MPAT) and they are not concerned about producing outcomes, it is matter of compliance. They push to achieve activities and outputs, many Departments annual reports are full of inputs and outputs rather than outcomes, to meet the Auditor General unqualified audit status. It is more about achievement of Annual Performance Plans targets, and not always about outputs that will lead to achievement of the sub-outcome. However, most of the Departments really work towards the outcomes, but the problem is that to achieve the outcome you need various Departments at all levels and other stakeholders to contribute, and it is not always the case to get that intergovernmental agreements. But honestly, the culture of planning of outcomes is not yet inculcated in most of the government outcomes in all the three spheres.

There are also budgetary constraints to appoint high-level skills in strategic planning and monitoring and evaluation and for data analysis.

Another issue coming to my mind is weak support of the municipalities by national and provincial government and alignment of priorities between what national does and what the municipality does.

The main challenge across is evaluations. It seems people are not ready to implement this system or rather do not understand that it needs regular evaluations. But in the DPME we have capacity and we have skilled professionals in monitoring and evaluation. Hmmm... Maybe they should capacitate other Departments.

Question: What is view on the positive and negative factors in relation to managerial factors (role of managers, such as alignment of policies, priorities and plans, sectoral planning, intergovernmental relations issues, monitoring and evaluation systems) at national and provincial levels? Do you think the managerial environment is conducive for outcomes based management policy at national and provincial level to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030? Kindly elaborate on the national, provincial and your Department managerial aspects.

Response: *This one has many serious issues; I can name few of them. Let me say, where planning is concerned, there is relatively little alignment at national. We budget individually and allocation is done individually. We only put what we have money for, not informed by the outcomes. In most cases people have a tendency of looking at projects where they are passionate for, and those that will have impact and produce outcomes are not necessarily prioritised. We still have a long way to go, we plan but if there is no budget, it is a problem.*

The challenge is that we cannot plan, the indicators in most Departments are not pitched at the right level, they are mostly activities, sometimes not measurable. The technical indicator descriptions are also not specific of how to measure performance

The challenge with outcome 9 is the overlapping because everything happens at local government level, though legislation is clear on the roles, but practically people still confuses the different functions for water supply. There is also dilution of the outcome and sub-outcome as they move through the different spheres, it is all about spheres of influence, and where the money is allocated. It is quite complicated with this issue of three spheres and implementation of the outcomes approach. How do we plan in a way that makes municipalities to align to the bigger outcome and know their role in the entire outcome is a challenge?

Outcome 9 has a sector delivery agreement, and all stakeholders were consulted to align their plans with the delivery agreement, the devil is always in the details, is the delivery agreement funded adequately and appropriately, who is supposed to do what, who is supposed to report, who is supposed to oversee, who accounts to whom...

Departments, provinces and municipalities still plan as institutions, not as a sector, I think we must start there, intergovernmental machinery in planning should be improved, and then the outcomes-based planning will happen. Another thing that I think should be included in this whole approach is budgeting, if your plan does not include outcomes, you should not get that much budget, because implementation happen at municipal level, there must be a huge budget there for them to deliver the outcomes, but provided the aligned to the MTSF and government outcome 9 and B2B.

The other thing is, the policy was never cascaded down to provincial and municipal level. Even some national departments are still not very conversant with what the policy principles expect of them. The policy does not find place in the PGDPs and IDP. In terms of personal experience, we went to a workshop in one province, they were trying to link their work to government outcomes or MTSF. They also had the provincial strategic planning session, instead of aligning to the MTSF they align to the SDGs. You see, where the misalignment of plans across all spheres come from.

Although the joint planning happens across national departments and to a certain extent provincial departments in the MINMECs, municipalities are left behind. Even between National and Provincial level there is no alignment. Provinces have their own provincial growth plans.

To be honest at local level, their priorities are different from what national see as a priority. What National considers as a priority like this government sub-outcome, is not a priority at local level. This makes it hard to achieve the sub-outcome, because the policy is not implemented consistently across the three spheres. While all National and Provincial Departments' Strategic and Annual Performance Plans are fully aligned to the Medium Term Strategic Framework, the government outcomes, not all municipalities integrated development plans are aligned to the MTSF, this is an impediment to achieving these outcomes.

