

AN OPERATIONAL FRAMEWORK TO IMPROVE MUNICIPAL INFRASTRUCTURE GRANT SPENDING IN NORTH-WEST PROVINCE, SOUTH AFRICA

By

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DECLARATION OF ORIGINALITY

I, SEBOKA KOPUNG, declare that the Thesis titled “An operational framework to improve municipal infrastructure grant spending in North West Province,” submitted for the degree of Doctor of Philosophy at North-West University, has not been previously submitted by me for a degree at this or any other University. This is my own work in design and execution and all material contained herein has been duly acknowledged.

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CERTIFICATE OF ACCEPTANCE FOR EXAMINATION

This thesis, entitled “An operational framework to improve municipal infrastructure grant spending in North-West Province”, written by **SEBOKA KOPUNG (student number 16212347)**, is hereby recommended for acceptance for examinations.

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DEDICATION

This work is dedicated to my late parents, Caroline Shale and Paul Mauston Kopung, my lovely and ever-supporting wife Evah Gaopalewe and our children Neo, Dineo, Tidimalo and Katlego, my brother Nketsi, elder sister Portia and late brother Joseph, to Fabia Nyai and the late Philip Laban Nyai. These people have supported and encouraged me.

ABSTRACT

The study has identified the adverse impact of under-expenditure of Municipal Infrastructure Grant (MIG) projects in North West Province. This study focuses on the extent to which the application of MIG processes is affected by the enabling environment in North West Province. The research objectives are: to determine the primary reasons for under-expenditure in MIG projects; identify the roles of all stakeholders in MIG projects, including in the Project Management Unit (PMU); determine the issues faced within the procurement division that impact municipal spending; quantify the extent to which under-expenditure directly contributes to inefficient service delivery; consolidate the findings of under-spending of MIG funds; and apply research findings to determine the new framework for spending.

Questionnaires were used to collect quantitative data from different local municipalities within North West Province. Secondary data was sourced from the Department of Human Settlement and Traditions (DHST) and annual reports and audited annual reports from the Provincial Auditor-General.

A framework was developed using different statistical analysis and findings from other research approaches. It was refined through focus group inputs. Qualitative content analysis was used to develop the final framework.

The focus group interviews revealed that MIG underspending was due to the following: (i) lack of independence by PMUs; (ii) the need to meet strict time frames; (iii) poorly functioning intergovernmental relations (IGR); (iv) procurement plans not being adhered to; (v) competent service providers not always being appointed; (vi) lack of involvement of communities through the project life cycle; (vii) lack of clear-cut policies regarding MIGs; and (viii) limitations on change management, requiring reduction in high staff turnover and the appointment of PMUs on a permanent basis. A refined framework resulted from the interview. Recommendations are made based on this refined framework.

In conclusion, it was found that total spending of MIG funds does not necessarily mean the backlog has been eradicated. The implementation of a proper framework will assist in proper expenditure of MIG funds. Secondly, it will eradicate service backlogs and minimise service delivery protests. It will result in provision of essential services to the communities that so direly need these. Finally, minimal amounts will be returned unspent to the National Treasury.

ABBREVIATIONS

AG – Auditor -General

AGSA – Auditor-General South Africa

ANC – African National Congress

ANN – Artificial Neural Network

ASD – Alternative Service Delivery

BID – Business Improvement District

BRICS – Brazil, Russia, India, China and South Africa association of emerging national economies

BU – Business Unit

CDW – Community Development Worker

CFO – Chief Financial Officer

CIDB – Construction Industry Development Board

CLO – Community Liaison Officer

CMIP – Consolidated Municipal Infrastructure Programme

CMMI – Capability Maturity Model Integration

CoE – Centre of Excellence

CoGTA – Co-operative Governance and Traditional Affairs

CoT – City of Tshwane

CTMM – City of Tshwane Metropolitan Municipality

DBSA – Development Bank of Southern Africa

DCoG – Department of Cooperative Governance

DE – debt-to-equity ratio

DEA – Data Envelopment Analysis

DEA-BND – Data Envelopment Analysis Bound Variable

DGSD – Democracy, Governance and Service Delivery

DHST – Department of Human Settlement and Traditions

DLG – Department of Local Government

DLGT – Department of Local Government and Traditions

DLM – Drakenstein Local Municipality

DME – Department of Mineral and Energy Affairs

DoRA – Division of Revenue Act

DoT – Department of Transport

DPLG – Department of Provincial Local Government

DPW – Department of Public Works

DSRSA – Department of Sport and Recreation South Africa
DWAF – Department of Water Affairs and Forestry
DWS – Department of Water and Sanitation
EPWP – Expanded Public Works Programme
EVM – Earned Value Management
FFC – Financial and Fiscal Commission
FGM – Municipal General Fund (in Portugal and overseas territories)
FMG – Financial Management Grant
FMPPI – Framework for Managing Programme Performance Information
GDP – Gross Domestic Product
GVA – Gross Value Added
HSDG – Human Settlement Development Grant
ICDG – Integrated Cities Development Grant
ICMS-E – *Imposto sobre Circulação de Mercadorias e Serviços*
IDP – Integrated Development Programme or Integrated Development Plan
IGR – Intergovernmental relations
IIF – Infrastructure Investment Framework
IMATU – Independent Municipal and Allied Trade Union
IMF – International Monetary Fund
IMI – Integrated Municipal Infrastructure
INEP – Integrated National Electrification Programme
IPD – Integrated Project Delivery
IRA – Internal Revenue Allocation
IRC – Corporate Profits Tax
IRS – Personal Income Tax
ITO – Input Transformation Outcome
IUDG – Integrated Urban Development Grant
IVA – Value-Added Tax
KPI – Key Performance Indicator
LFL – Local Finance Law
LGES – Local Government Equitable Share
LGSETA – Local Government Sector Education Training Authority
LGTAS – Local Government Turnaround Strategy
LSGIs – Local self-governing institutions
LTC – Long-Term Care
MBF – Municipal Base Fund
MCRSA – Mid-Continent Regional Science Association

MDG – Millennium Development Goals

MFMA – Municipal Finance Management Act 2003

MIG – Municipal Infrastructure Grant

MIIF – Municipal Infrastructure Investment Framework

MIS – Management Information Systems

MISA – Municipal Infrastructure Support Agency

MITT – Municipal Infrastructure Task Team

MIU – Municipal Infrastructure Unit

MMR – Mixed Method Research

MSA – Municipal Systems Act

MSIG – Municipal System Improvement Grant

MWIG – Municipal Water Infrastructure Grant

NDP – National Development Plan

NDPG – Neighbourhood Development Partnership Grant

NEMA – National Environmental Management Act

NSDP – National Spatial Development Perspective

NSDS – National Skills Development Strategy

NTAX – Non-Traditional Agriculture Exports

NWU – North-West University

OECD – Organisation for Economic Cooperation and Development

OHS – Occupational Health and Safety

PBO – Project-Based Organisation

PDS – (in Portuguese: *Partido Democratico Social*) – Democratic Social Party

PDS – Project Delivery System

PESA – Provisions of Panchayats (Extension to Scheduled Areas)

PFMA – Public Finance Management Act 1999

PGM – Project Governance Model

PIG – Provincial Infrastructure Grant

PMBOK – Project Management Body of Knowledge

PMITT – Provincial Municipal Infrastructure Task Team

PMO – Project Management Office

PMSA – Project Management South Africa

PMU – Project Management Unit

PPE – Personal Protective Equipment

PPMU – Provincial Project Management Unit

PPPF – Preferential Procurement Policy Framework

PRC – People’s Republic of China

PTIG – Public Transport Infrastructure Grant
RBIG – Regional Bulk Infrastructure Grant
RDP – Reconstruction and Development Programme
REAL – Revenue Management, Expenditure Management, Asset Management and Liability Management
REIT – Real Estate Investment Trust
RHIG – Rural Households Infrastructure Grant
RLM – Rustenburg Local Municipality
ROI – Return on investment
RRAMS – Rural Road Assets Management Systems
RSC – Regional Service Council
SADC – Southern African Development Community
SAICE – South African Institute of Civil Engineering
SALGA – South African Local Government Association
SAMWU – South African Municipal Workers Union
SBS – Service Balanced Scorecard
SCM – Supply Chain Management
SDF – Spatial Development Framework
SMIF – Special Municipal Infrastructure Fund
SNG – Sub-National Government
SPSS – Statistical Package for the Social Sciences
SSP – Sector Skills Plan
USDG – Urban Settlements Development Grant
WSA – Water Services Authority
YP – Young Professional

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CHAPTER ONE – OVERVIEW OF THE STUDY

1.1 INTRODUCTION

This research is in the field of project management and public administration. It seeks to solve municipal infrastructure grant problems through the formulation of an appropriate framework that will assist in increasing the spending of funds appropriately as recommended by MIG (Municipal Infrastructure Grant) objectives.

Post-1994 democratic South Africa significantly raised popular expectations in line with the African National Congress (ANC) slogan, “better life for all” (Josie, 2008:3). Dlalisa (2009:73) suggests the “better life for all” vision meant all people of the Republic of South Africa would receive similar attention from government when it came to service delivery across all three spheres of government. However, this was not the perception of everyone.

The national government's central priority was to provide basic services to all, subject to the constraint of available resources, with this objective being set out in the Constitution's Bill of Rights. These rights to which all citizens are entitled include, among other matters: a protected environment that is not harmful to health and wellbeing; housing; health care; food; water and sanitation; social security and education.

Responsibilities in respect of these rights are shared among government bodies, with each sphere of government charged with fulfilling its assigned functions. Local governments carry responsibility for provision of local infrastructure and basic services such as sanitation and water reticulation (Josie, 2008). Dlalisa (2009) maintains that provision of basic services lies with local government.

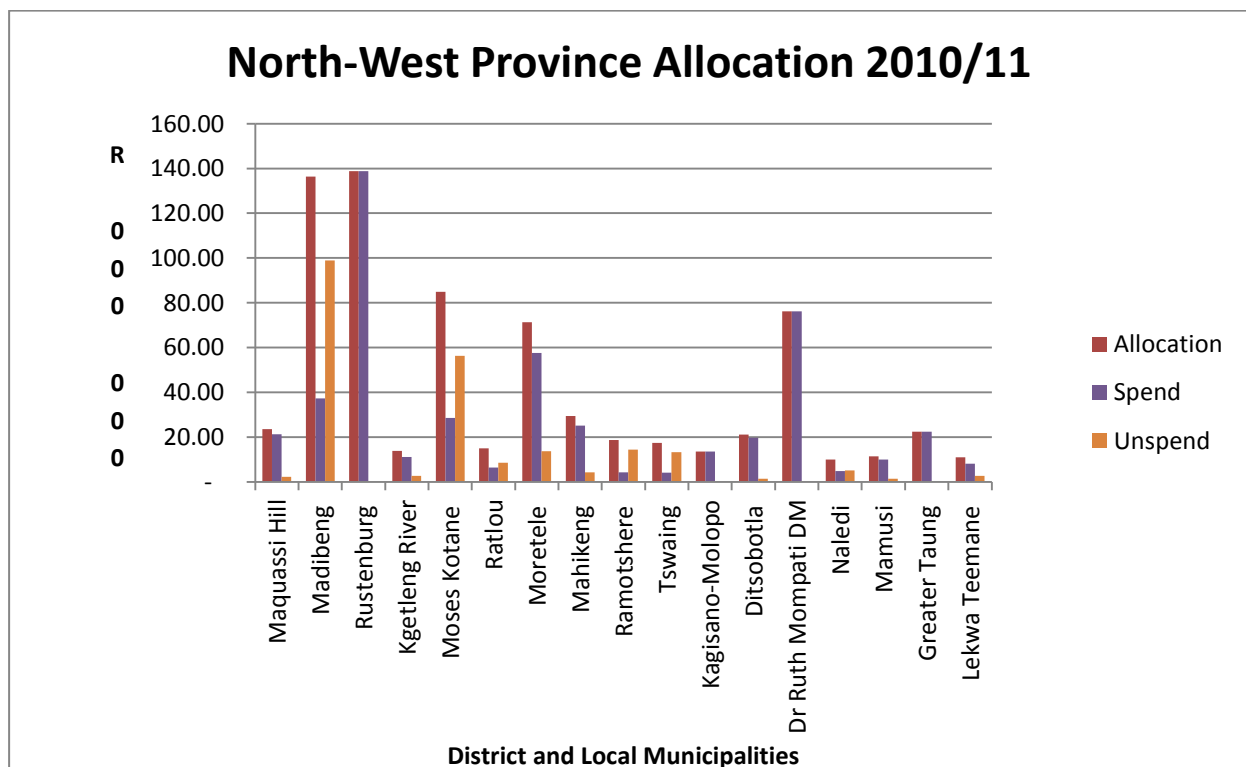
The signing of the Constitution shaped local government as the government delivery system and as an implementation point. However, Section 152 of the Constitution defines South Africa as a developmental state. This implies that municipalities assume a greater and more significant role in economic and social development (Koma, 2010).

Josie (2008:3) maintains that an MIG is a conditional grant used as a funding instrument to target the government's fundamental policy objective of addressing the inequalities and poverty in communities that perpetuate the legacies of apartheid. It must also be noted that MIGs are among the many conditional grants available to local government. According to the DPLG (2004a:2), the vision for MIGs is:

“The municipal infrastructure grant programme is aimed at providing all South Africans with at least a basic level of service by the year 2013 through the provision of grant finance aimed at covering the capital cost of basic infrastructure for the poor. The MIG programme is a key part of government's overall drive to alleviate poverty in the country and, therefore, infrastructure is to be provided in such a way that employment is maximised and opportunities are created for enterprises to flourish.”

The Division of Revenue Act (DoRA) (2007) defines MIGs as allocations intended to address backlogs in basic municipal infrastructure development and the carrying out of municipal services as set out in Schedule 6A of the DoRA. Schedule 6A deals with allocations in kind to provinces for designated special programmes. The DoRA defines such an allocation as provision of specific capital finance for eradicating basic municipal infrastructure backlogs for poor households, micro-enterprises and social institutions servicing poor communities.

This includes, among others, fully subsidising the capital costs of providing basic services to poor households and providing a mechanism for the coordinated pursuit of national policy priorities (MIG, 2004). However, district and local municipalities have returned unused MIG funds to the Treasury during the 2010/11 financial year, one example of under-expenditure being reflected by graph 1.1 and table 1.1 below.



Graph 1-1 North West MIG Allocation 2010/11

The graph above depicts the extent of underspending during the financial year 2010/11 and how Dr Ruth Momapiti district municipalities carried out MIG project functions. The degree of underspending was due to a lack of capacity to manage MIG projects (Singo, 2012).

Table 1-1 Allocation, spend, and unspent funds in millions in 2010/11 financial year

District and Local Municipality	R 000 000		
	Allocation	Spend	Unspent
Maquassi Hill	23.63	21.29	2.33
Madibeng	136.31	37.35	98.96
Rustenburg	138.81	138.81	-
Kgetleng River	13.80	11.09	2.71
Moses Kotane	84.86	28.55	56.30
Ratlou	15.03	6.40	8.63
Moretele	71.27	57.53	13.74
Mahikeng	29.42	25.12	4.29
Ramotshere	18.78	4.34	14.44
Tswaing	17.43	4.13	13.30
Kagisano-Molopo	13.61	13.61	-
Ditsobotla	21.11	19.76	1.35
Dr Ruth Mompoti DM	76.15	76.15	-
Naledi	9.98	4.83	5.15
Mamusi	11.47	10.03	1.45
Greater Taung	22.43	22.43	-
Lekwa Teemane	10.96	8.19	2.77

In the current literature on local government underspending, very little covers the utilisation of MIG. There is no framework for a theoretical model to assist in resolving problems related to the disbursement and allocation of the Municipal Infrastructure Grant. This research was initiated as a result of the underspending of MIGs by local municipalities, leading to many local municipalities returning funds to the National Treasury (Media, 2007:2).

This discussion focuses on the proposed research area, which is in project management and public administration, followed by key research objectives and the problem statement. It outlines the literature review, followed by methodology, motivation for the research and the delimitations of the study. The original contribution to knowledge—Framework formulation—is discussed and the chapter outline is also presented.

1.2 DEFINITION OF TERMS

1.2.1 Project

A project is as a unique endeavour with a defined beginning and end, conducted to meet predetermined goals within set parameters of cost, schedule and quality. The needs and expectation of a local government might be rough at the beginning but can be clarified as the project progresses (Richard *et al.*, 2002).

1.2.2 Long-Term Care

Long-term care (LTC) is a system developed in different developed countries, including South Africa, to provide for the citizens in need of care, but who cannot afford any other means of care. They are provided with publicly financed care (Karlsson *et al.*, 2007).

1.2.3 Revenue-sharing system

A revenue-sharing system is defined as a system that gives local governments an incentive to increase budgetary revenue, affecting municipal finance and allowing more economic autonomy and responsibilities over local interests. This increases local government revenues (Gu & Chen, 2005; Hauptmeier *et al.*, 2012; Jin, Qian & Weingast, 2005).

1.2.4 Fiscal Federalism

Fiscal federalism is a sub-field of public finance that explores the roles of different levels of government and their interrelationship through fiscal instruments or institutions. Fiscal federalism aims to afford sub-national governments the incentive to promote local economic growth (Ring, 2008; Gu & Chen, 2005).

1.2.5 Public expenditure management

Public expenditure management is appropriate planning and spending within budget processes, strengthening expenditure control systems, evaluating and monitoring expenditure control systems and the effectiveness of their establishment (Hatemi, 2002).

1.2.6 Public finance management

Public finance management is the ability to manage revenue and expenditure in financial performance reporting in a timely and reliable manner (Hatemi, 2002).

1.2.7 Property tax

Property tax is imposed by local governments to ensure that property owners contribute to the coffers of their local government. This can become a primary source of revenue collection (Olowu, 2003; Nieman & Krimm, 2009).

1.2.8 Capital grant

Capital grants are disproportionately discretionary allocations to municipalities facing population growth pressures, mainly caused by urban growth (Solé-Ollé & Sorribas-Navarro, 2012).

1.2.9 Regional strategic plan

A regional strategic plan is the means for the central and provincial governments to reposition regions and to reassert their functional importance in local and regional governance (Vogel *et al.*, 2010:22).

1.2.10 Categories of Municipalities

Municipalities are categorised according to Municipal Infrastructure Investment Framework (MIIF) groupings as follows: A municipalities are cities or metros, B1 municipalities are Secondary Cities; B2 municipalities are Large Towns; B3 municipalities, Small Towns; B4 municipalities, Rural Areas; C1 municipalities, District municipalities that are not Water Service Authorities (WSAs); and C2 municipalities are District municipalities that are Water Services Authorities (Palmer, 2008).

1.2.11 Fiscal adjustment

Fiscal adjustment is defined by impulse-response functions. This system is used to trace the fiscal adjustments to temporary imbalances, i.e. to surpluses or deficits that cannot be traced statistically to previous changes in the budget components. The fiscal adjustment process is calculated by computing the present value (PV) of the response of each variable with respect to shocks in every other variable (Buettner & Wildasin, 2006:1118-1119).

1.2.11 Regime

A regime is defined as the informal arrangements by which public and private interests function together in order to make and carry out governing decisions. The regime forms through a meshing of the interests of a number of groups co-operating on an agenda to achieve a set of policies in the interests of the coalition (Pacione, 2001:15).

1.2.12 Fiscal sustainability

Fiscal sustainability is defined as whether or not the current course of fiscal policy can be sustained without public debt exploding or imploding (Schoeman, 2011:6).

1.2.13 Service management decision

Service management decisions are described as the day-to-day operational decisions made by managers (Hildebrand & McDavid, 2011:57).

1.2.14 Local government

Local government is defined as encompassing counties, municipalities, towns and townships as well as special-purpose governing bodies such as those dealing with water, fire and libraries (Garay, Zereyesus & Thompson, 2011:47).

1.2.15 Economic development

Economic development is defined as a sustained increase in the economic standard of living of a country's population, accomplished by increasing its stocks of physical and human capital and improving technology (Girdwood & Girdwood, 2011:22).

1.2.16 Provincial centres

A provincial centre in Afghanistan is defined as a "provincial municipality." These include a number of larger-sized municipalities that serve as regional economic centres. The remaining non-provincial municipalities are commonly referred to as district municipalities or rural municipalities (Boex, Buencamino & Kimble, 2011:5).

1.2.17 e-Procurement in public administration

The term "e-procurement in public administration" is defined as the handling of public procurement processes using information and communication technologies, particularly with the help of the Internet, with the aim of improving and optimising public allocation processes in order to enhance the efficiency of public procurement overall (Wirtz, Lutje & Schierz, 2010:28).

1.2.18 Governance

Governance is defined as a system of values, policies and institutions by which a society manages its economic, political and social affairs interacting within state, civil society and the private sector (Dlalisa, 2009:10, citing Olowu & Sako, 2003:37). The focus of this study will be limited to institutional and technical governance.

1.2.19 Triple constraint

Triple constraint is defined as focusing on the management dimensions with reference to the optimal usage of resources to ensure that project output is adhered to in terms of time, cost and quality constraints (Kerzner, 2003).

1.3 PROPOSED RESEARCH AREA

The research area is in public administration, project management and utilisation of municipal funds. This research focuses on designing a Framework that could be used to improve the efficient and prudent utilisation of municipal infrastructure funding. The Framework is a derivative of the broader discipline of public project management as it pertains to local government in South Africa with particular reference to North West Province.

1.4 BACKGROUND TO THE RESEARCH PROBLEM

Local government is managed under the following legislation: The Municipal Demarcation Act, No. 27 of 1998; The Local Government Municipal Structure Act, No. 117 of 1998 (MSA); The Local Government Municipal Systems Act, No. 32 of 2000, The Local Government Municipal Finance Management Act, No. 53 of 2003, and The Development Facilitation Act, No. 67 of 1995. The Municipal Demarcation Act represented the first step in transformation with its main focus on re-demarcating the boundaries of municipalities. Municipal Structure determines the type of municipalities that can be established while Municipal Systems promotes the idea of citizen participation in local governance, as in The Municipal Finance Management Act and The Public Finance Management Act (Bogopane, 2012).

Singo (2012:5) states that infrastructure provision and service delivery remain the cornerstones of the Reconstruction and Development Programme (RDP). The RDP clearly articulated the government's vision of an integrated process of transformation to ensure the country embarked on a sustainable growth and development path (Singo, 2012; Subban, 2008). Subban (2008) argues that the RDP requires communities to become involved through the formulation of development forums. There is no doubt that development in the community leads to community-building. Aubry, Muller and Gluckler (2011:44) define a community as a group of people with common characteristics or interests living together within a larger society.

However Subban (2008) also recognizes the process as being multidimensional, with inter-related changes from within the society:

“Development is not about the delivery of goods to a passive citizenry. It is about active involvement and growing empowerment. In taking this approach, we are building on the many forums, peace structures and negotiations that our people are involved in throughout the land.”

The Municipal Infrastructure Grant is the largest local government infrastructure development in the country. It is a multi-sectoral grant (CoGTA, 2014b).

According to McCutcheon and Parkins (2009), The Division of Revenue Act (DoRA), enacted in 2002, made it mandatory to use labour-intensive methods for specific categories of infrastructure funded through public infrastructure: the Provincial Infrastructure Grant (PIG) and Municipal Infrastructure Grant (MIG). On the 31st of January 2005, the Deputy Minister of Public Works, Ntopile Kganyago, told Limpopo provincial and municipal government representatives in the course of a speech that:

“We need to remember the law of the country as stipulated in the Division of Revenue Act (DoRA) requires that provinces and municipalities must use the Guidelines for Labour Intensive Infrastructure when using the PIG and MIG budgets for certain types of projects. These guidelines require that provinces and municipalities amend their existing contracts to ensure that certain activities are designed to maximise the use of labour instead of machine.”

The negative impact of under-expenditure of Municipal Infrastructure Grants is not limited to the local and district municipalities of North West Province; other provincial and national departments are underspending their budgets. Such negative impacts are felt in water and sanitation, health care, road development and many other local government projects that fall under the jurisdiction of various municipalities (Ababio, Vyas-Doorgapersad & Mzini, 2008)

The National Treasury retains its policy-making and regulatory function as these pertain to municipalities. The following are the responsibilities of the National Treasury (Smit, 2011):

- Overall allocation of MIG funds through the DoRA;
- Determination of specific MIG conditions;
- Monitoring financial reporting, revenue-related criteria and spending trends;
- Ensuring that municipalities operate within the macroeconomic framework driven by national government; and
- On the advice of the Municipal Infrastructure Task Team (MITT), the National Treasury can make an adjustment to the funds to be received by municipalities.

There has been a positive trend throughout the world in the past decade to modernise local municipalities. This trend is directed towards the improvement of local service delivery (Bovaird & Löffler, 2002).

This perceived and real modernisation of service delivery has increased investment in urban infrastructure and is perceived by municipalities as being the key strategic objective for economic growth and social development (Swilling, 2006). Heywood, Missingham and Kenley (2010:158) concur that local government has strategic purposes concerned with people and the delivery of public services and goods to them. It is from this global background that the South African Government created a mega-fund called the Municipal Infrastructure Grant (MIG), the sole mandate of which is to facilitate infrastructure investment, development and modernisation.

The MIG is a fund of the Consolidated Municipal Infrastructure Programme (CMIP), Water Services Projects, Community-Based Public Works Programme, Local Economic Development Fund, Urban Transport Fund, Building for Sport and Recreation Programme and the National Electrification Programme. In the past, different sector departments managed the funding for these various issues. This management was uncoordinated and not cost-effective, hence the establishment of the MIG in 2004. The MIG can only be used for household infrastructure, public municipal services and infrastructure for institutions other than public municipal services (Smit, 2011).

The DPLG (2006a:3) maintains that the MIG is a conditional grant to municipalities and its management must be carried out at municipal level. This includes planning, budgeting, financial management and operational management. However, effective management and utilisation of capital funding falls within the responsibility of the Municipal Manager.

The success of an infrastructure project is dependent on the approaches used, such as the grant being integrated into such a project and funding being linked to the Integrated Development Plan (IDP), with the community being allowed to identify needful and critical projects (Smit, 2011). According to Media (2007:1) and Muthotho (2007), municipalities that constantly under-spend risk losing this infrastructure grant to better-performing municipalities, in line with Section 20 of the DoRA. This is in spite of governmental interventions as described by Bologo (2007:2).

The problem of municipal under-expenditure was described in 2005 by then-President Thabo Mbeki (2005) in his state of the nation address. This is reflected by graph 1.1 below where under-expenditure was in excess of millions of rands, with the Central District Municipality (Ngaka Modiri Molema DM) underspending by R46.64 million.

1.5 PROBLEM STATEMENT

The study has identified the adverse impact of under-expenditure of Municipal Infrastructure Grant projects on local communities and North West Province in particular. This study focuses on the extent to which the application of MIG processes is affected by the enabling environment in North West Province.

The South African Constitution recognises the decentralisation of government to locally elected governments as a means to improve service delivery to poor communities. This decentralisation includes both fiscal resources and service delivery responsibilities (Khemani, 2005; Singo, 2012). Glaser and Hildred (1999) maintain that there should be a link between service delivery performance and the attendant costs of service delivery. This research looks into different fund utilisation frameworks that have been used in other municipal authorities in order to determine their applicability and adaptation for implementation in North West Province.

The DPLG (2006b:2) developed a framework to assist the management of funds, dealing specifically with under-expenditure. The DPLG (2006b:9) is supposed to appoint a service provider to develop an evaluation framework to ensure proper project implementation. Bovaird and Löffler (2002:10) maintain that local government frameworks need to include local governance. The framework is based on benchmarking against other successful projects and has the following criteria: leadership, policy and strategy, people, resources, processes and different categories of “objective” and “subjective” results. However, the framework is not applicable since, in a South African context, all funding is centrally distributed to local government (Bovaird & Löffler, 2002).

Municipal funds utilisation applied an integrated framework that monitored implementation (Phillip, 2004). The use of this framework was followed by the adoption of the Local Government Turnaround Strategy (LGTAS) in 2009. The Municipal Infrastructure Support Agency (MISA) was also created to help struggling municipalities. Such municipalities have shown improvements in project implementation and expenditure of allocated MIG funds, with a strong focus on infrastructure maintenance and refurbishment (CoGTA, 2014a). However, these municipalities need to be provided with technical and professional support in a sustainable way. The Framework takes care of the utilisation of funds, needs and expectations of beneficiaries and non-financial considerations. Another model, the service balanced scorecard (SBS), was developed by Brackertz and Kenley (2002). It can be adopted by municipalities based on the findings from data and refined from comments of focus groups. However, project cost control, monitoring and procurement processes must be addressed to enhance utilisation of municipal funds.

Project cost control systems can contribute to efficient implementation of projects. Kerzner (2001:813) maintains that cost control implies good cost management, inclusive of cost estimating, cost control, project and organisation cash flow, costing, penalties and incentives. Cost estimation has been revealed as being a huge gap and an area that warrants concern in the DPLG (2006b:4) report. This has posed a risk of over-estimating on capital and under-estimation of operations and maintenance. Kerzner (2001:815) further maintains that all project planning and control systems have an identifiable design requirement such as a common framework within which to integrate time, cost and technical requirements and provide the ability to track progress according to significant parameters.

The project monitoring process has been suggested in the DPLG (2006b:7) report to monitor and work continuously with the municipalities to ensure successful implementation of projects. Capacity constraints, both technical and human resource-related, have also been identified as problematic in relation to the expenditure of funds. It has been found that backlog-monitoring systems lack baseline information (DPLG, 2006b; CoGTA, 2014a).

Delays in procurement processes result in projects being completed late and often being over-budgeted (Singo, 2012). Procurement must be seen as a strategy where municipalities attain and satisfy their mandates and obligations. Kerzner (2001:1140) has identified two basic procurement strategies, namely, corporate procurement strategy and project procurement strategy. This study seeks to find how procurement can be used to ensure utilisation of funds for the betterment of the local government and communities. It also considers what systems should be in place to facilitate utilisation.

MIG funds are conditional grants aimed at alleviating infrastructure backlog. The funds are for the poor and marginalised households. Municipalities have been underspending with funds being returned to the National Treasury, thus denying basic services to communities. This has led to numerous service delivery protests throughout the country (Cogta, 2007).

1.6 RESEARCH AIM

To investigate the impact of underspending on service delivery.

1.7 KEY RESEARCH OBJECTIVES

This study is undertaken to determine the extent to which project management frameworks, project cost control systems, and municipal and project monitoring systems can be structured and implemented in such a way that they promote effective utilisation of municipal funds. This can lead to improved implementation of MIG projects in North West Province. The specific objectives are to determine how the following can assist in solving the problem, namely:

- Determine the primary reasons for under-expenditure of the MIG;
- Identify the roles of all stakeholders in MIG projects, including PMUs;
- Determine the issues faced within the procurement division that impact municipal spending;
- Quantify the extent to which under-expenditure directly contributes to inefficient service delivery;
- Consolidate the findings of underspending of MIG funds; and
- Apply research findings to determine the new framework for spending.

1.8 RESEARCH QUESTIONS

The following are the research questions.

- What are the primary reasons for under-expenditure of the MIG?
- How are the roles of stakeholders managed within MIG projects and PMUs?
- Which issues within procurement divisions affect municipal spending?
- What is the impact of under-expenditure on service delivery?

1.9 RESEARCH DESIGN AND METHODOLOGY

1.9.1 Mixed methods and analysis.

Research design as the determination of any research strategy is dependent on the criteria that are employed, research questions and generation of evidence, extent of control of the researcher over actual events, and the degree of focus over the contemporary as opposed to historical events (Bryman & Bell, 2007; Mullai & Paulsson, 2011). Exploratory design is used in this research due to its applicability in both qualitative and quantitative approaches. It was the choice of the research problem that dictated the use of both quantitative and qualitative approaches: mixed method research.

Kumar (2014:22) maintains that a mixed methods approach allows the researcher to choose the method best suited for the study from within or across paradigms. Leedy and Ormrod (2013) argue that this type of research does not only involve collecting, analysing and interpreting both qualitative and quantitative data but also requires integrating conclusions from this data. The researcher using such methodology must have suitable skills to:

- Identify focused and useful questions;
- Formulate and strategically test an hypothesis;
- Choose one or more samples that will enable inferences about a large population;
- Create and use instruments that can show validity and reliability;

- Conduct structured or semi-structured interviews and open-ended interviews;
- Analyse, draw and persuasively argue for reasonable conclusions from qualitative data. This can be done through triangulation, negative case analysis or even thick description. According to Corbin and Strauss (2008), often the negative case can represent a dimensional extreme or variation on the conceptualization of data; and
- Calculate and draw inferences from descriptive and inferential statistics.

Quantitative data measurement is involved with those values that are numerical, while qualitative data measurement relates to measurement that is inherently categorical (Groebner, Shannon, Fry & Smith, 2005). Mouton (2001:89) maintains that research methodology explains the way the study is going to be carried out. However, there are three prominent criteria for evaluation of research, namely reliability, replicability and validity. Reliability is concerned with whether the results of a study are repeatable; replication or replicability is when the researcher chooses to replicate the findings of others; and validity is concerned with the integrating of the conclusions generated from research (Bryman & Bell, 2007).

1.9.2 Population

Salkind (2012:71) defines a population as the total of the entire individuals having characteristic(s) that are of the interest to the researcher. The researcher deemed it necessary to consider local municipality employees as the population. The focus was, however, on Project Management Units (PMU) procurement and technical staff as they are directly involved in MIG projects.

1.9.3 Sampling

Groebner *et al.* (2005) define a sample as a subset of population. Simple random sampling was used for this research. Each unit of the population has an equal probability or chance of inclusion in the sample. This method, however, does not eliminate sampling error (Groebner *et al.*, 2005; Bryman, 2012:190).

1.9.4 Data collection, method and analysis

Kumar (2014:22) suggests that for data collection, different methods should be used such as questionnaires for quantitative, in-depth interviews and focus groups for the qualitative method. Questionnaire techniques, documentary analysis and literature study pertaining to utilisation of the MIG were used for data collection (Mouton & Marais, 1990).

Creswell (1994:148) sees data collection as involving aspects such as setting boundaries for the study, collecting information through interviews, documents and visual material, and establishing the protocol for recording information. The paradigm and format of the investigation determine the nature of data collection.

Corbin and Strauss (2008:89) define a paradigm as a tool for helping the researcher to identify contextual factors and identify relationships between context and process. The researcher used documentary analysis for qualitative data collection. Riley, Wood, Clark, Wilkie and Szivas (2000:126) argue that for any attitude research, method is needed to display its reliability and validity. Method is defined as techniques and procedures for gathering and analysing data (Corbin & Strauss, 2008).

Questionnaires were used to collect quantitative data with most of the questions using a Likert scale, while other demographic information was sought from participants. Questionnaires were developed using a questionnaire development matrix (Klopper & Lubbe, 2012).

Secondary data collected from the Department of Human Settlement and Traditions (DHST), local municipalities and the Provincial Auditor-General involved MIG allocations from the 2009/10 to 2013/14 financial years, annual reports with financial, income, income and expenditure statements, and audited annual reports respectively. This covered five years as per the statutory requirement that financials should be retained for that period. A legislative and legal framework is provided by the National Archives and Records Service of South Africa (Act No. 43 of 1996). Ngoepe (2008:17), citing Fust and Graf (2002), states that proper management of records is the foundation any government needs to provide services and fulfil its obligation of accountability.

A focus group was used to collect the third set of data. Dilshad and Latif (2013:191) state that a focus group is an interview technique of immense use and value for collection of data in qualitative research. The researcher will approach members of the Integrated Municipal Infrastructure (IMI) for the focus group interview.

The data analysis included both qualitative and quantitative approaches. The quality of research findings is highly dependent on the accountability of the research methodology followed (Mouton & Marais, 1990). Data for this study is presented in Chapter 5 in graphs and tables, based on statistical analysis, to establish why there is under-utilisation of MIG funds by local municipalities in North West Province.

The researcher used SPSS for factor analysis and other statistical analysis. Qualitative content analysis was used to analyse data from documents such as annual reports, balance sheets, financial and income statements and audited annual reports. Content analysis has its origins in communication research and is the “generic name for a variety of means of textual analyses that involve comparing, contrasting and categorising a corpus of data... including both numeric and interpretive means” (Gerbic & Stacey, 2005:46).

1.10 ETHICAL CONSIDERATIONS MOTIVATION FOR RESEARCH

Sarantakos (1997:20) argues that social research is a dynamic process in which the researcher and participants enjoy mutual trust and cooperation. This creates an atmosphere of freedom in interaction. The relationship between the researcher and the participants can be maintained (Sarantakos, 1997:24-25) through proper identification of objectives, clear-cut relationships at the outset, concern for the welfare of the participants, free and informed consent, plus the rights to privacy, anonymity and confidentiality.

In order to satisfy the demands of ethical research, the following measures were followed, as listed by Molukanele (2009:107): participation was voluntary; permission was sought from the people concerned to conduct interviews; and confidentiality and anonymity were assured. Agreement was reached between the researcher and participants that no responses would be summed up or conflated as this could influence the answers of other respondents. North-West University’s ethical committee issued an ethical clearance to safeguard and protect the anonymity and confidentiality of the research participants and for the protection of the researcher’s reputation (Corbin & Strauss, 2012; Bryman & Bell, 2007).

1.11 DEMARCATION OF THE STUDY

The study focuses on the local and district municipalities in the North West Province, as compared to Limpopo, Free State and Mpumalanga provinces. The research also focuses on the five-year period from 2009/10 to 2013/14, in line with the applicable legislation. Metropolitan municipalities are used to benchmark municipality spending since they have sufficient and skilled human resources.

1.12 MOTIVATION FOR RESEARCH

This research seeks to make a contribution towards the improvement of the lives of the people in terms of the provision of basic services such as water, sanitation, health care and improved infrastructure.

Furthermore, it is hoped that there will be a reduction in poverty due to the provision of job opportunities in many government-funded projects such as the Extended Public Works Programme, access to overall government amenities, reduction in crime due to improved policing, and a reduction in the rate of project failures should the framework developed here be efficiently implemented in North West Province.

Lastly, the Framework could increase the sense of responsibility and accountability within the public sector and within individual sectors in terms of financial and professional prudence and accountability.

1.13 ORIGINAL CONTRIBUTION TO THE BODY OF KNOWLEDGE

This research will add new knowledge to project management in the public sector in terms of service delivery and also in project implementation by ensuring projects are completed in time, save costs and are implemented to pre-agreed standards, by improving the socio-economic status of local communities, alleviating poverty, streamlining project success factors, empowerment of project management units (PMUs) and the integration of procurement systems in the MIG projects in North West Province. The thesis proposes the design of an operational framework that would improve the use of MIG funds in North West Province.

1.14 CHAPTER OUTLINES

Chapter 1: Overview of the study

This chapter introduces the background of the problem statement. The discussion includes research objectives and questions, research methodology, motivation for the research, limitations to the study and its contribution to knowledge. The layout of the thesis is briefly explained.

Chapter 2: Literature Review

The literature review is contained in this chapter. The review focused on the best practices in emerging countries, the SADC, BRICS and South African municipalities. The role of local municipalities is considered, likewise the problem and impact of revenue in South Africa, and then the researcher discusses implementation levels, efficiency and resources, and process re-engineering.

Chapter 3: Theory

The chapter focuses on the revenue, public, financial management, project management and governance, project delivery systems (PDS), procurement and introduces fFramework formulation.

Chapter 4: Research Methodology

This chapter presents the methodology outlining the research process followed in gathering empirical data. This involves sample selection, data collection, method and analysis, case study methodology and ethical consideration.

Chapter 5: Quantitative Data Presentation and interpretation

This chapter outlines how data is analysed, after being obtained from questionnaires. It is presented in terms of graphs, tables, linear regression and reliability testing using Cronbach's alpha.

Chapter 6: Qualitative Data Presentation and interpretation

This chapter involves data presentation from documentary analysis. The researcher has used MIG allocations from the national CoGTA, the national Treasury Department database, annual reports from respective local municipalities, and audited annual reports from provincial Auditor-Generals. North West Province was compared against Limpopo, Mpumalanga and Free State provinces in terms of municipal infrastructure grant allocation and spending. Three metropolitan municipalities are used to provide benchmarks against North West Province's local municipalities. The purposive sample is the City of Matlosana, Rustenburg and Tlokwe Local municipalities.

Chapter 7: Findings and discussion

This chapter includes the findings and discussion thereof. The investigation is summarised and the main findings are critically discussed, based on the results presented in chapters 5 and 6 and findings from the already published empirical studies. An operational Framework is developed from the findings and the literature reviewed.

Chapter 8: Focus Group and Refined Framework

The researcher outlines answers the research questions. The Framework that was formulated in Chapter 7 is subjected to focus group interview. Focus group interviews are another way of collecting data. Critiquing and discussing the Framework assist the researcher to refine it.

Chapter 9: Conclusions and recommendations

This study concludes with the research questions being answered. The researcher makes recommendations based on the study and findings and suggests areas for future research.

1.15 CONCLUSION

This chapter has introduced the background to the study regarding investigation into an approach to investigate the utilisation of the Municipal Infrastructure Grant. The background focused on how MIGs are under-expended with funds being returned to the National Treasury. This chapter also described the aim of the study, which is to investigate the impact of under-spending on service delivery and to design a Framework to improve the utilisation of MIG funds in North-West Province.

1.16 LINK TO NEXT CHAPTER

This summary has focused on the background, introduced the research topic and objectives, research methodology and chapter layout. The next chapter reviews the literature pertaining to the role of municipalities, municipal funding and revenue collection, among other topics. It covers Brazil, Russia, India, China and South Africa... the BRICS countries.

CHAPTER TWO – LITERATURE REVIEW

2.1 INTRODUCTION

The researcher used search engines including Google Scholar and academic databases such as EBSCO, AAAS/Science Direct, APA and Emerald in the search for literature relating to the problem statement. Keywords used in the search include: local government, municipalities, municipal infrastructure grants, expenditure, under-expenditure, project delivery systems, procurement and service delivery.

2.2 LAYOUT OF THE CHAPTER

The chapter focuses on the role of municipalities in the BRICS countries, discussing the problems they have with revenue collection and the impact these have on local government. However, BRICS poses another problem, as the area of study is South Africa, and the countries involved have differing political landscapes and economic systems. The emphasis will be on some aspects within the BRICS countries, but predominately concentrating on South Africa. The critical review of key studies considers local government revenue issues and their impact on the efficiency and the effectiveness of local government.

2.3 ROLE OF MUNICIPALITY

The researcher looks into the roles of municipalities within the BRICS countries, utilizing the available literature. There has been growing recognition worldwide of the role of local governments in international development cooperation after the United Nations acknowledged in 2005 the role of local authorities in the achievement of the United Nations Millennium Development Goals (MDG), as this was the level of government closest to the people, making local government a good fit for international development work. It is increasingly recognised that decentralised, bottom-up forms of development assistance, as delivered by local governments, offer an alternative approach to development (Evan, 2009:142).

2.3.1 Brazil

Marketline (2015) says that Brazil is a strong federal republic and its democratic government is limited by law and derives its authority from the country's constitution. The three most important principles in Sino-Brazilian relations are non-interference, equality and mutual benefit.

The country is divided into states and municipalities, each with its own administrative division (Marketline, 2015:2). Basic education consists of eight years of primary, followed by three years of secondary, with all public schools being run by municipalities and states. Municipal colleges and universities are predominantly concentrated in large cities in the southern and south-eastern parts of the country (Marketline, 2015:75). Marketline (2015:82) maintains that the legal authority of the municipalities is restricted to matters of local interest while in South Africa, authority is decentralised to local authorities.