In order to achieve this linkage, there is a lot work to be done, the fact that we have three spheres of government, their plans not even linked. Currently, though there are implementation forums the effective alignment of plans is not happening. There should be collaboration, all three spheres should plan together, from national policy perspective, to provincial support level, to local government implementation. SALGA and provincial COGTA participate in the Implementation Forums and MINMEC, but that is not enough, mayors should also participate at this level because local government is an independent sphere, it cannot be left to SALGA.

You know I used to work closely with these two municipalities. They always complained that as national we do not involve them, we come with the outcomes, which for them at local government, they are problematic. As national we must understand the local government environment. They say they do not align their plans with national outcomes because there should be a budget to deliver, if they include these outcomes targets in their IDP, they will not achieve, and then they have to answer to the Auditor General's findings why they planned what they cannot achieve at the end of the financial year. The budget should also be allocated according to the outcomes that we are expected to deliver, I mean at all levels of government.

The issue that I think we are not doing well in outcomes-based planning, that the policy emphasises is the part on outcomes-based budgeting, that is not done at all and we also do not budget for outcomes necessarily. We plan individually in our Department, budget individually and National Treasury also allocates budget to individual Departments and municipalities, they do not allocate for the government outcome. I don't know how we can do it, but I think something needs to change in the way we do planning and budgeting in order to synchronise the two and align with the outcomes-approach.

We cannot come with the theory of change for the sub-outcome. It is not our role as a Department to develop it. Maybe you can ask the outcome 9 coordinating department or the department leading the sub-outcome on water supply if they have it, but I have never seen it. I believe it is important that we have it, or other at least other similar models. I think also at different levels there must be a ToC, like at local government level, but the question is, do they have capacity to do it? We have to help them as national. I think there is no clear cut role clarification of who should come up with the TOC for this sub-outcome.

Another thing, DWS has to report on the sub-outcome, but their challenge is lack of information and synchronisation with municipalities because planning is done elsewhere, not jointly and implementation is done by municipalities. Part of what DWS report on is out there in the municipalities and are forced not to report on outcomes but their own targets in the APP, and therefore not reporting adequately on the outcome. I think it is the challenge of coordination for this sub-outcome. There are some issues of coordination, we are much more effective in the economic cluster because of better coordination there, in the social, outcome 9 coordination is not that effective, there is no interlinkages between the cluster, I think it is one thing that can be improved for outcome 9. Hmm., by 2030, we can achieve, we can achieve the target by 2030, if they can enhance the coordination issues, and the way we coordinate with

local government... Look, in the coordination for outcome 9 there is a lot of duplication-role clarification is blurry. Mostly the coordinating part for outcome 9 is a problem; we can do better.

The misalignment of financial years of local government and national and provincial government, affect alignment of plans for this sub-outcome, and therefore the we are not able to work together towards the same goal. You know, another thin is the issue of concurrence, where municipalities can decide on their own priorities is another issue.

Question: In your view, do you think your Department's organisational structure is well configured to implement and support municipalities to implement and achieve the outcome-based management policy's intended outcome on 100% access to water supply by 2030?

Response: *Yes, I think so, because we have all the components aligned to the 14 government outcomes and other functional areas that support achievement of the outcomes like Evaluations Units, we have data management and analysis experts and all these people are specialists in their areas of work.*

PART B: OUTCOMES-BASED WATER SUPPLY IN RELATION TO MADIBENG MUNICIPALITY

Question: What is your view on external aspects (such as politicians in power and those in the opposition) in Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *Madibeng has many problems of governance. It has also been put many times under administration, even now it is still under administration, and these are some issues there which might need strong political intervention, it has administrative and political problems that should be addressed to unlock the bottlenecks. Let me just say most of the issues are political, politicians even interfere in administrative issues. Skills are generally a problem for local government. sometimes politicians in this municipality instead of prioritising this water supply services they prioritise and fund something else that will win them votes'. Political interference and corruption is a challenge for Madibeng, until they change the leadership, there will be these challenges.*

Question: What is view on legal, legislative, policy and regulatory environment (policies, frameworks) of Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *I know municipalities have performance management policies which are usually very good on paper, but when you look at the implementation, I would not say they have working monitoring and evaluation systems. But they do comply with performance reporting on their Service and Budget Delivery plans and the IDP because they are forced to comply with MFMA (Municipal Finance Management Act). Evaluations are still a problem. Though I am not sure about Madibeng specifically, I think you can check with them.*

Question: What is view on managerial aspects (such as role of management of the municipality, alignment of municipal policies and plans to national and provincial, intergovernmental and inter-organisational factors) of Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *I cannot say the same about Madibeng, that one has many problems. Its debt levels are high, it cannot spend their MIG (municipal infrastructure grant) funds, but they cry little budgets, National COGTA is now threatening to withdraw the funds because Madibeng is unable to use the money, and I talk millions that can be used to upgrade their water infrastructure. Madibeng is a lost case, we all, national, provincial and district need to see what we can do for the sake of the citizens...*

There, there are serious challenges, I mean for both municipalities. I doubt they know that such a policy exists. But that being said, I think the main struggle is planning skills and capacity. SMART indicators is also a problem. I guess they were not fully trained to apply its principles. As a planner, what I usually see in their plans, make me wonder how they report because the targets are not clear.

Like I said, there are no evaluations. That will be asking too much from them, they do not have capacity and skills for that, I mean, they do not have systems.

Question: In your view, does Madibeng Municipality have adequate and requisite technical capacity (such as skills, financial and human resources) for effective implementation of outcomes-based management principles?

Response: *No, it doesn't have, remember, it is a rural municipality still struggling to collect revenue, so its budget is minimal. It struggles to recruit and keep technical skills like professional engineers, as soon as they become registered professionals they leave the municipality.*

Hmm.. also issues of budget, municipalities will sometimes budget for bulk infrastructure, but they wait for the pipes to burst, so it eats a chunk of the budget, unlike if they keep their infrastructure maintenance plans in check.

Sometimes I wonder, because Madibeng does not have a big budget, it is struggling, but it cannot spend it infrastructure budget. Madibeng does not have the capacity to spend the budget, project management skills are a problem in the municipality. Almost every year, it could not spend its MIG (municipal infrastructure grant) budget. I think national should support Madibeng because it is the citizens who suffer. One official in the municipality told me that the support they get from national is too administrative, it is about whether they have spent the MIG budget or not, if they did, good, it does not matter how it was spent. I think it should be a different kind of support rather than just reports.

Question: What is your view on participation of citizens and stakeholders in the development, implementation, monitoring and evaluation of integrated development plans and water service development plans in Madibeng Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *It is regulated by the Municipal Systems Act, there are legislated structures and it has to comply. I am not sure, since the Municipality has a history of qualified audits reports and disclaimers if they do comply, but legally it has to.*

Question: How is the participation of national and provincial departments in the IDP and water service development planning processes of Madibeng Municipality?

Response: *I think it is effective. Though there were some issues of the level of participation, that it is too operational than strategic people, so they do not help the process. But I have seen most Departments attending IDP reviews in the Municipality.*

Question: In your view, do you think Madibeng Municipality' organisational structure is well configured to implement outcome-based management policy's principles and to achieve its intended outcome on 100% access to water supply by 2030?

Response: *I cannot speak with authority on this one, I think the municipality is better placed to respond to this one.*

Question: In your view, would you say Madibeng Municipality is service delivery oriented? Please elaborate on your response.

Response: *A definite no. I am basing my response on the service delivery protests and even when you go to the municipality you can be there for more than 30 minutes, people passing by without caring to assist you. It is deteriorating. It used to be better around 2008, I do not know what happened. Political factors are rife there and they affecting everything.*

Question: Do you think Madibeng Municipality will achieve the government sub-outcome on 100% access to domestic water supply by 2030? Kindly elaborate on the factors that will hinder or facilitate achievement of the sub-outcome by the municipality.

Response: *Hmm,-- I have to say no. Look, you see, there are issues of capacity within the water service departments, they have financial and technical capacity problems, corruption is worse. Well, another thing, which is also the main issue is ageing infrastructure, capacity to maintain the infrastructure. Well, the other issue, Madibeng has serious governance issues, there is just poor leadership. If I have to be optimistic, then I would say it may achieve if its political issues are addressed and there is financial muscle and skills.*

PART C: OUTCOMES-BASED WATER SUPPLY IN RUSTENBURG MUNICIPALITY

Question: What is view on external aspects (such as politicians in power and those in the opposition) in Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *They are also political like in Madibeng, but what is different is that Rustenburg has progressive political leadership and their influence is for the better. Royal Bafokeng Traditional Council is also an external influence because it has royalties in billions from the mining house around the area, and... I understand it gives pressure to the Municipality to deliver to its community. Well, the opposition parties, are obviously also putting the ruling party on its toes, but for the better of course. I can say Politically, there is commitment to ensure that all households in the municipality have water. But also, our traditional councils because of their financial muscle, they contribute financially to the services and we have formal partnerships with some of the traditional councils. This does not only apply to water services only but to other municipal services’.*