Municipalities need to be aware of the programme and can expect benefits from actually making an effort to create new conservation units, or they can access revenue from the ICMS-E (*Imposto sobre Circulação de Mercadorias e Serviços*) for additional conservation benefits, as in the state of Minas Gerais. The decentralised structure of the State Forest Institute is responsible for monitoring all information related to ICMS-E transfers, based on conservation units: this has turned out to be extremely helpful in terms of publicising the new law. With its 150 local and 14 regional offices, the State Forest Institute has acted as an important source of information for municipalities with an interest in participating. Municipalities with a high percentage of protected areas can benefit substantially from the ecological services the Institute provides across local boundaries. Many municipal governments depend on this information and policy. The public as well is now aware of the natural assets the Institute preserves and maintains (Bernardes, 1999; Ring, 2008).

2.3.2 Russia

Fiscal data, including that on retention rates and inter-governmental transfers provided by Moscow Centre for Fiscal Policy, generated the necessary indicators based on the original database of the Russian Ministry of Finance. All other regional indicators were obtained from the Russian Federation's State Committee for Statistics (Desai, Freinkman & Goldberg, 2005).

In Russia, municipalities with many swing voters are given larger grants than others. The counties or district municipalities are responsible for public medical services, while municipalities are responsible for schools and care of the elderly. In addition to this guaranteed service level, the government can decide on supplementary transfers to municipalities that have run into economic difficulties.

Variations across municipalities have increased over time and, likewise, the level of intergovernmental grants (Johansson, 2003). Transfer is defined as how countries achieve vertical fiscal balance and ensure that the revenue and expenditures of each level of government are approximately equal (Santos, Ring, Antunes & Clemente, 2012; Ring, 2008; Richard, Smart & Smart, 2002).

A municipality is constrained to provide the same level of service across its entire area. It is the responsibility of the municipality to provide security to its habitat. In a municipality without a Business Improvement District (BID), the level of service leaves some property owners dissatisfied (Brooks & Meltzer, 2009:9).

2.3.3 India

According to Mitra, Bhattacharya and Ghosh (2014:229), studies of local government in India have focused on themes such as devolution of power, local government and poverty reduction, the organisational dimension, gender and inclusiveness. Local government in India operates on a decentralised system, as in South Africa. This has been found to improve public service delivery. To make decentralisation work, it is necessary to devolve administrative and fiscal powers to local level.

2.3.4 China

Shanghai, in the People's Republic of China (PRC), is the only state with a regional government that governs the larger city-region territory. Shanghai is an exception in that it operates both as a municipality and a provincial authority.

Elsewhere, there has been metropolitan reform such as Canada's amalgamation of Toronto with Toronto Metro (1998), Britain's re-establishment of the Greater London Authority incorporating the boroughs (2000), and Japan's transformation of administrative wards to fully fledged municipalities in central Tokyo with consequently greater independence from the Tokyo Metropolitan Government (1998). However, metropolitan reform aimed at enlarging the boundaries to cover the larger city region has rarely been considered in South African cases (Vogel, Savitch, Xu, Yeh, Wu, Sancton, Kantor & Newman, 2010:7).

The Chinese Government tends to handle social control mechanisms rather differently at local government level. According to Wang (2015:2), there are three general responses, these being concession, repression and tolerance. However, central and provincial levels of government tend to intervene in the event of large-scale and more violent collective resistance. The goal of local government in the 2000s was to contain social discontent, instead of resolving grievances. Employees are evaluated on such issues as "stability control" (Wang, 2015). This approach differs from that in South Africa, where democratic processes allow people to protest freely.

2.3.5 South Africa

Sections 4 and 5 of the Constitution of the Republic of South African (1996) assign functions to the three spheres of government, that is, national, provincial and local government. Section 153 empowers municipalities to structure and manage administration, budgeting and planning processes. These functions are clarified by the Municipality Structure Act (Act No. 117 of 1998) to avoid duplication of functions between municipality B and C. The Local Government Municipal Act, 1998 (Act No. 27 of 1998) defined a metropolitan as a large urban settlement with high population densities (Smoke, 2001; DPLG, 2007; Singo, 2012).

Palmer (2008) defines municipal categories as per the Municipal Infrastructure Investment Framework (MIIF) groupings for his analysis. These are A municipalities, comprising Cities or Metros; B1 municipalities, comprising Secondary Cities; B2 municipalities, comprising Large Towns; B3 municipalities, comprising Small Towns; B4 municipalities, comprising Rural Areas; C1 municipalities, comprising District municipalities that are not Water Service Authorities (WSAs); and C2 municipalities, comprising some District municipalities that are WSAs. The objective of the analysis was to derive a benchmark of the normal time frames for project preparation and completion (Palmer, 2008:10).

Legoabe and Ngozwana (2012:53) maintain the White Paper strongly suggested that municipalities need to develop at least three sets of capacities in order to improve service delivery. These take the form of strategic capacity to assess, plan and develop innovative programmes to meet local needs and make significant contributions to social and economic development; integrated capacity to co-ordinate and integrate outputs from inside and outside the administration to ensure development outcome; and a community orientation to inform user-friendly, relevant and quality services to local communities.

Legislative and policy framework is provided for in sections 151 to 164 (Chapter 7) of the Constitution, the Local Government Municipal Structure Act, 1998 (MSA), the Local Government Municipal Finance Management Act, 2003 (MFMA), the Local Government Municipal Systems Amendment Act, 2003, the Municipal Property Rates Act (2004) and the Municipal Systems Act of 2000. These acts form the cornerstone for municipal operations, planning, governance and accountability, and formation of policies and procedures (National Treasury, 2004; Singo, 2012).

The Municipal Structure Act No. 117 of 1998, 2000 Amendment, dealing with the division of functions and powers between district and municipalities, contains the following objectives: equitable, efficient, affordable, economical and sustainable access to basic municipal services for all consumers; providing municipal services as close as possible to the intended consumers; minimising costs of services to consumers; achieving economies of scale in the delivery of service; minimising inter-jurisdictional spill-overs; promoting efficient, effective and accountable public administration; and addressing the historical inequalities in society (Smoke, 2001).

The main goals of municipal concentration are service delivery, equitable provision of services and better planning across a metropolitan area. Municipal mergers are promoted because public welfare services are more efficiently produced in large municipalities. Municipalities are supposed to transfer the planning, organisation, provision and control of the main municipal services to a central administration unit with a separate budget (Bönisch, Haug, Illy & Schreier, 2011; Fox & Gurley, 2006).

Singo (2012:18-19) argues that the Department of Provincial and Local Government (DPLG) is the leader of the sector and custodian of infrastructure while the National Treasury co-ordinates overall allocation of the government's contribution towards infrastructure. However, CoGTA (2014a) maintains that local government is the primary site for delivery of services. Levels in the municipality are important as they provide services and the demographic structure for cost determinants. The conception of this political form draws on the theory of the capitalist state that emerged from debates among Marxists of the 1970s (Johansson, 2003:896). Singo (2012) tabulated the backlog in municipalities.

Table 2-1: Key municipal services backlogs (Source: MIIF, 2008)

Municipal service	Service level representing a backlog
Water	No reticulation
	Public standpipes below RDP standards (i.e. more than 200 metres from dwelling)
Sanitation	No sanitation available to the household
	A pit latrine not provided with ventilation, and
	Bucket latrines
Electricity	No electricity for lighting
	No reticulation
	No solar home system
Solid Waste Management	No rubbish disposal
	Collection less than weekly
Housing	Single informal dwelling, or
	Backyards shacks more than 7% of housing
	Overcrowding in urban formal areas more than 10%

The role of the DPLG is to ensure proper co-ordination between all municipal infrastructure programmes and sector departments at provincial level; monitor municipal performance; ensure regional scale infrastructure is guided by provincial government collaboration; assist in maintaining programme management systems and functioning PMUs; and provide technical support through all phases of an infrastructure project (Singo, 2012, citing DPLG, 2008). Sector departments are the Department of Public Works (DPW), the Department of Water and Sanitation (DWS, formerly the Department of Water Affairs and Forestry (DWAF), and the Department of Transport (DoT)): their conditions are attached in Appendix F.

LGSETA (2012) identifies the following as key stakeholders within the local government: the Department of Co-operative Government, serving as a regulatory and co-ordinating body for the local government sector; the Department of Traditional Affairs, serving as regulatory and co-ordination body for traditional affairs and traditional leadership institutions; the provincial departments of Housing and Local Government; the South Africa Local Government Association (SALGA), as an organised employer body; the South African Municipal Workers Union (SAMWU) and the Independent Municipal and Allied Trade Union (IMATU), as the trade unions in the sector. Gale (2011) maintains that external stakeholders can derail a project if their concerns and expectations are not addressed.

A PMU has a PMU manager, administrator, data capturer, technician and financial/legal staff within its staff complement. These employees are meant to fulfil the functions of the unit. However, when a unit is under-staffed, municipal staff can be used to perform some of the functions (Van Aswegen, 2012).

It is the responsibility of the project manager and project team to win stakeholder backing. Negative stakeholders should not be viewed as project risks; rather they should be considered part of the project landscape and actively managed. Neutralising or containing them will depend on their political status. The public could be educated about the project through road shows, covering topics such as scheduling, environmental issues, technology and jobs. Training centres can be established within the project to develop the local labour pool (Gale, 2011).

The key performance areas for local government sectors are identified by the SETA as being good governance and the deepening of democracy; municipal transformation and institutional development; municipal financial viability and management; basic service delivery and infrastructure development and sustainable local development (LGSETA, 2012:19). Heywood, *et al.* (2010) maintain that professional work in the organisational context contains issues of organisational governance. These stakeholders are critical for finding new paths and achieving many of the government's 12 outcomes (National Treasury, 2011).

Municipalities in South Africa play a strategic role in relation to future energy systems, exploring and developing new roles such as climate policy and energy planning, including policies such as rain- and wind-harvesting projects in South Africa (Sperling, Hvelplund & Mathiesen, 2011:1339). The content of municipal energy plans and strategies is an indication of the ambition of municipalities when it comes to energy planning. These roles and responsibilities require thorough revision in order to contribute to the development of concrete strategies for 100 percent revenue energy (Sperling *et al.*, 2011:1344). However, municipalities are rarely able to generate income from the provision of ecological services. On the contrary, they are often restricted when it comes to land-use planning (Ring, 2008:485).

Developers make huge profits by relocating residents and changing land use. If a site is planned for redevelopment, sitting tenants need to be compensated. Instead of direct negotiation between public projects and farmers in regard to land acquisition, the municipal government can first acquire land and then transfer the use right to the projects concerned. This approach speeds up land acquisition through a standard compensation procedure and encourages the sharing of common facilities (Wu, 1998, 2002a; Vogel *et al.*, 2010:27).

2.4 PROBLEM WITH REVENUE

The study looks not only at China and South Africa, but also considers other countries outside the BRICS group such as the United States, Canada, Mexico and Germany. This was due to available literature during the study period.

2.4.1 South Africa

The Republic of South African Constitution and legislation such as the Municipal Structures Act allow municipalities to raise funds for financing services. This local revenue is unlikely to be sufficient to meet municipal expenditure needs as per their annual budgets. This warrants local government being entitled to an equitable share of nationally raised revenue, including the Municipal Infrastructure Grant (MIG) as one of the many available grants (Smoke, 2001:20).

The DPLG (2004c:3) states that the Framework for the infrastructure investment is as listed in the table below. This fund does not operate through the equitable share for local government but is provided through eight autonomous programmes including both asset and cash transfer.

Table 2-2: Existing funds and budget allocations (Source: DPLG, 2004c:3)¹

	Responsible department	Transfer type	2002/3	2003/4	2004/5	2005/6
Consolidated Municipal Infrastructure Programme (CMIP)	DPLG	Cash	1,671	2,246	2,724	3,016
Water Service Project	DWAF	Cash/ Asset	999	1,102	948	1,037
Community-Based Public Works Programme ²	DPW	Cash/ Asset	260	260	555	588
Local Economic Development Fund	DPLG	Cash	111	117		
Sport And Recreation Facilities	DSR	Cash	76	123		
National Electrification Programme to LG ³	DME	Cash	228	240	245	258
Urban Transport Fund	DoT	Cash	40	9		
Integrated Sustainable Rural Development		Cash	32			
MIG ⁴	DPLG	Cash		47	117	97
Sub-total capital			3,416	4,144	4,588	4,996

CoGTA (2014b) and Vanier and Rahman (2004:12) state that the CMIP was established with the primary objective of funding the municipal backlog through provision of basic levels of infrastructure to low-income households. Its aim is to enhance long-term sustainability and improve service delivery.

¹ Data Source: National Treasury: Budget Review 2003, Table E16

² Allocations in 2004/05 and 2005/06 were subject to review by Cabinet of all poverty relief programmes.

³ Allocation to Eskom not included as it is not taken as funding to local government. But amounts were substantial: R600m increasing to R740m.

⁴ Methodology for MIG allocation was uncertain

It also focuses on improving the municipalities' ability to improve contract management and their operation and maintenance capacities. CMIP mainly funded four categories of infrastructure, namely:

- Installation of new trunk and connector infrastructure for greenfield development;
- Upgrade of existing infrastructure;
- Rehabilitation of existing infrastructure; and
- Rehabilitation of support services.

Problems with revenue can arise even if tax rates are set by the national government while the revenue is collected by local government... this latter resulting in low revenue collection. Such low collection is evident in Germany, also with VAT collection in Mexico and South Africa (Richard *et al.*, 2002:901).

The Business Improvement District (BID) model can ameliorate this. A BID is formed when a majority of property owners in a commercial neighbourhood vote to tax themselves in order to provide local services. This model was initiated in Toronto, Canada, in the early 1970s and in New Orleans, Louisiana, in 2003. A BID allows neighbourhood members to overcome the revenue problem by collective action and bring about service provision (Brooks & Meltzer, 2009:2-6).

The ability to raise a property tax is subject to economic constraints. Local tax bases are sensitive to the tax rate, as any property improvement attracts a higher tax assessment. Increases in property tax directly depress property values. Such future tax burdens decrease a buyer's willingness to pay for property (Brett & Tardif, 2008:441).

The viability of certain municipalities is hindered by their low rate of revenue collection. This undermines abilities to deliver services to communities (CoGTA, 2014a:6). But, to cite Albert Einstein:

"We cannot solve today's problems with the same level of thinking that created the problems in the first place."

CoGTA (2014a) recognises the need to change the method of solving problems by putting people and their concerns first; creating conditions for decent living; improving governance; ensuring that sound financial management and accounting resources exist; and finally, by building sound institutional and administrative capabilities.

2.4.2 Other countries

2.4.2.1 United States of America

The concept of Real Estate Investment Trusts (REITs) has been the key reason for, and outcome of, the liberalisation of property investment. The National Treasury of South Africa is considering REIT policy. A REIT is an international form of property investment that enhances investment financial systems. The growth of REITs in the United States has set the stage for the REIT approach to be securitized across the globe. In the United States, REITs have been linked to forced evictions of tenants: appropriate policies need to be in place for REIT introduction in the residential sector to prevent its exploitation for excessive commercial gain (Parthab, 2009:20).

The global introduction of REIT as an investment vehicle has brought problems. Unger (2006) identifies the following issues: loss of tax receipts; encouraging the irreversible replacement of long-term social investment at low rates of profit; and the development of massive concentrations of financial power and anti-democratic political influence. REITs not only make housing markets dependent on international speculation, but also increase the economic pressure on other public real estate (Parthab, 2009:20).

2.4.2.2 Germany

In some German municipalities, public property owners have been bankrupted as a result of changes in the structure of ownership and management of rental housing. The South African Listed Property Index has lost 36.4 percent of its value with investors losing R32,3 billion between November 2007 and 2008. South Africa's REIT policy design intends permitting REITs liberally across all property types, including residential property. Similar moves have caused problems for social housing in countries such as the United States, the United Kingdom, Canada and Germany (Parthab, 2009).

Defining numerous municipalities as neighbours for a given community can affect taxes in nearby municipalities. Taken on an average over neighbouring jurisdictions, tax rates will, of course, present a variable with even smaller variation. This problem can be expected to become more severe as more municipalities are, on average, defined as neighbours for a given community (Hauptmeier, Mittermaier & Rincke, 2012:415).

Socioeconomic plans are made to clarify the overall positioning of regions and major cities, provide blueprints for priority development areas, and find solutions for problems that are difficult for one city or one province to solve.

These directly connect state resource allocation to spatial formation where regional planning is weak and infrastructure follows market choices, leaving substantial problems of coordination for fragmented and tangled institutions of governance.

Regional inequalities, as with like rural-urban dualism, have been major problems. But these problems were deeply embedded in state socialism. Just as in the sphere of social reproduction (Nee, 1991), the state performed redistributive functions in regional development (Vogel *et al.*, 2010:19).

2.4.2.3 Mexico

The distribution of conditional transfers is discretionary but the SIF has been used for political purposes. This has been accomplished because, according to the Mexican Constitution, the Federal Government cannot channel resources directly to municipalities, but only through state governments (Hernandez-Trillo & Jarillo-Rabling, 2008:1547). According to Gorka (2006:7) action undertaken by the Department of Environment has probably solved this problem, but the issue of decreasing receipts from charges and penalties remains unsolved.

In principle, some transfers make it possible to introduce bottom-up decision-making mechanisms. In Mexico, municipalities are structured in such a way that important decisions are made by popular representatives. The popularly elected representatives conform to the so-called “cabildos”, a type of local congress (Hernandez-Trillo & Jarillo-Rabling, 2008:1549).

There are two models of budgetary collaboration, namely aligned budget and pooled budgets. Aligned budget is where each role player decides to assign an agreed part of their own budget in support of a common initiative, while pooled budgets refer to resources using special funds, such as the MIG, to achieve a common objective. The objective in this instance is the provision of infrastructure. MIG project implementation fits both approaches, namely “hosting” and “third-party” approaches where one partner takes responsibility, and a special unit is established respectively. A Project Management Unit (PMU) is a special unit established to implement projects within a municipality (Raine, Watt, O'Donovan, Pritchard & Cattell, 2011:1-2).

Empirical studies have shown that regions receiving higher transfers from the central government are observed to vote more in support of the party in control of the central government. This may be because the resources were funnelled to those regions precisely because of their loyalty. Endogeneity of resource transfers (to individuals or communities) is therefore a major hurdle that must be overcome (Litschig & Morrison, 2009:2).

Developers are increasingly opposed to paying for new infrastructure, arguing that the income a municipality derives from property rates ought to cover such infrastructure. The edge of the built-up metropolitan area is the most attractive area for developers since it is virgin ground without the encumbrances faced when developing within currently built-up areas.

However, this virgin ground by definition has little infrastructure present and development there is also contrary to the Spatial Development Framework (SDF) policy. The lack of infrastructure in these “city-edge” areas has been viewed by developers and landowners as “blocking development” and in mid-2007, civil society bodies representing business and property interests brought pressure to bear on municipal administrations. The intention was to restructure the apartheid city spatially and remedy structural problems (Breetzke, 2009:7,14).

2.4.2.4 Canada

An ongoing problem for local governments has been the tendency for higher-level governments to hand responsibilities downwards without providing the commensurate resources. This “mandates without money” issue is a persistent irritant in relationships between local governments in countries like Canada, which has provincial governments under the federal government.

Value for money is a major issue for local government managers and elected officials. In Canada’s New Brunswick Municipal Council, property taxes and user-charges are the two principal ways in which revenues are raised. This is a narrow revenue base compared to that for local governments in the United States and Europe. Local government officials regularly find themselves caught between increasing demands for services and low tolerance for property tax increases (Young, 2009; Hildebrand & McDavid, 2011; Brett & Tardif, 2008). Similarly, this “mandate without money” has led to many municipalities in South Africa receiving qualified audit reports.

2.5 IMPACT OF REVENUE IN SOUTH AFRICA

The local economic situation has an impact on public spending for social welfare, housing, health care, and public safety (Eichhorst, 2007:756). Analysis of the impact of population ageing on public spending in four European countries gave rise to a more comprehensive LTC system of informal care and private funding (Karlsson, Mayhew & Rickayzen, 2007:108). Portugal’s introduction of a new Local Finance Law resulted in the design of a new ecological fiscal transfer scheme (Santos *et al.*, 2012:261).

This inter-governmental fiscal arrangement supports growth and investment, following investigation of the impact of fiscal recentralisation in the 1990s (Gu & Chen, 2005:1022; Desia *et al.*, 2005:822). Section 6 of the Municipal Finance Management Act (Act 53 of 2003) in South Africa permits municipalities to invest funds as prescribed in the Act.

Fiscal information can be influenced by citizens, making it significantly less likely that they will support taxes for services. This fiscal information lowers support for taxation for services and can increase opposition (Simonsen & Robbins, 2000). However, budgeting for collaboration has significant impact on the accountability aspect (Mitchell & Thurmaier, 2011:6). Four key reasons motivate local authorities to pursue budgetary collaboration, namely: to achieve better outcomes for users; to address a problem that could not be tackled by one organisation alone; to achieve financial savings; and to reduce duplication of services (Raine *et al.*, 2011:2).

Input-output analysis of economic systems is often used to study the impact of changes in the demands of the external components on the outputs and inputs of production sectors. This model is used to analyse a city's economic conditions. The data used to estimate the empirical model of tax and public input competition comes from a sample of 1,100 German municipalities in the state of Baden-Wuerttemberg, covering the period 1998-2004 (Correa & Guajardo, 2001; Hauptmeier *et al.*, 2012).

South Africa's interest rates from April 2008 to June 2008, combined with high inflation, rising electricity charges introduced by ESKOM, and rising food costs have impacted the listed property sector in South Africa (Parthab, 2009). Furthermore, free market policies such as REIT have an impact on the urban environment. Urban restructuring for the poor in post-apartheid SA has been marginalised. Three options available to local government have been identified as: broadening existing sources through rate increases or optimisation strategies; developing new revenue sources; and reducing current service levels. The tax base can also enable municipal governments to make existing revenue sources productive (Parthab, 2009).

It is important that countries first determine the feasibility of permitting REITs. The broader issue to be investigated is the liberalisation of the real estate market and its impact on urban form in relation to a case study of KwaZulu-Natal. It is first necessary to establish the method used to monitor and evaluate real estate at local government level (Parthab, 2009). However, revenue collection efforts can be achieved by improving the methods (Hatemi, 2002:108).

In Brazil, the heterogeneous responses reflected the uniqueness of the 1989 election there, which involved large-scale voter rejection of the Democratic Social Party (PDS). Being the party of the authoritarian regime made the PDS's chances of winning so low that any beneficial impact from the additional transfers was unobservable. This is consistent with the fact that the re-election probability for municipalities to the left of the cut-offs was about 10 percent for the PDS while it hit 35 percent for opposition municipalities. The fact was that the transfers improved the re-election prospects of all other parties.

Even in the context of weak party identification, a new democratic regime, and term limits on incumbents preventing their re-election, this result suggests that such transfers should also have positive local electoral effects in consolidated democratic systems (Litschig & Morrison, 2009:19).

2.6 CHANGE MANAGEMENT AND LOCAL GOVERNMENT FUNDING

China's regional economies have experienced profound changes over the past 20 years. The interplay between local governments and the central government—under various fiscal relationships—has had a major effect on China's regional economies (Gu & Chen, 2005:1021). Meanwhile in Mexico, according to the Constitution, the Federal Government is not allowed to channel funds directly to municipalities. All transfers must be made through state governments. All the MIGs are channelled through the central government's National Treasury Department. These funds are disbursed in a redistributive manner, albeit with some degree of discretion that has the effect of weakening the redistribution element (Hernandez-Trillo & Jarillo-Rabling, 2008:1549).

Majority rule can sometimes ignore the interests of a minority. Intradistrict homogeneity and interdistrict heterogeneity work in favour of decentralisation, whereas intradistrict heterogeneity and the non-negligible presence of minorities favours centralisation when decentralisation may hurt minorities and reduce overall economic efficiency (Akai & Mikami, 2006:53).

One cannot mention planning without securitising fund allocation. Mohaptra (2015) maintains that the whole planning process, starting from formulation of the Vision document to finalisation of the District Plan, is dominated by issues of funding. However, according to Mohaptra (2015) this raises questions about the usefulness of the process as the gap increases between proposed outlay and actual allocation. The table below presents the projected gap between available and required funds under three major Indian sectors for the financial year 2012-2013.

Table 2-3: Sector-wise analysis of resource requirement and resource availability of three major sectors during the year 2012-2013 (Rupees in lakhs, i.e. 100,000 rupees) (Source: Mohaptra, 2015:100)

Year	Sector	Resource Requirement	Resource Availability	Resource Gap
2012 - 2013	Social Science	48,799	46,174	2,625
	Rural Development	10,219	7,798	2,421
	Agriculture and allied sector	9,049	5,934	3,115
Total		68,067	59,906	8,161

The table shows the required resources for three major sectors being calculated as Rs 68,067 lakhs, with only Rs 59,906 lakhs being available. Thus, the estimated gap is Rs 8,161 lakhs, which is 11.98 percent below the requirement. However, according Mohaptra (2015), there is no plan to adjust the gap. For this reason it is suggested that issues relating to devolution of funds be reviewed.

According to LGSETA (2012:20), change and demand for skills is largely driven by the constitutional mandate of municipalities. During the apartheid era, municipal borrowing was restricted to the former white areas. This enabled them to achieve and sustain higher standards of infrastructure (Singo, 2012).

It is often argued that rich local governments always ignore differences in needs, costs, revenue-raising capacity, or local preferences and instead opt for centralisation. A transfer system provides each local government with sufficient funds to deliver a centrally pre-determined level of services. Believers in principle capacity maintain that local governments are spending what they and their constituents view as other people's money and therefore they are unlikely to be under much local pressure to spend this money efficiently (Richard *et al.*, 2002).

The DPLG (2004c:4) suggests that the efficient use of funds is one of the principles and objectives of MIG. Funding should be used to improve access to basic services at the lowest cost.

Some of the implications of this are: appropriate selection of service levels; funds are mixed with grant funds to minimise leakage to non-eligible households; the mechanism to disburse funds should be simple and easy to monitor; and outcomes of municipal spending should be easy to monitor (DPLG, 2004c).

The introduction of Local Finance Law (LFL) has brought about many changes. Under the former regime, municipalities received 30.5 percent of the average revenue collected from income, profit and sales taxes (IRS, IRC and IVA). Of this, 4.5 percent constituted the Municipal Base Fund (MBF), which was shared equally among all the municipalities; 20.5 percent constituted the General Municipal Fund and 5.5 percent the Municipal Cohesion Fund (Santos *et al.*, 2012).

Meanwhile in Portugal and its overseas territories, the Municipal General Fund (FGM) was broken down into three territorial units, mainland Portugal, the Azores Autonomous Region and the Madeira Autonomous Region. The change is in the implementation of the ecological fiscal transfer scheme in the context of FGM (Santos *et al.*, 2012:264).

Federal governments are generically bound to equalise public funds across member states so as to enable household access to minimum public service levels irrespective of the place of residence in the federation (Koethenbuerger, 2008:17). The main unconditional grant to Spanish municipalities has a low equalisation power as it is earmarked as capital grants and constitutes a sum that has to be matched by a municipality's resources (Solé-Ollé & Sorribas-Navarro, 2012:3209). However Poland uses Western models of the 1990s, which indicates the necessity for change in the system of charges and environmental funds. Collection of environmental fees and penalties plays important and specific roles in the financing of investment for environmental protection in Poland and in other Central and East European countries (Gorka, 2006).

The "Federalist" approach assumes that funds flow to local responsible political bodies and that there is sufficient accountability and no desire for local government interference in terms of local expenditure choices. This is not the case in South Africa. When central government employs local governments as agents in executing national policies, such transfers must be conditional on the funds being used properly (Richard *et al.*, 2002).

The Philippines model seems close to the federalist approach, with most funds coming from internal revenue allocation (IRA). These funds are allocated, in part, equally to each province and in part according to population and area.

The poorest region, Bicol, received slightly above the average, while the Cordilera Administrative Region received almost double the average regional transfer per capita. This makes distribution unequal (Richard *et al.*, 2002:906).

Extensive governmental decentralisation characterises the three states, 32 counties and more than 2,000 local governments constituting the New York region in the United States. Although state aid programmes provide some levelling of tax resources, this region remains characterised by severe inequalities of resources among communities. In this “weak state” context (Skowronek, 1982), political fragmentation creates widespread intergovernmental economic competition; local governments seek to achieve tax, services and private sector gains or suffer losses of economic and political advantage. In the United Kingdom, central London was prioritised by the mayor, who wanted to shift the centre eastwards if the central government would pay for this (Vogel *et al.*, 2010).

Expenditure outcomes could be categorised into three basic objectives that any system needs to achieve. These include instilling aggregate fiscal discipline, facilitating strategic prioritisation of expenditures across programmes and projects and lastly, encouraging technical efficiency in the use of budgeted resources. This will achieve output at the lowest possible cost (Hatemi, 2002:100).

Services within local government are funded and maintained as total general fund expenditures per capita (Carr & Karuppusamy, 2010; Solé-Ollé & Sorribas-Navarro, 2012). Changes in local boundaries have strategic significance as they determine the construction of new roads, utility lines, schools and other public institutions. They have been used to gain advantages in awarding intergovernmental aid, in extracting political benefits and even in regulating social behaviour through controls over vice (Fleischman, 1986; Vogel *et al.*, 2010:12).

REITs are said to help investors combat inflation in the long run. Real estate investment is a vehicle enabling investors with relatively limited means to pool funds and invest in real estate projects requiring substantial sums.

According to property specialists, property funds have shifted from developed to emerging markets, with the BRICS countries presenting opportunities for REIT investments (Parthab, 2009:15).

Food security has been a major driver for new investors, including companies and funds from a variety of countries. Institutional investors include pension funds, banks and insurance companies that have collected massive amounts of capital and might seek profitable financial investment around the world. Property funds are growing in Singapore, Hong Kong and China as the Western property market buckles under the credit crisis (Parthab, 2009).

Environmental funds have played a specific role in the financing of environmental protection in Central and Eastern Europe (Gorka, 2006). Polish environmental funds, for example, have their own special character that works to their advantage. Environmental funds initially dominated investment, running at 40-50 percent, but in the second half of the 1990s this percentage dropped to 20-25 percent. Charges levied for taking over farmland for non-agricultural purposes are paid to the Farming Land Protection Fund. This fund is relatively small and is used mostly for economic purposes. Poland has a well-organized and coherent system of environmental funds (Gorka, 2006).

The BID framework has an overall effect on the distribution of municipal spending across BID firms and non-BID firms. BID services complement municipal services and invariably attract investment and shift spending toward themselves (Brooks & Meltzer, 2009:3).

The early 1990s saw rapid change in public governance and management, and beginning with the experience of New Zealand from 1989 onwards, the strategy of using performance measurement to manage for results was adopted in many Western countries. The change that undermines the trust is critical to reaching a workable compromise for performance measurement; public reporting and performance management ultimately undermine the integrity of these systems (Hildebrand & McDavid, 2011:41-2).

2.7 IMPLEMENTATION LEVEL

Mohaptra (2015:85) reports that an increasing global debate on the functioning of local governments has attracted many scholars in India. The main point for exploration involves various aspects that prompt local development planning and the implementation of development programmes. Local self-governing institutions (LSGIs) have been playing a catalytic role in the planning and implementation of development programmes in India.

District planning should take care of issues of implementation, participation and resource allocation for it to be successful. The process has also raised questions regarding the efficacy of the *Panchayati Raj* institutions because of their demonstrated failure to manage inadequate infrastructure facilities, poor data management systems, insufficient staff and a huge capacity gap (Mohaptra, 2015). According to Mitra *et al.* (2014:229) *Panchayati Raj* is rural local government in India

It is imperative to note that decentralised planning promotes equitable development and inclusive growth at grassroots level. Local organisations and institutions are able to formulate, adopt and execute actions, then supervise the plan without interference. In this type of planning, the people are considered an important and inseparable part of the process. Thus decentralised planning is believed to create opportunities for effective people's participation in the planning process (Mohaptra, 2015).

A series of institutional arrangements is implemented with strong emphasis on regional comparative advantage and international interaction. China's coastal provinces appear to be integrated into world markets while the inland regions lag far behind in the industrialisation process. The growth imbalance has left China's provinces at differing stages of development and this calls for different policy responses to deal with the varied challenges they face (Gu & Chen, 2005). China's implementation of REIT had a major impact on the global REIT market. This followed work on a pilot REIT project to test the proposed legal framework. However, the strongest examples of a city region defining and implementing a global city strategy for REIT appear to be London and Tokyo (Ernst & Young, 2008; Parthab, 2009; Vogel *et al.*, 2010).

The outlining of new territory determines the extent to which a locality exercises power, as well as the kind of regulations it can enforce. Infrastructure, schools, transportation and police operate across certain areas. Zoning regulations are bureaucratically enforced and a high level of fragmentation leads to tremendous difficulties for provincial governments in implementing regional development strategies. Without a properly designed institutional structure, regional strategies are difficult to implement effectively. This weakens top-down governing capacity. The problem with actual implementation is that it is clearly related to the question of fundamental government reform and even political transformation in China (Vogel *et al.*, 2010).

Municipalities are willing to participate in testing and demonstrating an array of new technology with clear distribution of responsibilities between central and local governments. The main point is that overall strategic planning needs to be discussed and possibly restructured to enable strategic municipal planning to be effective (Sperling *et al.*, 2011).

The level of implementation and the structures vary from place to place if financial responsibility is to be properly ensured. This involves integrated revenue management systems with established revenue performance standards, documenting revenue performance, comparing actual with expected performance, initiating corrective action and designing controlling mechanisms (Hatemi, 2002).

Provincial and municipal governments in South Africa face challenges in data processing, project registration, consultant appointments and project completion. A project registration form is attached, as Appendix A. Municipalities and provinces seem not to use the MIG Management Information System (MIS) for their own project documentation, resulting in information not being captured. Different dates for project registration cause confusion. Other challenges include a lack of inter-departmental cooperation and co-ordination, lack of long-term planning in municipalities, and human resources incapacity and a high staff turnover leading to a loss of institutional memory (Palmer, 2008:30).

Palmer (2008:2) carried out database analysis on municipalities that involved 8,646 records. The findings are shown below.

Table 2-4: Total projects and Date Categories (Source: Palmer, 2008)

Item	Number of Projects	%
Total Number of Projects	8,676	
Projects with Registration Date	5,191	59.8
Projects with Planned Consultant Appointment Date	2,280	26.3
Projects with Actual Consultant Appointment Date	1,834	21.1
Projects with Planned Tender Advertisement Date	1,715	19.8
Projects with Actual Tender Advertisement Date	1,104	12.7
Projects with Planned Contractor Appointment Date	3,513	40.5
Projects with Actual Contractor Appointment Date	1,737	20.0
Projects with Planned Project Completion Date	2,388	27.5
Projects with Actual Project Completion Date	1,033	11.9

Palmer (2008:34) recommends the following indicators, as tabulated below:

Table 2-5: Recommended Indicators (Source: Palmer, 2008:34-35)

#	<i>Indicator name</i>	<i>Indicator definition</i>	<i>Data required</i>
1	Consultant appointment	Difference between project registration date and consultant appointment date	Project registration date
			Consultant appointment date
2	Consultant variance	Difference between planned date of consultant appointment and actual date	Planned date of consultant appointment
			Actual date of consultant appointment
3	Tender advertisement	Difference between project registration date and tender advertisement date	Project registration date
			Tender advertisement date
4	Tender advertisement variance	Difference between planned date of tender advertisement and actual date	Planned tender advertisement date
			Actual tender advertisement date
5	Contractor appointment proxy indicator for the project preparation phase	Difference between project registration date and appointed and actual dates.	Project registration date
			Contract appointment date
6	Contractor variance	Difference between planned date of contractor appointment and actual date	Planned contract appointment date
			Actual contract appointment date
7	Project completion	Difference between project registration and project completion date	Project registration date
			Project completion date
8	Project completion variances	Difference between planned project completion date and actual date	Planned project completion date
			Actual project completion date

There is a certain amount of debate over the principle underlying the standard spending assessment system as grants are allocated in such a way that local councils can finance spending on services at the same levels across the board. At the same time there is considerable controversy over the methods employed to implement it (Pacione, 2001:37). The assumption is that an unclear institutional framework may lead to conflicts during implementation. The status of each focus area can be categorised according to one of three levels, namely, clear institutional framework, existing institutional framework and focus area. As a result the focus usually depends on the number of actors and the need for some institutional frameworks to be updated. Lack of clear national strategy may pose problems for municipalities; this can be sorted out at the central level with the participation of municipalities, which then play a more pronounced role during implementation (Sperling *et al.*, 2011).

CoGTA (2014b:4) maintains that the ability of local municipalities to discharge their functions varies between the various spheres and sectors. The second issue relates to their not getting enough funds to address backlogs in certain areas, based on current allocation. The third issue is changing priorities for municipalities; this undermines progress made on commitments. The last and fourth concern relates to the monitoring and reporting throughout the life cycle of the project, including operation and maintenance.

According to the OECD, Best Practices for Budget Transparency means “openness about policy intentions, formulation and implementation”, while budgetary transparency is “full disclosure of all relevant fiscal information in a timely and systematic manner” (Boubeta, Santias & Alegre, 2010:3). The table below displays the best practices for budget reporting when prepared with specific data disclosed, together with the procedure to be established to ensure integrity.

Table 2-6: The “three pillars” of OECD Best Practices for Budget Transparency (Source: Blöndal, 2006)

Budget report	Specific Disclosures	Ensuring Integrity
• The Budget • Pre-Budget report • Monthly report • Mid-Year Report • Year-End Report • Pre-Election Report • Long-Term Report	• Economic Assumption • Tax Expenditures • Financial Liabilities and Assets • Non-Financial Assets • Employee Pension Obligations • Contingent Liabilities	• Accounting Policies • Systems and Responsibilities • Audit • Parliamentary and Public Scrutiny

The above table is used in South Africa by local governments.

Meanwhile the national level is seen as being responsible for limiting the opportunities for local authorities to implement ecological transfer to compensate municipalities for costs related to protected areas (Sperling *et al.*, 2011; Santos *et al.*, 2012). The grant programmes are designed to encourage optimal provisioning of public services, varying primarily with the nature of the activity and noting that reduction in emissions from deforestation and forest degradation needs to be taken into account by fiscal transfer schemes to the local level as an important means of channelling international payments after assessing the effects of implementing the new LFL in the selected municipalities using the real value of 2008 fiscal transfer. In the South African context this is, however, a national department responsibility (Richard *et al.*, 2002; Santos *et al.*, 2012).

It is important to note that community participation involves effective delivery of local projects to communities. Without participation, the projects often founder at the implementation stage or are not maintained and fail to deliver sustained benefits (Singo, 2012). This can be addressed through skills improvement.

A local government monitoring system is in place in South Africa, but evaluation for effective policy implementation is deficient. The monitoring involves considering the kinds of land use and development that may be permitted within a municipality's town planning scheme (Parthab, 2009). Legislation should give the appropriate cabinet minister the authority to establish "growth plans" for designated areas. Such plans establish the basic rules of municipal land-use planning within the relevant territory (Vogel *et al.*, 2010:32).

According to LGSETA (2005), the sector skills plan indicated that lack of capacity within local government is attributable to the retrenchment of older employees and an outflow of the skilled labour force into the private sector. This lack of capacity within local government is often demonstrated by the lack of financial resources to meet service delivery obligations; municipalities having a large number of staff vacancies; staff not having a minimum level of competence; poor operational systems and processes, or indeed, none at all; and employees lacking the tools or hardware to do their jobs (Legoabe & Ngozwana, 2012:59).

Legoabe and Ngozwana (2012:7) state that the DBSA Fund was incorporated to address sustainable capacity building at the municipal level. This aims to enhance service delivery and improve local economic development to maximise the impact of development finance by (i) capacitating municipalities to eventually improve the lives of South Africans; (ii) delivering capacity-building funding through grants; (iii) mobilizing and deploying technical and financial expertise for infrastructure project implementation; and (iv) facilitating development through technical support and knowledge sharing.

The assessment report revealed that very few municipalities had in-house engineering design capabilities and expertise. They sometimes had fewer projects than before. Skills transfer was sorted out through centralisation of training and by establishing Centres of Excellence (CoEs). These are aimed at implementation and management of infrastructure projects at local government level. However, the larger and more capacitated municipalities have resource capacity, and can plan and prepare sophisticated infrastructure project proposals. These municipalities have the capacity to implement new infrastructure and maintain the existing infrastructure (Legoabe & Ngozwana, 2012).

The Water Research Commission (2007) study revealed that municipalities are affected by the following factors: turnover of councillors due to elections; political interference in the operational management of municipalities; politically motivated staff appointments; gross underspending and poor accountability in regard to utilisation of municipal grant funding; strong unionization, poor labour productivity; poor service delivery track records; poor capacity to deliver services and collect rates; and financial malpractices in public tendering processes.

According to the World Bank (2009), the South African Institute of Civil Engineering (SAICE) argues that some of the reasons behind failed or delayed infrastructure projects, or MIG-funded projects, include flawed procurement processes, inadequate design and poor performance on the part of the contractor. The percentages are reflected in the figure below.

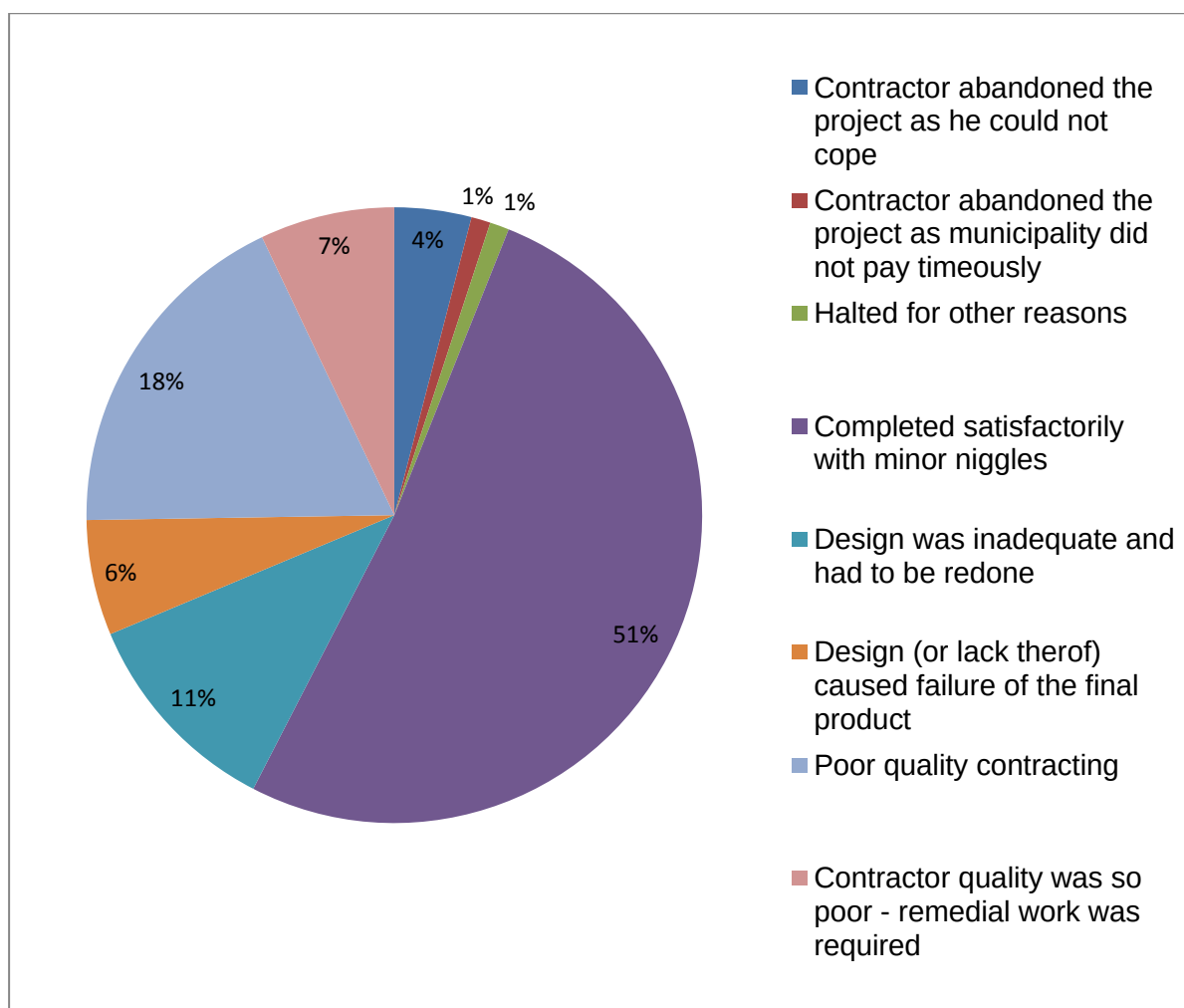


Figure 2-1: Municipal Infrastructure Grant-funded Project Failure Rates (Source: Legoabe & Ngozwana, 2012).