Question: What is your view on legal, legislative, policy and regulatory environment (policies, frameworks) of Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *Like I said, as far as I know, I have seen it has a performance management policy, like Madibeng, implementation is a problem. As regulated, it has a water service development plan.*

Question: What is your view on managerial aspects (such as role of management of the municipality, alignment of municipal policies and plans to national and provincial, intergovernmental and inter-organisational factors) of Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *Look in Rustenburg, you see progress, it has set clear targets aligned to the MTSF government outcome 9, on the entire sub-outcome 1, and the level and quality of planning is much better there, though I cannot comfortably say it is good, but they are getting there. They are still struggling with setting of targets and indicators. I mean there is room for improvement. But looking at the IDP of Rustenburg and how they do things, I saw it was aligned to the B2B (Back to Basics) pillars and the government outcomes, especially this outcome. I can say to a certain extent Rustenburg Municipality is trying to align. I understand the mayor has recently, a year or two ago introduced a water services technological system, which everybody is talking about. If it works, I think it will assist them to improve their water services.*

I know you want me to be specific to Rustenburg, but the one issue coming to my mind is weak support of the municipalities in general by national and provincial government and alignment of priorities

between what national see as a priority and what municipalities see as priorities, alignment is not possible. You see, as I mentioned, the financial years are different.

Question: In your view, does Rustenburg Municipality have adequate and requisite technical capacity (such as skills, financial and human resources) for effective implementation of outcomes-based management principles?

Response: *You see, Rustenburg is more urban and has a bigger revenue base, so its budget is bigger. Look, hmmm, most municipalities don't have skills; they don't have budgets for this kind of work. If you compare it to Madibeng, Madibeng's revenue base is low. Anyway Madibeng people are despondent because of corruption, poor services. So they decide not to pay and this kills the municipality's revenue.*

Outcomes are good, but individual departments, I mean including municipalities they only end up with activities in their plans so that they can achieve, they only include what they can be able to afford, and sometimes what they can afford is not necessarily aligned to this approach or even adding tangible outputs and outcomes towards achieving the 100% water access. You need the financial muscle and technical skills for specialists in planning and evaluations, you know well-grounded researchers to do that. Municipalities, I mean most municipalities are struggling. We also struggle at National. You can check, hmmm. I think most national Departments also don't have those kind of skills, well we have in the DPME. I guess, they are just like most government departments, it doesn't matter provincial, national, data analysis is a challenge across the board. Now back to your question, like I said with Madibeng, it doesn't have the capacity. It may have many warm bodies in the performance management units or its IDP section, but it does not mean they have skills for outcomes-based planning, monitoring and data management and evaluation.

Question: In your view, does Rustenburg Municipality have adequate and requisite water services supply technical capacity (such as skills, financial and human resources) to achieve the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *Like I already said, it lacks engineering and project management skills. Even funding for maintenance and upgrading of water infrastructure. Hmm...I don't remember hearing that Rustenburg returned its infrastructure budget- I mean the MIG. I think it spends its budget but I am not sure about this. Look I don't really have all the facts but I have never seen anything that suggests it cannot spend its allocated budget.*

I know they all have a performance management policy which is very good on paper, but when you look at the implementation, I would not say they have working monitoring and evaluation systems. But they do comply with performance reporting on their Service and Budget Delivery plans and the IDP.

Evaluations are still a problem. Like I said, there are no evaluations. That will be asking too much from them, they do not have capacity and skills for that, I mean, they do not have systems.

Question: What is your view on participation of citizens and stakeholders in the development, implementation, monitoring and evaluation of integrated development plans and water service development plans in Rustenburg Municipality on the successful implementation of outcomes-based management in relation to the sub-outcome of 100% access to adequate, reliable and sustainable water supply by 2030?

Response: *Citizens participation is regulated, municipalities have to comply otherwise it is non-compliance and AG (Auditor General) will pick it up. I know that it has structures where citizens participate in the IDPs (integrated development planning) processes. It has to account to citizens on the budget and plans, ja... it has formal structures for IDPs. I know as national we also participate there, SALGA is also one of the stakeholders participating there.*

Legislation is there, but municipalities are not able to apply them to have effective participation. The ward system is also not working as envisaged.