The above diagram reflects project failure caused by both consultants and contractors. Inadequate design—or the lack of it—contributed 17 percent (6 percent design-caused failure of the final product while 11 percent was due to inadequate design and had to be redone). Poor workmanship by contractors has resulted in project failure. In some cases the contractor abandoned the construction site due to late payment by municipalities (Chiro, 2010). This suggests that civil engineering is a constraint for the municipality when it comes to implementing infrastructure projects (Legoabe & Ngozwana, 2012).

It is mandatory that local government must contribute in variety of ways to the 12 government priority outcomes and thus to the government's development agenda. The list of 12 government priorities is attached as Appendix D.

It is noted that of particular interest are priorities (2) improved health and life expectancy; (5) a skilled and capable work force to support inclusive growth; (6) an efficient, competitive and responsive economic infrastructure network; (9) a responsive, accountable, effective and efficient local government system; (11) a better South Africa, a better and safer Africa and world; and (12) a development-oriented public service and inclusive citizenship (LGSETA, 2012). Priority 9 is relevant and crucial to the local government and the study.

LGSETA (2012:4) states that according to the Skills Development Act of 1998, skills plans and relevant strategic objectives must be developed to make local government a “responsive, accountable, effective and efficient system and in line with Local Government Turnaround Strategy”. However, according to the Demarcation Board, among factors affecting municipal performance are the extent of the service backlog to be addressed, in spite of the availability of financial reserves; the ability of the municipality to generate its own financial reserve as against dependence upon equitable share; management experience and capability; the quality of the IDP; and efficient, effective, well-co-ordinated intergovernmental relations (LGSETA, 2012:33).

Table 2-7: Percentage vacancies by Standard Occupation Category (SOC) (Source: LGSETA, 2012:35)

Occupational Category	Vacancy rate		
	2007/08	2008/09	2009/10
Legislators	0	0	0
Directors and Corporate Managers	21%	22%	31%
Professionals	29%	32%	30%
Technicians and Trade Workers	22%	36%	30%
Community and Personnel Service Workers	24%	32%	31%
Clerical and Admin Workers	18%	30%	25%
Machine Operators and Drivers	21%	19%	35%
Elementary workers	15%	20%	24%
TOTAL	21%	27%	29%

The table above shows the high vacancy rate in categories such as professionals and technicians that are mandated to carry out MIG projects. This will hamper service delivery and the spending capacity of local municipalities.

Table 2-8: Senior Management: Education Level (national average %) (Source: LGSETA, 2012, citing Municipal Demarcation Board, 2008)

Type of manager	No data	1	2	3	4	5	6	Unknown
Municipal manager	1	0	4	26	36	7	25	0
CFO	4	2	8	23	46	1	16	0
Corporate Service	11	3	9	24	30	2	19	2
Technical	9	1	6	50	26	0	15	0
IDP / Planning	1	0	3	24	36	8	26	1

Legend					
1	Pre-matric	2	Matric	3	Matric and diploma
4	Undergraduate	5	Undergraduate and diploma	6	Post-graduate and diploma

Spending on MIG projects, DoRA reports and submission of financial statements to the Auditor-General is compromised by the lack qualifications and experience for Chief Financial Officers (CFOs), with eight having only matric and 23 with diplomas. The same argument holds for technical managers, with nine making no data available, one pre-matric and six with matric only. This makes it difficult for them to question a project's technical specifications.

Table 2-9: Senior Management: Education Level (LGSETA, 2012)

Type of manager	1	2	3	4	5	6	7	8	Other	Total
Municipal manager	2	4	7	7	12	0	2	1	9	44
CFO	4	0	73	1	5	.0	0	0	16	101
Corporate Service	11	7	8	14	26	1	0	0	33	100
Technical	9	1	2	1	5	1	4	57	20	100
IDP /Planning	1	17	9	15	25	2	12	2	17	100
Total	27	29	99	38	73	4	20	60	95	445

Legend							
1	No data	2	Teaching	3	Financing	4	Legal
5	Public Administration	6	Nursing /Medical	7	Planning /development	8	Engineering

It is a point for concern that 27 (6.1 percent) of the senior managers did not specify their educational qualifications. These are the people responsible, among others, for the implementation of MIG and other municipal projects, bid specification, tender adjudication and contract management. Also of concern in regard to MIG spending is this “other” qualification, which may be irrelevant or unrelated to the position occupied. This affects 21 percent (96) of the total respondents.

On a more positive note, 73 (72 percent) of CFOs have some kind of finance qualification.

Table 2-10: Senior Management: Years in Position (Source: LGSETA, 2012)

Type of manager	No data	Years in the positions						
		> 1	1-2	2.1-4	4.1-6	6.1 to 10	10+	Total
Municipal manager	2	45	22	8	14	8	1	99
CFO	5	39	12	14	18	6	5	94
Corporate Service	12	33	12	13	22	6	3	98
Technical	11	39	12	13	14	5	4	94
IDP/Planning	22	22	15	21	13	7	0	100
Total	52	178	73	69	81	32	13	498

The table above reflects that more than 50 percent (251) of the staff have fewer than four years in the position indicated. This is not a reflection of how many years they have spent altogether in local government. However, it does reflect badly on the project and/or programme in terms of continuity and succession planning. The table shows years of experience in local government.

Table 2-11: Senior Management: Years of Local Government Experience (Source: LGSETA, 2012)

Type of data	No data	Number of years						
		0	1-5	5.1 -10	10.1-15	15-20	20+	Total
Municipal manager	4	0	28	27	13	6	9	87
CFO	7	0	30	19	16	10	18	100
Corporate Services	15	2	26	19	14	8	15	99
Technical	12	1	29	22	12	6	18	100
IDP/Planning	17	2	32	29	12	3	5	100
Total	55	5	145	116	67	33	65	486

The above table shows that 55 have not declared—or it cannot be traced—how many years of experience they have had in local government. More than 54 percent (266) have spent fewer than 10 years in local government... rather a mixed bag.

One aspect is that they are from the new dispensation and newly qualified, while on the other hand they are not experienced in the system. The remaining 165 (34 percent) serve as the organisational memory, providing much-needed experience in terms of stakeholder management, legislative framework, policy implementation and intergovernmental relations.

2.7.1 Intergovernmental Relations

Van Aswegen (2012:81) argues that local government is underpinned by a system of co-operative governance. This relationship is supposed to harness all public resources collectively for a common goal. Such co-operative government requires a system of co-operation and constructive inter-governmental relations.

South Africa has an intergovernmental system based on the principle of co-operation between all the three spheres of government. CoGTA is mandated to monitor the implementation of the Intergovernmental Relations Framework Act. The Intergovernmental Relations Framework Act was enacted in 2005 (Act No. 13 of 2005) to provide a framework for the establishment of intergovernmental forums and mechanisms to facilitate the settlement of intergovernmental disputes.

The Act is intended to facilitate co-ordination in the implementation of policy and legislation, including: (i) coherent government; (ii) effective provision of services; (iii) monitoring implementation of policy and legislation; and (iv) realisation of national priorities (RSA, 2005).

Weak intergovernmental support and oversight, and issues associated with inter-governmental fiscal systems, were identified as factors affecting optimal efficiency and service delivery capacity (LGSETA, 2012; Legoabe & Ngozwana, 2012:58). LGSETA (2012:33) maintains that un-coordinated intergovernmental relations are factors affecting municipal performance despite financial reserves.

The report from AGSA (2013:9-58) for Mpumalanga suggested that the Office of Premier should strengthen intergovernmental relations. This would ensure that all public institutions with a role to play were adequately capacitated. The office should promote and enable intergovernmental relations and co-operative government.

2.7.2 Local Government Turnaround Strategy (LGTAS)

This strategy was unveiled in 2009 by CoGTA in order to transform local government in South Africa. The following factors were identified as developmental risks underpinning the optimal efficiency and service delivery capacity: systematic factors linked to current model for local government; policy and legislative factors; political factors; weakness in accountability systems; capacity and skills constraints; weak intergovernmental support and oversight; and issues associated with inter-governmental fiscal systems (LGSETA, 2012; Legoabe & Ngozwana, 2012:58).

The following key drivers of the LGTAS have been identified as: (i) to ensure that municipalities meet basic service needs of communities; (ii) build clean, effective, efficient, responsive and accountable local government; (iii) improve performance and professionalism in municipalities; (iv) improve national and provincial policy, oversight and support; and (v) strengthen partnership between local government, communities and civil society (LGSETA, 2012:21).

According to Josie, Khumalo and Ajam (2006), the following reasons contribute to MIG under-expenditure: (i) municipalities continue spending MIG funds rolled over from previous years; (ii) lack of proper project planning; (iii) ineffective project management; (iv) lack of capacity for managing MIG funds; and (v) late approval of projects and budgets by council officials. The table below reflects how much left was unspent nationwide.

Table 2-12: MIG Spending Trends 2009/10 to 2012/13 (CoGTA, 2014b)

Financial year	Transferred	Expenditure	% Spent	Unspent funds
2009/10	8,738,699	7,818,608	89%	920,091
2010/11	9,924,806	8,545,922	86%	1,378,884
2011/12	11,443,489	9,248,418	81%	2,195,071
2012/13	13,879,161	10,963,074	79%	2,916,087

CoGTA established the Municipal System Improvement Grant (MSIG) to assist municipalities in improving efficiency and build in-house capacity. The 2009/10 MSIG framework was aimed at supporting the implementation of a municipal Property Rates Tax, good governance with a focus on public participation, a municipal fixed assets register; a skills audit for employees under Section 57, and implementation of by-laws and policies in support of local government legislation (LGSETA, 2012).

2.7.3 Other countries

There is opposition to relocation of capital, this being central to campaign platforms and the implementation of multi-faceted efforts to overturn capital relocation (Vogel *et al.*, 2010). The National Fund serves an important function in the implementation of foreign aid, also from the resources of the European Union (Gorka, 2006).

Germany is in the lower third percentile for implementing electronic transaction of procurement. On the federal level, electronic purchasing is increasingly practised; however, on a municipal level the adaptation process is accepted only with hesitation. So far, only individual pilot projects, for example e-procurement by the city of Mainz, have been realized. Three barriers to the decision makers' cognitive model were found. These included individual internal barriers, external barriers and internal corporate barriers. Analysing the barriers of the individual responsible for implementation, three factors were found to be relevant. These can be classified as change management, the technical knowledge of the implementer and the IT-project competence of the implementer (Wirtz, Lutje & Schierz, 2010:27-29).

2.8 EFFICIENCY AND RESOURCE

The Russian government is known to under-tax major energy and fuel companies, resulting in only a small fraction of natural resources rents being captured by the public sector in the Russian Federation. The revenue from rents can lead to public institutions becoming detached from their tax base. However, at sub-national level, potential resource rents are largest in the oil, gas and mineral-rich regions (Hatemi, 2002; Hauptmeier, Mittermaier & Rincke, 2012). Most of these rents are appropriated by the private interests that control the natural-resource firms (Desia *et al.*, 2005).

The International Monetary Fund (IMF) Code is structured on four pillars: (i) clarity of roles and responsibilities; (ii) open budget processes; (iii) public availability of information; and (iv) assurance of integrity. The first pillar focuses on the establishment of a clear distinction between governments (Boubeta *et al.*, 2010:5).

This was developed a model in which a social planner for a federation would wish to transfer resources toward “more patient” governments. Assuming that patience is not observable, they show that a programme of net transfers from impatient to patient governments, combined with borrowing restrictions that, in equilibrium, bind on patient governments, is socially optimal (Boadway, Buettner & Wildasin, 2008). Implications of the different models of financial provision need to be analysed in terms of sustainability and social justice. Redistribution of resources goes on with the most important one being between healthy and disabled people, but it also exists in other dimensions. Resources ensure that the value of service is reflected in market prices (Ring, 2008).

There has been growing concern regarding the weak effectiveness of federal transfers and the low absorption capacity of states and municipalities in poor countries to foster development or alleviate poverty (Hernandez-Trillo & Jarillo-Rabling, 2008). Municipal associations that comprise a large number of members might not be the best idea from an efficiency perspective, but one of the major tasks of fiscal federalism involves efficiently and effectively allocating public sector functions, expenditures and revenues to the central state and local government levies in the federal system. The loss of biodiversity and the threat to services provided by ecosystems for human wellbeing are among the serious global change problems, demanding in many cases, centralised standard-setting and policies (Bönisch *et al.*, 2011; Ring, 2008:486).

In Russia, regional governments began to exert greater authority over local resources, enterprise and fiscal policy, and the federal government’s ability to police the common market came under considerable strain.

Although several regions have liberated their economies, enforced hard budget constraints and protected private property, others have resisted these reforms despite efforts in recent years to re-assert federal authority (Desia *et al.*, 2005). Fragmentation of the resources of environmental funds is a major weakness. Not only is it impossible to subsidise larger projects, but also the insufficient resources make regions earmark those resources that they have for other, communal, goals, often against the rules of rationality (Gorka, 2006).

Local revenues related directly to enterprise income have the effect of pushing enterprises into the arms of local governments and Vogel *et al.* (2010:5) believe the recognition of economic integration of the metropolitan region may evoke a potential response as policy makers and business leaders see that the benefit of greater regional cooperation to provide efficient and effective public services enhances infrastructure and addresses unintended negative consequences, such as pollution or traffic congestion (Vogel *et al.*, 2010).

More effort needs to be put into reform and efficiency-enhancing policy innovations since these changes produce high returns (Gu & Chen, 2005). Regional policy approaches and governance arrangements are thought to be critical in providing citizens in the cities and suburbs alike with a good quality of life and high levels of public services (Vogel *et al.*, 2010).

Current public budgeting theory has not fully responded to the emergence of public collaboration efforts. Budgeting for collaboration is unique and distinct from the established four budgeting functions. The lack of institutional norms creates unique budgeting opportunities in emerging networked organisations (Mitchell & Thurmaier, 2011:4).

The empirical evidence shows that grants have an important role in the adjustment process, whether these grants have an equalisation objective as in Germany, or even when there is no clear and objective rule that determines their allocation, as in Spain (Solé-Ollé & Sorribas-Navarro, 2012).

Efficiency can be improved by the fostering of local autonomy, with local governments paying close attention to relations among the governing class and in local government (Suhardjanto, Sulistyorini & Hartoko, 2009:233). Decentralisation increases efficiency and reduces provincial disparities, since local governments are forced to increase their own efforts to provide better public services to their constituents (Suhardjanto *et al.*, 2009:234).

Performance measurement was expected to drive both external reporting and internal performance management to improve efficiency and effectiveness (Hildebrand & McDavid, 2011:42). The government of British Columbia, in Canada, suggests that expecting performance measurement and reporting regimes to contribute simultaneously to accountability and performance management may not be a workable strategy (Hildebrand & McDavid, 2011:43).

In Germany, resources were limited to such an extent that public administration was weakened, having a negative long-term impact on the overall economic climate and employment. It is likely that this situation will worsen, since the financial resources that had been awarded to the communities are about to be further reduced, in spite of rising duties and responsibilities. To counteract this development, costs can be reduced with the help of e-government, involving the modernization of public administration through the systematic use of innovative and modern technologies. In this context, e-procurement is becoming increasingly important (Wirtz *et al.*, 2010:26).

Service delivery is enhanced with decentralised systems providing adequate power and resources to ensure the autonomy to take measures that improve transparency, reduce costs and encourage innovation (Mitra *et al.*, 2014:299-230). Local Self-Governing Institutions in India have attained prominence in formulating decentralised planning following the enactment of the 73rd Amendment Act in 1992 and the PESA Act in 1996 (Mohaptra, 2015).

However Mohaptra (2015:88), citing Rao (1989), argues that decentralised planning in India rests on four objectives, namely: (i) it is difficult for macro-level planning to effectively cover the resources at the locals at household and village level; (ii) bringing the poor and the disadvantaged into the mainstream economic process requires programmes at grassroots level for identification and delivery towards achieving viability; (iii) dependable arrangements are required for providing relief and supplying basic needs; and lastly (iv) participatory mechanisms are needed in the planning for resources and requirements with a view to promoting motivation, habits of self-help and an active role in strategic and planning decisions among the people.

Local government should possess updated information about tapping existing sources to promote development programmes. It is highly recommended that resource-mapping exercises should be mandatory for all tiers of the local government (Mohaptra, 2015:105).

Shujian and Shiyi (2014) have calculated the efficiency of local government in China. Their calculations indicated that the eastern provinces have a higher level of governance performance than other regions.

However, governance efficiency has decreased over the period of fiscal decentralisation reform. In order to improve local governance performance, there must be complete transparency of governmental fiscal behaviours by placing them under the complete budgetary control and supervision of the relevant local legislature.

Various authors see some measure of the capacity of local governments in raising resources—and their efforts in doing so—as a critical issue reflecting on the efficiency of a municipality. Extensive lists of efficiency studies from different public services, including vertically integrated network services such as water, sewage disposal or energy provision, indicate limited potential: this was evident in numerous North West Province municipalities (Richard *et al.*, 2002; Bönisch *et al.*, 2011; Singo, 2012).

The organisational structure and institutional capacity of the municipality is not designed to accommodate and retain skilled manpower (Hauptmeier *et al.*, 2012). The Local Government: Municipal Systems Amendment (Act 7 of 2001), Section 72(b), and CoGTA (2014) argue that provision must be made for training and skills development of municipal staff members. This must be followed by correct placement within the organisation and can reduce staff turnover.

A problem is created when the function of financing local infrastructure, such as MIG, is assigned to an automatic and permanent transfer not linked to coverage needs. First, the central government loses a potentially important tool to implement its development goals and to direct resources to the provinces with the most important coverage gaps. Secondly, the construction of infrastructure and government policies prohibits these resources being utilised anywhere else since they are locked into that province and municipality (Richard, Smart & Smart, 2002; DoRA, 2007).

The IDP must be linked to the budgeting process, according to the MFMA, as this will enhance efficiency and effectiveness and ensure that IDP requirements are upheld. The IDP Value-for-Money Model (in the figure below) highlights the statutory performance measures of municipalities (Subban, 2008:58). Section 41(c) of the MSA requires that the IDP should form the basis for the annual report, requiring consistency of objectives, indicators and targets between planning and report.

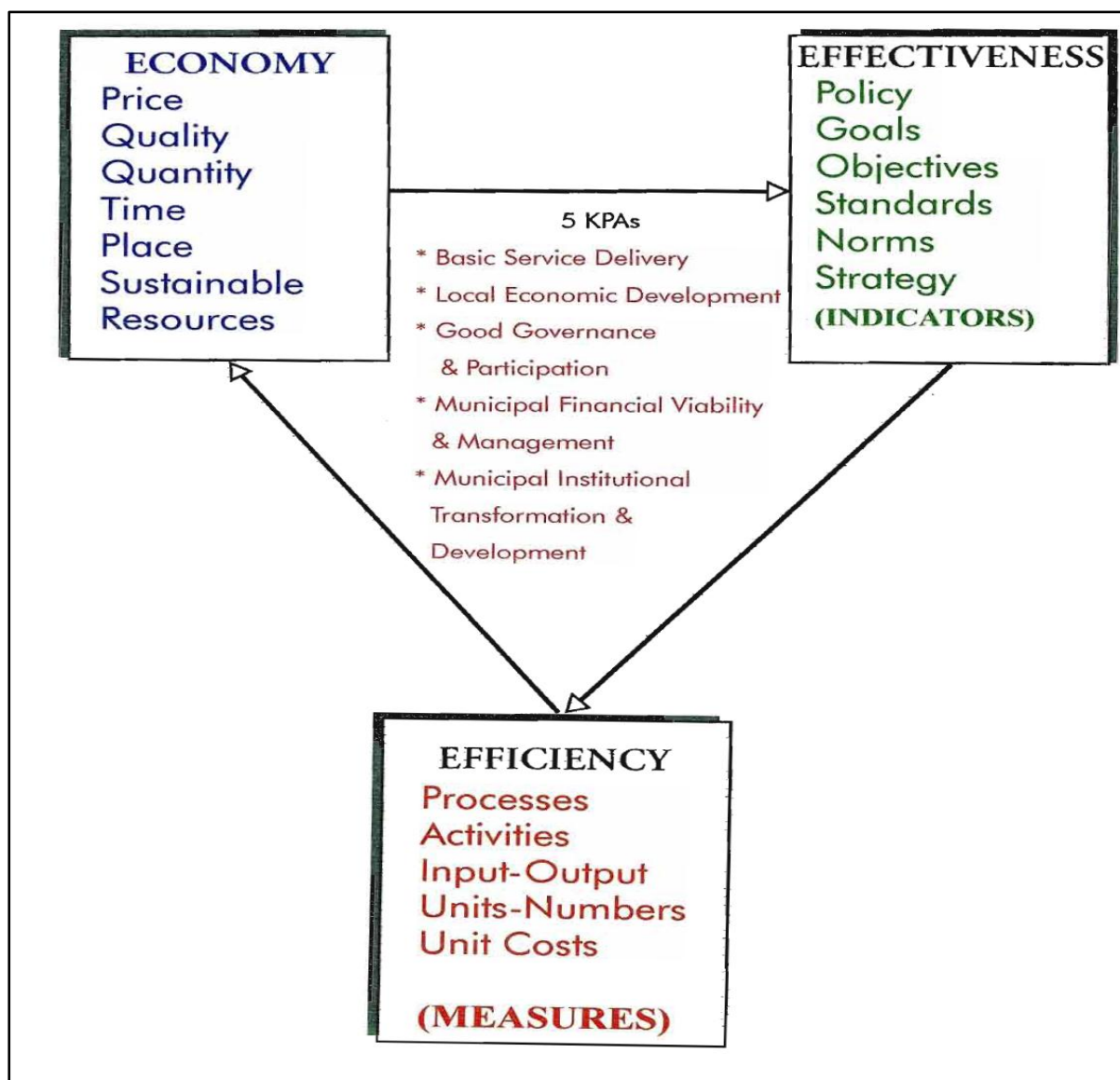


Figure 2-2: IDP Value-for-Money Model (Source: Subban, 2008)

Subban (2008) states that the key performance areas in terms of efficiency, effectiveness and economy theory framework are basic service delivery, local economic development, good governance and participation, municipal financial viability and municipal institutional transformation and development.