Question: How is the participation of national and provincial departments in the IDP and water services development planning processes of Rustenburg Municipality?

Response: *I think it is generally effectively. It is just that most of the time national and provincial departments send people at lower levels. But they do participate. I know DWS is very much involved and support these municipalities with water service development plans. Which is also good for skills transfer?*

Question: In your view, do you think Rustenburg Municipality's organisational structure is well configured to implement outcome-based management policy's principles and to achieve its intended outcome on 100% access to water supply by 2030?

Response: *Hmm...On this one, I do not know, I am not well conversant with this issue, I think the municipality will respond better. But what I know is that since 2015, the Water services and Sanitation have been separated to align with National. I have seen their IDP, it also tries to align with the B2B (Back-to-Basics).*

Question: In your view, would you say Rustenburg Municipality is service delivery oriented? Please elaborate on your response

Response: *On several occasions when I go to the municipality, I see a service-oriented organisation, so yes, but well, there is always room for improvement. They have people managing the quos, I saw in one of their reports that they are strengthening the water services call centre. So, yes, it is service oriented. It also makes time to meet with MUNWATCH (the structure formed by citizens to pressurize the municipality to deliver services) and listen to citizens' complaints.*

Question: Do you think Rustenburg Municipality will achieve the government sub-outcome on 100% access to domestic water supply by 2030? Kindly elaborate on the factors that will hinder or facilitate achievement of the sub-outcome by the municipality.

Response: *Hmm,-- Like Madibeng I don't think so. The two municipalities won't achieve the target of 100% access as envisaged by the NDP. Look, I must acknowledge that Rustenburg is progressing better than Madibeng, but still it will not achieve this target by 2030 unless there are funds and issues of infrastructure are sorted. Ok, ok, you see, like I said, there are issues of capacity, financial and technical capacity in general to implement the outcomes based water services is lacking at municipal level. Well, another thing, which is the main issue for Rustenburg, similar to Madibeng is collapsing infrastructure, maintenance of the infrastructure, the infrastructure is dilapidated and requires billions, it has been left too long and it is now at a stage where a lot of money should be sourced, I do not know if that will be possible given the financial situation in the country. Besides, water services need engineers and project management skills, and Rustenburg Municipality does not have those in abundance, unless they outsource*

Well, to be honest this target is also ambitious, there is a need for review of outcome 9 delivery agreement to make this target realistic.

You see, outcomes are things we cannot control, level of detail is needed in terms of implementation, trade-offs to negotiate with municipalities. Where there is no infrastructure like Madibeng and Rustenburg, it will be impossible to achieve the sub-outcome. The minute you start talking outcomes, you must be ready to negotiate due to lack of resources and see if municipalities can afford that. I think this negotiation and level of detail is missing in the whole value chain, and this requires joint planning at political and administrative level. How you get there in the case of South Africa, is something. There should not be a big brother mentality, all spheres of government should be equal to pull it through, and then we can start alignment of plans with each sphere having deliverables that have been negotiated based on the budgets of different institutions. I think the elephant in the room is effective planning and intergovernmental coordination, we need to get these two right.

Since 2030 is 14 years from now, I think with some interventions and powerful progressive leadership at administrative and political level maybe the two municipalities can achieve the outcome because they are under Bojanala District and it has been prioritised for Back-To Basics.

Question: What are your general recommendations for the two municipalities to achieve this target by 2030?

Response: *Political will first There must be adequate budgets and National and Provincial Treasury should align their budget allocations based on the IDPs of these municipalities. What is the use of these municipalities calling citizens for an IDP, getting their needs and then the next thing Treasury says no, we cannot fund this? That is why we have so many service delivery protests.*

Well, the establishment of MISA (municipal infrastructure agency) and the project management Office might assist municipalities like Madibeng and Rustenburg. But what I have realised that our plans as government do not talk to each other. I think if there will be a way to align plans, it may also help, but there must be budgets to implement those plans. National should also have requisite skills to help municipalities because most of the time national is more administrative than technical and municipalities need technical skills to solve their problems at local level. Currently national focuses on ticking boxes rather than supporting municipalities with real skills and resources.