Efficiencies are possible where service levels are increased and revenues remain constant. In the other scenario, service levels are maintained while revenues are reduced (Simonsen & Robbins, 2000).

Politically fragmented metropolitan regions can undertake effective responses to the problems of global economic change (Vogel *et al.*, 2010:34). Traditional measures of revenue and expenditure levels do not adequately detect improvements in service quality or administrative effectiveness.

Municipal and city managers typically have formal training and more administrative experience than do mayors. Ideally, they can provide better leadership. Also, city managers have an incentive to focus on the effective use of available resources because their future compensation is more directly linked to the efficient operation of the organization than it is to spending levels (Feiock, 2007; Carr & Karuppusamy, 2010).

Differences in organisational structure can affect efficiency in more independent municipalities. Some commonly used fiscal indicators show significant effects. Higher debt levels result in an increase in inefficiency and higher equalization transfers have a positive effect on efficiency. There is, however, a trade-off between effectiveness of control and co-ordination costs within an increasing number of member municipalities (Bönisch *et al.*, 2011).

The efficiency measures born from scientific management have been utilised for budgeting. Budgeting for planning uses systems theory to shift the focus to system output, long-term planning and programmed spending (Mitchell & Thurmaier, 2011). Its effectiveness has been evaluated by analysing the achievement of the targeted or planned objectives of a municipality. This will invariably improve performance.

CoGTA (2014a) recognises that there are challenges within local government requiring attention. These apply to top, middle and bottom-level municipalities. The top performers comprise a small group, the middle-ranking municipalities are fairly functional with average performance, and the bottom grouping is frankly dysfunctional. Institutional incapacity has been identified as the main contributing factor.

Van Veelen (2012) stated that South African municipalities face technical capacity constraints, lack of proper operational systems to maintain infrastructure, and lack general capacities for planning, financial management and governance. According to the DCoG Feasibility Study in 2011, electricity and sanitation are the biggest concern in terms of backlogs, together with the state of rural roads. The status with regard to access to infrastructure is illustrated below:

Table 2-13: Current Levels of Access to Basic Services (Source: Legoabe & Ngozwana, 2012:71-72)

Municipal Backlog per province	Backlog (% with service below adequate)			
	Electricity	Piped Water	Sanitation	Refuse Removal
Western Cape	6.0	1.1	6.6	8.9
Free State	13.4	2.5	30.6	23.9
Gauteng	16.5	2.1	12.2	13.8

Municipal Backlog per province	Backlog (% with service below adequate)			
	Electricity	Piped Water	Sanitation	Refuse Removal
North West	17.7	10.1	18.4	45.2
Mpumalanga	18.3	8.7	46.1	58.5
Limpopo	19.0	16.4	69.2	81.3
KwaZulu-Natal	28.5	20.6	36.1	48.1
Northern Cape	12.7	5.2	45.5	27.9
Eastern Cape	34.5	29.6	51.1	60.0
South Africa	20	11.4	32.4	38.4

Watermeyer (2014) argues that public infrastructure is central to the economy of the country, providing improvements or efficiencies in services. However, a key question often asked is whether the investment provides value for money. Value for money is regarded as optimal use of resources. This includes maximum benefit from the resources available. Value for money is assessed by delivery cycle, as reflected below:

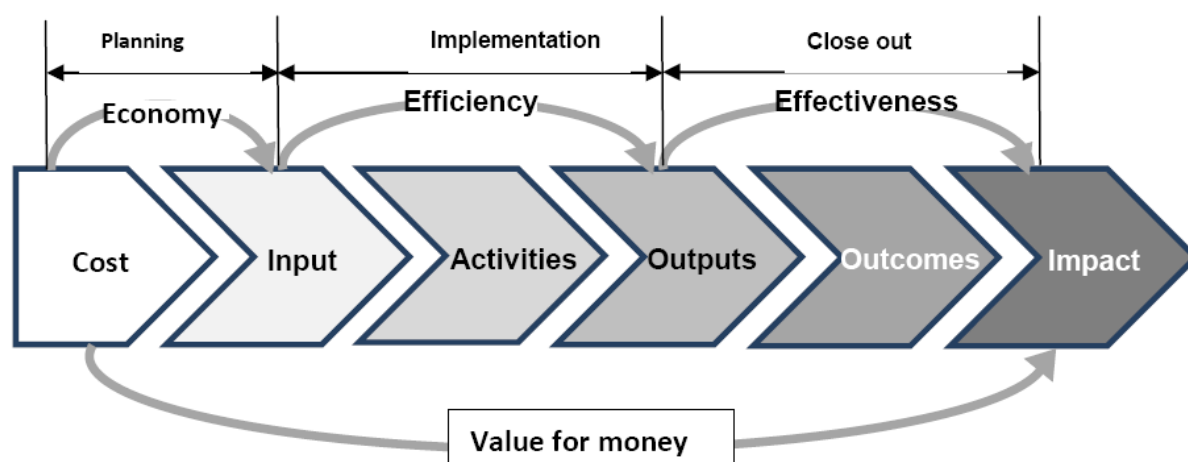


Figure 2-3: Results chain from framework (Source: Watermeyer, 2014).

Cost	Sum of money required to fund the intervention
Input	Inputs cover all the materially significant financial, human and material resources used for a development intervention.
Activities	Activities are used to deliver outputs
Outputs	Outputs relate to products, capital assets and services that result from a development intervention. Outputs are limited to the specific, direct deliverable

	of the intervention.
Outcomes	Outcomes are likely or realised short-term/medium-term effects of the outputs of any intervention. Outcomes are used to identify (a) what will change, (b) who will benefit and (c) how it will contribute to poverty reduction and/or Millennium Development Goals
Impacts	Longer-term effects are produced, directly or indirectly, by a development intervention. Impact refers to higher-level identified achievement towards which the intervention will contribute.

2.9 PROCESS RE-ENGINEERING

According to LGSETA (2012:34), high skills demand is the result of upgrading service delivery, linked to the restructuring of internal work environment. This has invariably resulted in new job requirements, and legislative and constitutional changes. Rapid restructuring has seen mismatches in many cases between organisational organograms, incumbents of posts, job descriptions and the qualifications required. This is reflected in table 2.7. It is believed that municipalities are often driven by narrowly defined political interests rather than any desire to enhance the effectiveness and efficiency of municipal functioning.

Municipal councils usually approve an organisational structure reflecting positions necessary for delivery of services and achievement of IDP objectives. However, the National Treasury has noted that most of the approved structures are outdated and inadequate (LGSETA, 2012). It is critical to note that no MIG funds may be spent outside the framework of a municipality's pre-existing IDP and approved budget. The IDP is based on the provision of basic package services to the poor, appropriate services levels, financial sustainability and the existence of adequate organisational capacity (DPLG, 2004a:10).

Financial sustainability is regarded as an accounting problem; a need to balance revenue and expenditure and how the organisation responds will determine the extent to which deficits are prevented (Thomson, Vork, Habicht, Roovalt, Evetovits & Habicht, 2010).

The grant provides for a far greater stimulus to public expenditure within South African local government than an equal increase in revenue from own resources. This raises concerns about the responsiveness of local officials to the needs of the electorate, with expenditures being allocated according to their own objectives. This has led to numerous services delivery riots. In addition, high levels of grant dependency can promote fiscal irresponsibility and even instability at the national government level (Schoeman 2011:2; Amusa, Mabunda & Mabugu, 2008).

The transfer formula incorporating observable measures of need may induce further incentive problems and the higher the income elasticity of demand for the service, the higher the matching rate needed for low-income recipients and the higher the price of elasticity (Richard *et al.*, 2002). However intergovernmental fiscal transfers provide decentralised governments with the financial resource needed to discharge their local public functions while also helping to reduce fiscal imbalance across decentralised governments (Ring, 2008; Santos *et al.*, 2012; Litschig & Morrison, 2009:2). From that economic perspective, the problem is to avoid political conflict. Transfers that finance local deficits or those that are entirely discretionary in nature are invariably bad (Richard *et al.*, 2002).

This problem is further aggravated by foreign investors who often negotiate directly with senior government officials, excluding the planning authority until a late stage. One can conclude that no single perspective can fully grasp the intricacies of the economic and political processes at work (Vogel *et al.*, 2010). Studies undertaken in Germany in 2011 use the non-parametric DEA-procedure to overcome the problem of missing input prices in flexible functional forms in SFA analyses. However, cost efficiency ignores the question of municipal size, resulting in methodological problems. One of the main problems here is the impossibility of assigning certain inputs to certain municipal tasks, such as central administration (Bönisch *et al.*, 2011).

In South Africa, municipal services controlled by the administrations are sewerage, sanitation, garbage collection and disposal, public markets, abattoirs, recreation and cultural places. This is undertaken without clear guidelines and revenue collection ends up being badly hit (Hatemi, 2002). The South Africa Water Services Act, 1997 (Act No. 108 of 1997) looks into water provision as a district municipality function.

The existing budgeting process at government level incorporates collaborative activities, as well as how public collaborative networks approach the budget (Mitchell & Thurmaier, 2011:15). Each of the three network budgets is evaluated by four criteria: narrative, explanation of budgetary process, performance targets/results and explanation of cost allocations. There is no evidence of meeting the three criteria in the budgets studied (Mitchell & Thurmaier, 2011). Wealthier regions spend relatively more on subsidies to local enterprise (Desia *et al.*, 2005).

Input-output analysis complements the method currently used to generate the quantitative information required to manage and plan the human resources employed by the public sector. This method analyses the demand for human resources, generating information within an organisation in response to changes in its structures. This helps to correct the existing imbalances between the methods for analysing supply and demand for these resources. It also provides an instrument to assist managers in an efficient allocation of human, financial and physical resources.

Thus the method used to forecast supply and demand of human resources generates quantitative estimates of both the labour that will be available and that which is required (Correa & Guajardo, 2001). Such analysis can improve efficiency within local government.

After the 2009 arrival of Governor Ishihara in Tokyo, local leaders repeatedly demanded more local autonomy from the state. The aim was to improve regional policy implementation by involving the private sector in the decision-making process (Vogel *et al.*, 2010). Local autonomy has been practised for years in Indonesia with the intention that regions should be capable of running their own governments based on initiation, creativity and an active role in the community. The South African Constitution recognises local government autonomy (Suhardjanto *et al.*, 2009:233).

The government response to competition, diminishing support for cities and decentralising political authority, is part of being lean, more aggressive and better prepared to compete in a market-centred global economy. Creating regional political institutions or processes promotes policy co-ordination which might enhance the economic competitiveness through greater investment in infrastructure and improved public services while lowering business costs and providing greater access to labour and markets (Vogel *et al.*, 2010).

It is important to note that when local authorities contemplate budgetary collaboration with partner organisations, there should be clarity at the outset as to the reasons for pursuing such budgetary collaboration and also, what each expects from the other. There should be sustainable trust between each partner, requiring significant investment of time and effort in the early stages. Collaboration comes with negative impacts that must be dealt with.

These include differences in culture, professional perspectives and ways of working. These must be handled early. A council and its partners should recognise the impact of political differences as this would bring imbalances in both power/influence and contribution/inputs between themselves and partners in collaborative budgeting (Raine *et al.*, 2011:4).

There has been a shift in South Africa away from traditional financing, owning and managing of public projects. Alternative Service Delivery (ASD) arrangements have been widely used with the most recent one being the Municipal Infrastructure Support Agency (MISA), established in 2011. ASD arrangement is defined as a creative and dynamic process of public restructuring that improves service delivery by sharing governance functions with other government entities (Zussman, 1997). These agencies can bypass the many bureaucratic challenges that municipalities face and hence provide potential for innovation (Peters, 2012).

Professional partnerships between local government officers in the developed countries such as the United Kingdom and also in the developing world are increasingly recognised as effective in facilitating the exchange of knowledge and expertise. The perceived advantages of local authority partnerships are capacity building, structural reform and meeting the MDGs. Capacity building seeks to develop the abilities of the individual local government officer. Structural reform looks at the structures and organisation of government (Evan, 2009).

It seeks to strengthen and streamline the basic patterns and practices of the institution in an effort to build a stronger administrative base and facilitate a more efficient service delivery. Making communities safer and supporting new black business have been at the heart of the link between Leeds City Council in Britain and Durban in South Africa; Leeds has worked with the South African local authority, police and residents. Improving the economy of Ekurhuleni in South Africa has been an outcome of the link between Ekurhuleni Metropolitan Municipality and Britain's Lewisham, working in partnership with the South African Department of Labour (Evan, 2009).

The implementation of transparent budgeting may decrease opportunistic behaviour by opposition parties. The importance of budget transparency in local government—within globalisation processes—has given rise to greater recognition, materialised in an application of the subsidiary principle and growing municipal participation in public policies. This is based on municipal performance in terms of focus on service quality, deregulation and decentralisation and management (Boubeta *et al.*, 2010).

Governments continue to prefer controlling administrative processes as well as (now) expecting performance results. The performance measurement and public reporting process tends to be decoupled from internally focused performance measurement for performance management (Hildebrand & McDavid, 2011:42-20).

CoGTA (2014:7-8) maintains that a differential approach is critical in areas such as public engagement, good governance, financial management and technical capacity. Standards have been suggested for municipalities that are dysfunctional. The aim is that they must at least perform the basic functions of local government and enforce current policies and legislation. The middle-performing municipalities must be taken to a higher level while at the same time incentivising the top performers. Lastly, there has to be a zero-tolerance approach to corruption and fraud.

The CoGTA (2012) Local Government Skills Audit argues that a municipality has capacity if it has satisfied the following criteria:

- Strategic leadership to steer the municipality towards achieving its vision;
- Clear organisational purpose and orientation;
- Flexible and robust structures;
- Efficient and effective systems;
- Sufficient resources such as infrastructure, opportunities to mobilise assistance through partner network, solid inter-governmental relations and readily available capital and operating funds; and
- Can positively engage with its environment in forming and mobilising community participation and effective partnership.

However Legoabe and Ngozwana (2012:49) noted that mentorship programmes were not running as planned. The Young Professionals (YPs) were being prematurely absorbed by host municipalities before they could finish the programme and register as professionals. This happened during the third year of the programme, where a number of YPs were pre-absorbed and reassigned to municipalities. This went against provincial ordinances and national legislation requiring the need for experienced, qualified and registered professionals.

This trend grew within host municipalities, with absorption taking place even at senior positions such as Municipal Technical Manager or PMU Manager. This was done despite the incumbents having not fully appreciated the functional responsibilities and legislative obligations of their new municipal function. This premature appointment of civil engineers posed both short- and long-term risks to both employer and employee. A major indirect long-term risk emanated from possible litigation following such events as unforeseen bridge collapses.

Other secondary risks identified included, but were not limited to, non-compliance with the Occupational Health and Safety (OHS) Act; ignorance of critical legislation and financial processes and their implications; and inability to manage highly technical complex projects that required advanced application of professional skills (Legoabe & Ngozwana, 2012).

2.10 CRITICAL REVIEW OF KEY STUDIES DESCRIBED ABOVE

It is the responsibility of the national and provincial government to support and strengthen local government in managing its affairs, while exercising their powers within the ambit of the legislative framework.

When one checks the DPLG's role in terms of co-ordination, monitoring, regional collaboration, maintenance of programme management and technical support throughout the project life cycle of an infrastructure project, then the projects should be on time since corrective actions would have been taken earlier. The DPLG should assist a local government to manage triple constraint. Secondly, it would have the effect of minimising or completely eradicating the return of unspent funds to the Treasury.

Wang (2015) maintains that the primary goal of local government in China is to contain social discontent. The Chinese are encouraged to petition local government. This does not apply in South Africa as the country is ravaged by violent service delivery protests. People start with petitions, then realise that their grievances are not being addressed.

Decentralised planning proved successful in India and this IDP process is the same system used in South Africa,. The main focus in both systems is people participation, taking care of people's aspirations and needs.

The DPLG (2004a) suggested a mechanism to disburse funds that is simple and easy to monitor, with the outcomes of municipal spending easy to evaluate. However that is not the case with underspending, while overspending could have been avoided earlier and would not have progressed through succeeding years.

Many strategies have been suggested, at implementation level, by the DPLG and CoGTA for turnaround, but planning, implementation and monitoring systems are crucial. Projects will continue to fail in spite of the government providing enabling policies, and financial and institutional support for municipal infrastructure. However, the Presidential Local Summit recognised that there were dysfunctional municipalities and found corruption, plus the non-existence and non-functioning of some councils. Poor financial management and a poor record of service delivery were also visible. This acknowledgement should form the basis for a turnaround strategy.

Successful implementation of infrastructure projects is highly dependent on different types of resources, placement and funding, and also proper management. This will require local government to respond to the challenge of good governance and efficiently using resources. This can be done through integrating IDP processes with MIG project planning. However, widespread instances of corruption amongst public representatives and in business result in breakdown of values and good governance.

The most significant part of process re-engineering is to find out what the problems are, then address them head-on. There must also be consequences for non-performers and recognition granted to top performers. One such is the fast-tracking of the appointment of contractors. Another measure is to align the municipal financial year with the central government's financial year.

Procurement has been identified as a bottleneck for infrastructure and service delivery. However, suggesting that preferential procurement would be used as an empowerment instrument would only delay projects further. Procurement systems and processes must be free from political interference and streamlined with a project life cycle. The DPLG can oversee this function as mandated and utilise the Municipal Infrastructure Unit (MIU) for this function

Azhar, Kang and Ahmad (2014:214) argue that public projects have limitations and suggest that Integrated Project Delivery (IPD) eliminates those limitations. IPD focuses on overall improvement and integrates processes, tools and people in the systems. It addresses inefficiencies and waste embedded in current projects, including MIG projects. The success of the system is based on trust, and collaboration in reviewing and resolving design and construction problems to find the best solution (Jones, 2014; Azhar *et al.*, 2014; Suprpto, Bakker, Mooi & Moree, 2015).

The LGSETA supports local government in achieving priority 9 and NSDS 3. Priority 9 is about a *“responsive and accountable, effective and efficient local government system”*. It is of paramount importance that municipal council approve the structures of the local government. However, the National Treasury says that these structures are outdated and inadequate, which creates a dilemma in meeting both priority 9 and the National Skills Development Strategy (NSDS) three objectives.

2.11 SUMMARY

The role of municipalities has changed with the implementation of acts such as the Municipal Act, Act No. 117 of 1998, with devolution of powers dealt with by the Water Services Act (1998). Functions have been transferred from national to provincial level and even further, to the local government. However, survival of local governments is based on fiscal sustainability. Fiscal policies must be economically desirable and involve some degree of autonomy.

Local government revenue has four principal sources. These are: general revenue, utility revenue, liquor store revenue and insurance trust revenue. Problems arise with revenue if the tax rates are set by the central government.

The provision of MIG has eased the finances of the local governments and improved delivery of their mandate. Services within local governments are funded and maintained as total fund expenditure per capita.

Section 214 of the Constitution of South Africa (1996) makes provision for the allocation of resources between three levels of government with the MFMA (2003) providing the financial management system. Implementation levels and structures vary from place to place if financial responsibility has been properly handled. Efficiency is improved by fostering local autonomy.

2.12 CONCLUSION

CoGTA has conceded that there is still much to be done in some of the 278 municipalities in South Africa. Three categories have been identified: top, middle and bottom. At the bottom are the dysfunctional ones, requiring significant work. CoGTA found endemic corruption, councils which didn't work, a lack of structured community engagement and poor financial management leading to continuous negative outcomes, resulting in a poor record of service delivery (CoGTA, 2014a:4-5). The political management of municipalities and their responsiveness to the needs and aspirations of local communities had to be further developed.

Citizens had to be empowered to hold local government accountable and ensure it lives up to its promises. This will improve service delivery.

2.13 LINK TO THE NEXT CHAPTER

The next chapter examines the relevant theory, considers definitions of terms, and looks into the role of municipalities pertaining to revenue, fiscal responsibility, financial management, project management, procurement and governance.

CHAPTER THREE – THEORY

3.1 CHAPTER LAYOUT

This chapter defines terms that are applicable to the chapter and the study as a whole while the researcher looks into the following topics in depth: the role of municipalities in South Africa; revenue and how the MIG formula is used to allocated funds; fiscal responsibility including—but not limited to—fiscal sustainability and transfer; decentralised government; financial management and governance; project management; project delivery systems; procurement and framework formulation; and revenue, fiscal and financial management.

3.2 REVENUE

South African local governments are entitled to an equitable share of revenue to enable them to execute their mandates. They may also receive other allocations from national revenue, either conditionally or unconditionally (Section 227, Constitution of the Republic of South Africa, 1996). These allocations can be either a Provincial Infrastructure Grant (PIG) or an MIG, and used for infrastructural projects. Revenue management, inclusive of collection, can determine the success or failure of a municipality.

A municipality has to make a choice on how it raises revenue from local sources. These sources should match the benefits and costs of municipal services. Category A and B municipalities use property rates while category A and C have the Regional Service Council (RSC) levy. Taxes on utility consumption and motor vehicle are also a source of revenue for some. The revenue bases of municipalities must reflect the functions they are expected to undertake (Smoke, 2001).

Local government revenues come from four principal sources: general revenue, utility revenue, liquor store revenue and insurance trust revenues. Local governments engage in functions that provide non-public goods to consumers or customers; they can generate revenues in the form of charges that are similar to revenues for firms. Some governments have revenues from utilities: water, electricity and gas supply and transit services. They may also receive some revenues from charges they levy on users of certain highways (toll roads), education, hospitals, airports, water and sewerage, solid waste management and other services they provide to their own citizens and to others (Garay *et al.*, 2011:46).

Tax revenue may be divided into four principal types: (1) individual and corporate income tax; (2) sales tax; (3) property tax; and (4) motor vehicle licenses. Finally, because local

governments provide services to their citizens on behalf of the state, certain inter-governmental transfers accrue to them for these services (Garay *et al.*, 2011:46).

Local governments in South Africa collect only a relatively small portion of revenue from their own resources and have little or no borrowing power to fund deficits. Appendix A presents a list of category B municipalities collecting more than 15 percent of Gross Value Added (GVA) in their particular areas. It should be noted that the 2004 GVA is used as a proxy for regional GDP since it is the only related figure available. Revenue includes charges on the sale of services such as electricity and water, etc., own funding and external loans, but excluding subsidies and grants used to finance both operational and capital expenditures. It is noted that from the total of 237 municipalities in category B, only 43 collect more than 15 percent of GVA from their own resources and loans in their areas (Schoeman, 2011 5).

Transferring revenue-raising power to local governments means transferring responsibility for expenditure and is based on a measure of each jurisdiction's potential revenue-raising capacity, and not on actual revenue. Revenue capacity must be measured accurately, otherwise transfers will create disincentives for local governments to raise revenue (Richard *et al.*, 2002). Hatemi (2002:97) believes that proper revenue administration assists local government with the effective collection of tax and non-tax revenue.

Private reserves are established and run by their owners who are responsible for their maintenance and management, yet they indirectly benefit from the revenues of municipalities (Ring, 2008). In the case of revenues, this can be interpreted as evidence that the overall amount of grants to municipalities does not correspond to local tax revenues. In the case of capital grants, this might occur because a municipality dedicates greater efforts towards applying for project grants following a revenue shortfall (Solé-Ollé & Sorribas-Navarro, 2012:3210).

The provision of grant aid enables central government to exercise control over local government. This might also be due to *ad hoc* interventions by the central government in terms of providing assistance to certain municipalities with revenue difficulties (Pacione, 2001:17; Johansson, 2003; Solé-Ollé & Sorribas-Navarro, 2012).

Total population, per capita personal income and intergovernmental revenues are consistent predictors of per capita expenditures (Carr & Karuppusamy, 2010). These findings confirm the work of Jung (2006) and Craw (2008). The need for economic efficiency requires greater autonomy of sub-national government in expenditure and taxing decision, with Solé-Ollé and Sorribas-Navarro (2012:3204) believing in the adjustment of the revenue and the expenditure side after a budget.

Each county should strike a balance with respect to the weight attached to the redistributive, stabilisation and efficiency effects of transfer design. Fiscal capacities should be fully equalised. Costing mechanisms for collaborative participation need further refinement to capture accurately the cost of participating (Richard *et al.*, 2002). Networked organisations represent an opportunity for budgeting reform as they lack institutional barriers to change, while revenue collection efficiency and effectiveness can be measured using different methods (Mitchell & Thurmaier, 2011; Hatemi, 2002).

MIG Formula- and project-based

Table 3-1: Pros and Cons of Formula-Based Grants and Project-based (Source: DPLG, 2014:50)

	Formula-based	Project-based
Pros	• Stable and predictable • Avoids discretionary or subjective interference (i.e. at political level) • Imposes hard budget constraint • Enhance transparency and accountability if formula is published • Can be simply run at national level • Can allow more municipal discretion	• Promote healthy competition amongst municipalities • Allocations only made to projects with best investment return • Encourage pre-planning by municipalities • Overcome “lumpiness” typical of infrastructure projects
Cons	• Require reliable data • Not as flexible to respond to changing priorities • Can fund inefficient projects	• Can be an administrative burden • Richer or more capacitated regions may continue to get bigger allocations • Can create incentives for municipalities to bid for exorbitant allocations.

MIG Formula

The CoGTA (2014(b):4) suggested the basic elements of the formula for calculating the national totals. With the calculation of the total allocation to municipalities, $MIG_{(F)}$ is calculated as the difference between the total allocations made to the MIG through the national budget process ($MIG_{(T)}$) and the national MIG unit management costs and the allocation for the Special Municipal Infrastructure Fund (SMIF). This applies to both new and rehabilitated infrastructure.

Equation 3.1: Total Allocation through National Budget

$$MIG_{(T)} - \text{management costs} - \text{SMIF} = MIG_{(F)}$$

The $MIG_{(F)}$ allocation is further split as follows:

Equation 3.2: MIG Allocation Formula

$$MIG_{(F)} = B + P + E + N + M$$

Where:

- **B** is the amount allocated for *basic residential infrastructure* (new and rehabilitated) and comprises 75 percent of the total allocation. This component is further divided into sanitation (72 percent), road and storm water (23 percent), and “others”, such as refuse removal and street lighting amount to 5 percent.
- **P** is an allocation for *public municipal service infrastructure* (new and rehabilitated) and comprises 15 percent of the total allocation. Public municipal facilities include community facilities such as community centres and sport facilities, social services, emergency services, parks and open spaces and public transport.
- **E** is an allocation for infrastructure for *social institutions and micro-enterprises* (new and rehabilitated) and comprises 5 percent of the total MIG allocation.
- **N** is an allocation to identified *nodal municipalities* in the urban renewal and rural development programmes and comprises 5 percent of the total MIG allocation.
- **M** is a negative or positive allocation related to *past performance* of each municipality relative to grant conditions. It is an allocation to allow for performance-related adjustment to the total MIG allocation.

The above equation shows how local municipalities are limited and directed on how to use the funds, and for what. It requires that prioritised projects be budgeted for. Although the formula appears to be limiting, local municipalities have an option—through infrastructure requirement—to decide how the funding should be applied to address their basic services. This can only be done based on the following two assumptions:

- There is a capable planning instrument at local government level; and
- Capacity exists to translate expectations into technical infrastructure requirements in conjunction with department sectors (CoGTA, 2014b).

Table 3.2 defines municipal services.

Table 3-2: Municipal services definition (Source: DPLG, 2004b).

Infrastructure category	Target consumer group	Sub-category	Services included
Residential services	Special households		“Plot package” including electricity, storm water management, water supply, sanitation, municipal roads, refuse removal and street lighting
Services provided to institutions other than public municipal services	Institutions such as schools, clinics, police stations, prisons, churches and private recreational facilities		“Plot package” ⁵
Public municipal services	Accessible to all	Public transport	Municipal public transport, municipal airports and pontoons, ferries and harbours
		Emergency	Fire fighting

⁵ School sanitation is a particularly high priority due to the impact it has on the health of the community.

Infrastructure category	Target consumer group	Sub-category	Services included
		service	
		Community services	Child-care facilities; beaches and amusement facilities; cemeteries, funeral parlours and crematoria; cleansing; facilities for animals; fencing; local amenities; local sports facilities; municipal health services and public places
Standard services to business premises ⁶	All businesses		“plot package”

CoGTA (2014b) claims that direct grants have assisted local municipalities to eradicate basic services backlogs. Such grants allow municipalities to undertake multi-year planning against multi-year allocations, as per the DoRA formula. The grant absorption ability of a municipality to deal with basic services has increased. The process must be transparent and predictable.

It is important to note that local municipalities are the spending authorities (CoGTA, 2014b). The table below depicts allocation criteria for different infrastructure grants, the methods used, and provides additional comments.

Table 3-3: Allocation Criteria for Infrastructure Grant (Source: DPLG, 2014:50)

Grant Name	Method	Comments
MIG	Formula	Uses Census 2011 data, based on poverty and demographics.
Urban Settlements Development Grant (USDG)	Formula	Based on old MIG formula, updated with allocations for informal settlements .
Integrated Cities Development Grant (ICDG)	Formula	Allocations to metropolitan municipalities based on population and on performance against pre-determined criteria.
Rural Road Assets	Formula	Uses a R500/km rate based on the extent of

⁶ MIG funds may not be used for building work (top structure) for business.

Grant Name	Method	Comments
Management Systems (RRAMS)		network and number of local municipalities in a district municipality.
Rural Households Infrastructure Grant (RHIG)	Formula	Based on the highest number of backlogs in priority districts.
Municipal Water Infrastructure Grant (MWIG)	Project-based	Prioritised in the 24 priority districts; projects assessed by DWS and allocations made on the feasibility of the projects
Public Transport Infrastructure Grant (PTIG)	Project-based	Budget requests evaluated by department per project
Neighbourhood Development Partnership Grant (NDPG)	Project-based	Approval of projects by National Treasury; priority for township areas with high densities, poverty and connectivity
Integrated National Electrification Programme (INEP)	Project-based	Approval is by annual committee chaired by the department; criteria used include backlogs, a rural bias, integration with other projects, and alignment with the IDPs
Regional Bulk Infrastructure Grant (RBIG)	Project-based	Projects assessed by DWS and allocations made on the feasibility of the projects

The Urban Settlements Development Grant (USDG) was used for metropolitan areas before it became MIG Cities. The USDG is the largest infrastructure grant that allows metros some flexibility and discretion to fit in with their consolidated metropolitan funding. It can be used for capital investment and basic infrastructure for the urban poor (DPLG, 2014:24). The DPLG (2014:25) proposed that the USDG be changed to the Integrated Urban Development Grant (IUDG) and that the co-ordinating department should administer it.

The Integrated National Electrification Programme (INEP) is one of the project-based grants administered by the Department of Energy (DoE), and is used to electrify poor households. However it was found that metros used the USDG for electrifying all households. Hence a metro's share of the INEP grant is allocated with other basic services as part of a consolidated urban grant.

Some municipalities are under the impression that through mergers, they may in the future become liable for the excessive debt of a larger common pool of revenues, while others note that pre-merger local governments care most about their own geographic units (Bönisch *et al.*, 2011:13; Hinnerich, 2009:722). Financial aid for debt servicing to other levels of government, tax-revenue-sharing, general grants, general apportionments, and the allocation to reserve cannot be matched to measureable commands (Bönisch *et al.*, 2011:20). However Stanley (2003:191) states that non-traditional agriculture exports (NTAX) are those that traditionally comprise no more than 1 percent of a country's export revenues.

Share is important for the understanding of the fiscal relationship between the province and the national government. Other explanatory variables include the real budgetary expenditure of the local government, which is the main component of public consumption, the size of the government and the development level of the province. The centralised fiscal system is the centre in terms of the increase in revenue at the expense of local governments (Gu & Chen, 2005).

It is imperative that external auditors of local governments submit their audit reports as soon as possible after fiscal year-end. The dependent variables constitute the number of days from the end of the fiscal year to the external audit report date. Administrators and elected officials are expected to signal fiscal competence and stewardship to citizens, investors and other users (McLelland & Giroux, 2000:263). Such administrative competencies allow the state and localities to find new ways to raise revenue and provide services that are valued by taxpayers, or drop the ones that are not (Gordon, 2011:346). Administrative costs borne by governments such as record keeping, auditing and enforcement, are ultimately borne by the taxpayer. As a result, the municipal revenue administration cost relative to the total revenue collected can be employed as a quantitative indicator to test efficiency (Hatemi, 2002:98).

Public consumption depends on the availability of government revenue, including budgetary and off-budgetary revenues. For a provincial government, its revenue is subject to remission to the central government. Hence, the ability of the provincial government to retain revenue should be embraced as a main explanatory variable. Municipalities employ the share of the revenue retained by the provincial government in the total revenue produced by the province as a proxy for the government's ability to retain revenue (Gu & Chen, 2005:1027).

Local firms' tax and wage payments are the main sources of regional revenue and employment and if regional revenue is derived from unearned income streams rather than local taxation, the effect of fiscal autonomy weakens (Desia *et al.*, 2005:815).

Besides revenues from the local business tax, grants and federal tax revenue sharing play an important role in municipal financing. The main deficiency identified in this system is the lack of tax independence for local governments (Hernandez-Trillo & Jarillo-Rabling, 2008).

Minas Gerais had shown a 100 percent increase in the number of municipalities benefiting from ICMS-E revenue since the inception of the ecological programme. Instead of perceiving protected areas as an obstacle to development, municipalities are starting to see them as an opportunity to generate revenue (Ring, 2008:491).

Economic development metrics, such as ROI, can help a city deliver services more effectively, especially in today's fiscally constrained environment. Economic gardening and business incubation ROI calculations can be used to benchmark success/failure and estimate community impact. Moving forward, the exact ROI inputs will need to be agreed upon by the City Commission (or City Council), Mayor and City Manager (economic development specialist). The city should publicly explain its stance on economic gardening and business incubation (Girdwood & Girdwood, 2011:29).

3.3 PUBLIC FINANCIAL MANAGEMENT

The South African Constitution (1996) provides the basis for public financial management, assigning clear roles and responsibilities to different levels of government. These are supported by provisions of the Public Finance Management Act 1999 (PFMA) and the Municipal Finance Management Act 2003 (MFMA). The following key areas pertain to public finance management:

- The general guidelines for the regulation of financial affairs of all levels of government;
- The allocation of resources between the three levels of government (Section 214);
- The powers assigned to the National Treasury to prescribe measures to ensure transparency and expenditure control in all government spheres (Section 216); and
- The establishment of an independent Fiscal and Finance Commission to advise Parliament and other authorities on fiscal matters (Quist, Certan & Dendura, 2008:40-41).

The MFMA (2003) is a finance management system for local government, forming an integral part of the broader reform package for local government. It aims to modernise budgetary, accounting and financial management practices in local government to achieve efficient service delivery to communities (Quist *et al.*, 2008:42).

The challenges of economic growth and effective service delivery are regarded as key to long-term development (Thomas, Seager & Mathee, 2002). Provincial governments prepare budgets and financial reports consistent with the national budget and these are consolidated into a financial report within five months of the end of the fiscal year. Local authorities prepare financial statements (Quist *et al.*, 2008:65).

A number of shortcomings in local government finance in South Africa are outlined, with some of the most relevant issues including (Schoeman, 2011:3-4, Momoniat, 2001:2):

- Increasing dependence of municipalities on transfers from national government to fund their activities. This is due to a lack of own-revenue effort and a lack of commitment to leveraging private funding.
- The outstanding debtors of municipalities.
- Actual expenditure by all categories of municipalities had been increasing annually by 13,3 percent. This increase far exceeded the inflation rate and represents a sharp increase in real expenditures.
- Low levels of expenditure on repairs and maintenance due to the ease with which these expenditures can be deferred in favour of new capital projects or other operating costs. Two factors appear to underlie this problem. First, the under-pricing of municipal services relative to their true cost of delivery, including maintenance costs, and secondly, poor management practices in municipalities.
- Poor quality of data on provincial transfers to local government. Some provinces are not consistently gazetting their municipal allocations and it is safe to assume that they transfer larger amounts than what they are publishing. The fact that provincial transfers to municipalities have not been consistent is an indication of uncertainty on the part of provinces in relation to their planning, which in turn makes it difficult for municipalities to plan for this funding.
- Weak co-ordination between programmes. The overall implication is that transfers are not yet reaching their potential in terms of comprehensively supporting economic growth and poverty alleviation.
- Programmes to strengthen the capacity of municipalities remain fragmented and are difficult to evaluate. This is a significant problem, given concern about capacity constraints in municipalities.
- Probably one of the most serious problems at local government level is the proportionally high ratio of salaries to total operating expenditures (28,4 percent in the case of Metros and 35 percent in the case of Category B municipalities for which data is available).

The challenges faced by the municipalities at the lower end of the spectrum relate primarily to high vacancy rates, which are greatly aggravated by poor management and poor governance (Schoeman 2011:3-4; Momoniat, 2001:2).

CoGTA (2014:11) believes that sound financial management is integral to the success of local government. CoGTA and the National Treasury have come up with a remedial process and performance indicators that will be constantly monitored. These include the number of disclaimers in the last three to five years; whether the budgets are realistic and based on cash available; the percentage of revenue collected; the extent to which debt is serviced and efficiency and functionality of supply chain management. The National Treasury Framework for Managing Programme Performance Information (FMPPI) requires that processes to produce performance indicators should be verifiable.

Public finance management of revenue and expenditure, in the form of financial performance reporting, is needed in a timely and reliable manner (Hatemi, 2002). China has solved many problems in its public finances, such as unbalanced financial rights, the duties of local governments, and the fiscal difficulties of the government at county and township level. Financial allocation is one of the most important means in the distribution of national income and is important for promoting economic and social development (Yingguo, 2011).

Expenditure for covering deficits in the budget in previous years is excluded, since analysis is restricted to one year and should not be confounded by previous years' financial management. Citizens tend to underestimate the future burden of debt. Vote-maximising local politicians have incentives to shift the financial burden of municipal expenses onto future generations. Another problem is shadow budgeting as this affects municipal efficiency. Several municipal services are usually provided by municipal enterprise and these are not always included in the municipal core budget (Bönisch *et al.*, 2011).

Budgeting has long served as an instrument to achieve political and administrative goals. Schick (1966) provides chronological and heuristic dimensions to the study of public budgeting and financial management, with the budget being developed first to control government spending and later into a management tool. It developed into planning for multi-year expenditure programmes with the advent of complicated weapons systems and entitlement welfare programmes. Thurmeier and Gosling (1997) have added policy as the fourth function of budgeting as it details the rapid conversion of three state budget offices to form a control orientation to dominant policy orientation (Mitchell & Thurmaier, 2011).

No discussion of state finances would be complete without mentioning political gridlock. California is notorious for budgets that arrive late, while the states of New York and Illinois missed their budget deadlines in 2011 due to partisan wrangling (Gordon, 2011). Budgeting for management recognises that executive and management principles need to play a greater role in step with public management efforts. Lack of the institutional norms generally found in long-established government bodies may allow for enticing budgetary and management possibilities in newly established networked organisations (Mitchell & Thurmaier, 2011).

Different systems for financing LTC can be compared, providing a theoretical overview of the policy options and trade-offs connected with designing and providing a system for LTC financing (Karlsson *et al.*, 2007; Wittenberg, 2003).

Technological improvement in both financial accounting and auditing have resulted in decreases in the reporting time. The most likely factor increasing the time from fiscal year-end to external auditor report date is the regulations that increase the complexity and risk of financial audits, especially the Single Audit Act of 1984. Prompt auditing and annual report timeliness is effective financial management. Competent managers may have an incentive to report financial information in a timely manner, which may be regarded as above-average performance (McLelland & Giroux, 2000).

Government accounting regulations, such as requiring financial statements to be prepared in conformity to generally accepted accounting principles, significantly increase audit time. Large cities were chosen to analyse audit report timelines due to the high incentive for signalling as well as a great need for analysis by bond investors (McLelland & Giroux, 2000).

There is little evidence that individual investors review annual reports or other pieces of financial information. It was found that interest rates for municipal bonds changed only after the bond ratings changed. Audit delays lead to higher risks, missed opportunities and greater information asymmetry (McLelland & Giroux, 2000).

The correctness of revenue collection and expenditure management can be evaluated using both quantitative and qualitative indicators. Constantly reviewing the pattern of spending is essential to ascertain what is still required to fulfil target objectives with planned expenditure: this can be used to evaluate whether the expense system is effective or not. To be effective at revenue collection, municipal governments need to design and implement the requisite indicators (Hatemi, 2002).

Grant financing may diffuse accountability and foster rent-seeking clients, thus eroding the very benefits gained from decentralization of spending. However, with its virtues and perils, any final

evaluation of grant financing has to be district municipality-specific, with the system depending on the particular details of the local government financing systems as a whole (Solé-Ollé & Sorribas-Navarro, 2012:3204).

Conditional grants play an important role in the financing of capital projects and many of them require co-funding by own-revenues. This is the case with the municipal infrastructure grant. Finally, local debt is subject to certain ceilings, involving both the ratio between debt and current revenues and the short-term financial position (Solé-Ollé & Sorribas-Navarro, 2012).

Environmental funds as para-budgets have the effect of driving services and commercial resources out of the market for environmental protection. Other means of financial assistance in the form of grants-in-aid and preferential loans encourage local governments to undertake investment projects and to supplement their limited means with commercial credits. In Poland, the legislation dealing with public finances does not provide for pre-assumed purpose-oriented budget expenses. A possible provision of environmental protection in the budgetary law would bring only minor changes, because in practice it will mean a dispersion of means to different purposes and a temporary patching of the budget (Gorka, 2006:16).

The National Environmental Management Act (NEMA) (Act 107 of 1998) and decentralisation of management allow those in South Africa that profit from the natural environment not only to record and control pollution by themselves, but also, on their own, to set the level of due charges according to rates updated annually by the rulings of the Council of Ministers and by municipal by-laws. Financial assistance from these funds can reach thousands of millions annually, with the 2005 figure being twice as high as the total receipts from charges and penalties (Gorka, 2006).

Globally, cities play a pivotal role in servicing these firms as command centres of the global economy. Cities that excel in business and financial services further facilitate the agglomeration of such businesses by attracting other firms to their jurisdictions. Similarly, global city regions have emerged as new spatial and economic formations in the world economy (Vogel *et al.*, 2010).

The South African Constitution (1996), sections 100 and 216, allows for intervention by central government when an entity of government fails to perform an executive function related to financial management. It prescribes circumstances under which the National Treasury may withhold funds (Quist *et al.*, 2008:40).

3.3.1 Financial Governance

Dlalisa (2009:42) argues that there must be internal control measures within local government to comply consistently with legislative requirements. The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) provides the foundation for good governance. Section 195 of the Constitution of the Republic of South Africa, Second Amendment Act, 2003 (Act 3 of 2003) makes provision for good governance through a set of public administration guidelines. These principles are:

- A high standard of professional ethics must be promoted and maintained;
- Efficient, economic and effective use of resources must be promoted;
- Public administration must be development-oriented;
- Services must be provided impartially, fairly, equitably and without bias;
- People's needs must be responded to, and the public must be encouraged to participate in policy-making; and
- Transparency must be fostered by providing the public with timely, accessible and accurate information (Dlalisa, 2009)

The Municipal Finance Management Act, 2003 (Act 56 of 2003) is an important piece of local government legislation that ensures good governance in financial management matters. Its object is to secure sound and sustainable management of the fiscal and financial affairs of municipalities and municipal entities by establishing norms and standards.

Section 102 provides guidelines on how to deal with irregular, fruitless and wasteful expenditure by the municipal staff concerned, irrespective of their levels within municipal structures.

Section 126(1) (a) of the Municipal Finance Management Act (MFMA) requires all accounting officers to prepare annual financial statements of their municipalities within two months after the end of the financial year. These must be submitted to Auditor-General.

The Auditor-General is governed by the Public Audit, 2004 (Act No. 25 of 2004), and this empowers municipal accounting officers to perform their tasks more effectively, while promoting transparency and accountability. Dlalisa (2009:86), citing Pope (2000), argues that the Auditor-General is the fulcrum of a country's financial integrity systems.

The Auditor-General's report for 2008/09 stated that a significant number of matters relating to municipalities dealt with inadequate infrastructure asset management processes; compiling asset registers; compiling budgets and financial statements; supply chain policy and procurement; analysing and interpreting financial statements, which were inadequately prepared; cost accounting; and filing and documentation (LGSETA, 2012).

Sections 16 to 19 of the Municipal Systems Act, 2000 (Act 32 of 2000) provide for public participation to allow for transparency, involvement, openness, accountability, responsibility and participation. Local governments must encourage and create conditions for local communities to participate in the affairs of the municipality (Dlalisa, 2009:50).

3.3.2 Financial Performance

Ratio analysis is a useful management tool that improves understanding of financial issues and provides key indicators of municipal financial performance (Poznanski, Sadownik & Gannitsas, 2013:1). Poznanski *et al.* (2013) argue that for the ratios to be useful and meaningful, they must be:

- Calculated using reliable and accurate financial information.
- Calculated consistently from period to period.
- Used in comparison with internal benchmarks.
- Used in comparison with other local municipalities. The researcher is using the City of Matlosana, Tlokwe Local Municipality and Rustenburg Local Municipality.
- Carefully interpreted in the proper context.

D'Amato (2010) states that financial ratios are used to assess company—or in this instance local municipality—performance. Financial ratios are tools to help with the interpretation of results and to allow for comparison against the previous year.

The annual financial statement for Drakenstein Local Municipality (DLM) (2009) provides a financial health assessment which analyses and interprets financial information relating to the municipality in order to assess its financial position, performance and cash flow positions. The ratios used are classified or categorised into four areas: Revenue Management, Expenditure Management, Asset Management and Liability Management (REAL).

Revenue Management

A local municipality uses two ratios, namely the level of reliance on government grants and actual revenue as against budgeted revenue. The purpose of the level of reliance on government grants ratio is to determine what percentage of a municipality's revenue is made up

of government grants, to determine the level of reliance on government funding by the municipality. The formula for this is: Grants & Subsidies/Total Revenue.

The purpose of actual revenue vs. budgeted revenue is to determine and identify deviations between actual and budgeted revenue and to ascertain reasons for the deviation. The formula for this is: actual revenue/budgeted revenue.

Expenditure management

The report discusses personnel costs vs. total expenditure, total operating actual expenditure vs. budgeted expenditure, interest as a percentage of total expenditure and repairs and maintenance/total operating expenditure. The purpose of the personnel costs to total expenditure ratio is to indicate what percentage of total expenditure is attributable to personnel while the total actual operating expenditure vs. budgeted expenditure ratio is to identify the deviation between actual and budgeted expenditure and ascertain reasons for the deviation. Interest as a percentage of the total expenditure's purpose indicates the percentage of total expenditure that is attributable to interest, while the last ratio's purpose is to determine whether the local municipality is utilizing adequate amounts on repairs and maintenance of PPE (DLM, 2009).

The researcher is using the operating expense/revenue ratio (operating expense ratio) to determine the profitability of the local municipality. The operating expense ratio compares expense to revenue. A decreasing ratio is considered desirable since it generally indicates increased efficiency (Poznanski *et al.*, 2013).

Asset Management

Drakenstein Local Municipality (2009) discusses only total capital expenditure, i.e. actual vs. budget and debtor collection period. The purpose of the total capital expenditure ratio is to identify, per class of asset, whether a municipality has a variance of more than 5 percent when actual and budgeted capital expenditure are compared. The debtor collection period ratio's purpose is to calculate the debtors collection period of the municipality by comparing the year-end balance of certain debtors with revenue earned from debtors during the financial year. However, asset management is not used in this study for financial performance analysis.

Liability management

The researcher also uses gearing ratios or leverage ratios. The gearing ratio compares owner's equity or capital to borrowed funds. Gearing is a measure of financial leverage, demonstrating the degree to which a firm's activities are funded by the owner's funds versus creditor's funds

(D'Amato, 2010; Poznanski *et al.*, 2013:9). The debt to equity (DE) ratio provides an indication of a municipality's capital structure. Acceptable debt to equity ratios may vary across industries.

DE formula

Formula = total debt/equity (D'Amato, 2010)

Poznanski *et al.* (2013:9) argue that too much debt can put a local municipality at risk while too little debt may limit municipal potential. However, there must be balance, with the ability to service debt.

Liquidity management

Sowden-Service (2012:1036), D'Amato (2010:6) and Poznanski *et al.* (2013:7) define liquidity ratio as an indication of the company's ability to repay its debts in the short term. It focuses on current assets and current liabilities. The researcher has used current ratio, current asset: current liabilities. The current ratio indicates the ability to repay the current liabilities out of the current assets. The normal ratio is considered to be 2:1. D'Amato (2010) suggests that the numerator, current assets, may be adjusted to remove inventory, as inventory may be viewed as not readily available as cash. This is known as quick ratio.

Poznanski *et al.* (2013) maintain that a ratio of less than 1 indicates liquidity issues while a very high current ratio means there is excess cash that can be invested in the municipality, or there is too much inventory. A ratio of between 1.2 and 2.0 is sufficient.

Formula = (current assets)/(current liabilities)

3.4 PROJECT MANAGEMENT

The construction industry is vital for the development of any nation and the physical development of construction projects such as building, roads and water purification plants. Significant challenges exist for both project owner and contractor to deliver a project successfully due to complexity in design and involvement of a multitude of stakeholders (Alzahrani & Emsley, 2013).

According to Cartwright, Yinger and Ajmani (2007:24), professionalism includes demonstrating commitment to the project, operating with integrity, handling personal and team adversity in a suitable manner, managing a diverse workforce and resolving individual and organisational issues with objectivity. Project management involves building and maintaining the project team, plans while managing for project success and resolving conflict. Managing as a unit of competence can be measured. Cartwright *et al.* (2007:30) look at managing as effectively

administering the project through appropriate deployment and using both intangible and tangible resources. This is well reflected in the table below:

Table 3-4: Personal competence – Managing (Source: Cartwright *et al.*, 2007:30-31)

8.0 Unit of Competence: Managing	
Element 8.1 Builds and maintains the project team	
Ensures expectations and responsibilities are clear to team members and they understand their importance to the project	- Documented feedback from the project team on clarity and responsibility - Team correspondence - Documented project directives, tasks and assignments - Published Resource Assignment Matrix (RAM)
Element 8.2 Plans and manages for project success in an organised manner	
Insists on compliance with processes, procedures and policies	Monitored compliance of processes, procedures and policies Examples of enforcing policies and procedures
Element 8.3 Resolves conflict involving project team or stakeholders	
Ensures team and stakeholders are fully aware of team rules	Documented team rules

Suprpto *et al.* (2015:667) maintain that the success of a project can be ensured not by blaming the owner or the contractor, but through shared responsibility and focussing on finding solutions when problems occur.

Alzahrani and Emsley (2013:321) conclude that construction projects and their success are closely related to the contractor. However Kerzner (2001) maintains that project environment can breed problem-causing activities if not properly managed.

Common types of management pitfalls include: (i) lack of planning; (ii) activity traps; (iii) people versus tasks skills; (iv) ineffective communication; and (v) managing bottlenecks.

Activity traps result when the means become the end, rather than the means to achieve the end. Team meetings and customer technical interchange meetings, the development of special schedule and charts are some activity traps. Proper planning and delegation can eliminate them. Poor communication can produce a bottleneck. Another bottleneck can be caused by the

customer's project manager considering himself /herself higher than the contractor's project manager (Kerzner, 2001).

3.4.1 Contrast project management in the private and public sectors

Van der Waladt (2011:68) states that any comparison between public and private sector management should acknowledge the difference in nature, demographics, ideology, type of dispensation, culture of a state. The basic difference is private is profited orientated while public is service delivery orientated in terms of goals to be achieved. The following are amongst other differences stated by Van der Waladt (2011:70),

Table 3-5 Specific differences between private and public sectors (Van der Waladt, 2011:70)

	Private	Public
Established	Initiative of an enterprenuer to make profit.	Initiated by government to meet a needs, desirs and demands of the public.
Activities	Their own concern	Responsible and accountable to the public
Politics	Not directly affected by political movements	Politicised and institutionalised

The government institutions are using project management as vehicle to operationalise policy programme and strategic objectives for service delivery (Van der Waladt, 2011). Phase 3 of IDP process demands design and content of the project. This includes details for each project to be worked out in terms of beneficiaries, cost, completion data and management issues.

Van der Waladt (2011:80-81) alluded that PMI has developed a "Government Extension" to address distinctive practices found in the public sector. The Extension focuses on three areas perculiar to public sector that can affect project governance., namely

- The size and diversity of government entities and their projects;
- Government entities' underpinning in public law, which stipulate precise terms for execution, managerial and soicio-political responsibilities; and
- The responsibility of the project team to serve as stewards of public interest.

3.4.2 Project life cycle

Project life cycle contributes to broader strategies across many sectors (Crawford and Bryce., 2003:363). Pajares and Lopez-Paredes (2011:615) argue that *“some structural or systemic changes during project life cycle can alter the initial expected variability and lead the project outside confidence limits.”*

Crawford and Bryce (2003:364) state that due to cross pollution of project management approaches from other industries, the tool that has emerged as closest to being as aid is Logical Framework Approach (LFA). LFA is widely used as a project planning and appraisal tool. It is also used as framework for defining Monitoring and Evaluation (M & E) systems to support project beyond the design phase in the project cycle.

The community must be kept abreast of what is happening throughout the project life cycle, as per the figure below.

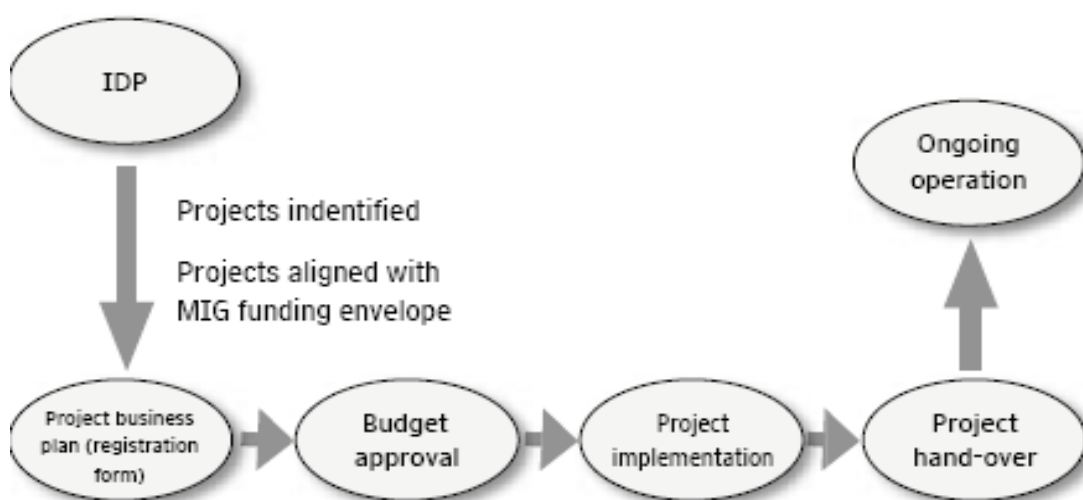


Figure 3-1 Overview of the Project Life cycle (Source: DPLG, 2004c).

A project business plan will vary depending on the sector departments. Sector department requirements are attached in Appendix F (DPLG, 2004c).

3.4.3 Project Monitoring Processes

Pajares and Lopez-Paredes (2011:615) state that Earned Valued Management (EVM) is management technique for project performance monitoring. EVM framework, variances and performance indexes inform project managers whether the project has over-cost or delay. Al-Jibouri (2003:145) maintains that progress must be monitored and compared as work proceeds in order to be able to identify and measure these differences.

Monitoring project performance involves taking measurement as the project progresses and compared the results against desired values. However, Al-Jibouri (2003:146) maintains that parameters used for assessing performance are financial.

Three of the most commonly used monitoring techniques are, namely

1. Leading parameter;
2. Activity based ratio; and
3. Variance and earned value analysis (Al-Jibouri.,2003:145-6)

It is important to note that these techniques are applicable to different situation (Al-Jibouri., 2003:154). Al-Jibouri (2003:148) argues that these monitoring systems must be tested for effectiveness and hence a project model has been developed to simulate the project and generate information relevant to these systems. In contrast, Pajares and Lopez-Paredes (2011:617) propose integrate project uncertainty in terms of its parameters variability within the EVM framework to improve project control. Atkinson (1999:339) suggests that criteria for project success should involve time, cost and quality. These projects are measuring delivery stage. However, Belassi and Tukel (1996:143) suggest success framework addressing four factors in four areas, namely factors related to the project; factors related to the project manager and the team member; factors related to the organisation; and factors related to the external environment. The study carried by Belassi and Tukel (1996) revealed that the following are critical factors for project success, namely

- Top management support;
- Client consultation;
- Preliminary estimates;
- Availability of resources; and
- Project managers' performance.
-

3.4.4 Project cost control

Al-Jibouri (2003:145) states that project plans are drawn to ensure that the work is carried out to the desired quality, in the allowed time and according to budget. Benjaoran (2009:273) states that most of the contractors struggle with cost control system.

To solve this problem cost control system that is suggested is to monitor the progress of project cost and to make a real-time comparison with bill of quantities (BOQ). This system must be well established developed (Benjaoran, 2009:275).

The earned value concept was adopted using three principle terms, namely the budgeted cost, actual cost and earned value. These were simplified to suit the capabilities of contractors with the quantities of materials in BOQ used as budgeted costs (Benjaoran, 2009:277, Al-Jibouri., 2003:150). The cumulative numbers of requisitioned materials as the actual cost and earned values were estimated by contractor's supervisors (Benjaoran, 2009:277). Al-Jibouri (2003:146) suggested the classical control cycle three stages, namely

1. Measuring the state of the system
2. Comparing these measurements with the desired state of the system
3. Taking corrective action to return the system to its desired state or to minimise some loss function

3.4.5 Project Management Office (PMO)

According to Desouza and Evaristo (2006:415-6) there is no universal definition of a PMO. Developing a PMO that works is an exercise in both customisation and sustained effort. A PMO varies in terms of size, structure and accountability. The only criterion for a PMO is that it must be aligned with municipal culture.

Different organisations use PMOs to run their projects. These include: the Auditor-General of South Africa (AGSA) and Umgeni Water in South Africa. AGSA (2014) used a PMO to test the application of the project management approach within the organisation, through the implementation of the audit software project

Rawhani and Jonas (2010) argue that a PMO was created at Umgeni Water to increase the efficiency of planning, implementation, control and closure of capital projects. The following job functions are normally within the PMO offices: manager, office administrator, document controller, contract administrator, project managers and cost engineer/scheduler (Rawhani &

Jonas, 2010; Van Aswegen, 2012). Singo (2012) maintains that well-resourced PMOs must be established within local governments to monitor projects effectively and efficiently. They can serve as central points of control for all project reporting and accountability.

A descriptive model for PMOs is proposed to make sense of the variety of configurations that are found in reality (Aubry *et al.*, 2011). This model includes structural characteristics and the role and functions of a PMO mandate. A PMO is the knowledge management base of an organisation, this being one of the functions of the model.

Aubry *et al.* (2011) state that the model include other activities such as:

- Monitoring and controlling the performance of the PMO;
- Managing archives of project documentation;
- Conducting post-project reviews or post-mortems;
- Conducting project audits;
- Implementing and managing a database of lesson learned; and
- Implementing and managing a risk database.

3.4.6 Project Management Unit (PMU)

According to the DPLG (2004b:13-14), once municipalities have been identified to implement MIG projects, they are required to set up a Project Management Unit (PMU). PMUs handle the following functions in relation to the municipalities they serve: (a) responsibility for project-managing MIG funding, (b) co-ordination of the project identification process between municipalities served by the PMU, in terms of the relevant IDPs; (c) co-ordination of the project feasibility process; (d) establishment and approval of contracts with contractors and consultants for each project, including feasibility studies; (e) project management; (f) co-ordination of project-based capacity-building initiatives; and (g) management of the monitoring database and preparation of all necessary reports.

PMU teams work hand-in-hand with client departments, which are identified agents of project implementers in terms of capital and MIG projects. The Project Management Institute (2008:58) sees developing a project team as a process of improving competencies, interaction and the overall team environment to enhance project performance.

Cartwright *et al.* (2007:21) maintain that the team must be managed as part of the competence of the project manager, as per the table below:

Table 3-6: Performance competences – Monitoring and controlling a project (Source: Cat *et al.*, 2007)

Element 4.5 project team managed	
Performance criteria	Types of evidence
Holds regular team meeting	Minutes of team meetings
Conducts team-building activities	Documented results of team-building activities
Monitors team satisfaction	Results of team satisfaction survey
Provides feedback on team and individual member performance	Documented feedback given on a team survey. Documentation of team feedback

Cartwright *et al.* (2007:11), Phillips (2004:6) and the Project Management Institute (2008:39) argue that monitoring and controlling projects entails project tracking and regulating, project change and initiating the corresponding changes, quality and risk monitoring, team management and contract administration. The same sentiments are reiterated by Chiro (2010) in his study citing a lack of personnel to monitor and evaluate progress and quality of work as leading to projects not meeting the desired outcomes.

A PMU is required to have a suitably qualified manager and consultants, employed by the municipality, who will take individual responsibility for the MIG programme in their own municipality and for other municipalities where this responsibility has been delegated to them. Municipalities will be encouraged to include capital works funded from other sources within the competence of the PMU. Staffing of a PMU will be subject to the national MIG unit (DPLG, 2004b).

The DPLG (2004b:25) maintains that the municipality must be capacitated by enhancing governance and administration, planning, operations and projects. Government is developing an integrated strategy for capacity building for each of these components. Within the same strategy, the MIG is concerned only with projects, and the arrangements relating to the effective delivery of municipal infrastructure. In this context the capacity-building component of the MIG will be targeted as per Table 3.6 below.

Table 3-7: Targeting MIG capacity building (Source: DPLG, 2004b:25).

Scale of initiative	Type of activity	Key features
Project level	Project implementation	Capacity building is associated with improving the ability of communities to become involved with the project planning and construction of projects. With regard to the latter the focus is on labour-based construction and small contractor development.
	Operation	Under this category the project includes an undertaking to train the future service provider (operator) to operate the infrastructure. Typically this would involve community-based organisations but it may also be aimed at municipal staff. In some cases the obligation to support services providers may extent for up to three years. Such costs may be included under project costs.
Programme (municipal scale)	Programme management	The focus of the national effort under the national MIG office will be on building the capacity of project management units (PMUs) to ensure that they can fulfil their functions.
	Project implementation	There may be a local motivation to establish programme-scale initiatives that could include district-scale labour-based construction programmes, particularly for roads. Such initiatives typically have a strong capacity-building element.

The DPLG (2007) suggests that the municipality should have the following personnel in a PMU office: project manager, engineer, technician, secretariat, financial personnel, legal personnel, administrative personnel, OH and S personnel, data capturer, and IT personnel and community officer. The scope of the work of the PMU is aligned to MIG principles, and is responsible for financial management, contract administration, project management, project monitoring and evaluation, monitoring the database MIG MIS and project-based capacity building.

A municipal engineering department must have a strategic plan to avoid infrastructure capacity limitations and must allocate funds to implement these infrastructures (Breetzke, 2009).

3.5 GOVERNANCE

It is important to note that governance is strengthened through policy objectives and targeting, since without these it would be difficult to evaluate and monitor (Thomson *et al.*, 2010:130).

South Africa has attracted much attention by the way it solves its domestic problems and thus enhances good governance in Africa. This includes the constitutional and legislative frameworks that underpin governance in local government (Dlalisa, 2009). Dlalisa (2009:10) defines governance (citing Olowu & Sako, 2003:37) as a system of values, policies and institutions by which a society manages its economic, political and social affairs interacting within the state, civil society and the private sector.

The quality of leadership and governance are critical for the performance of local government. Effective leadership and good governance ensure effective service delivery and resolution of backlogs in term of infrastructure. However, for this to be realised, municipal capacity is critical and needs to be stabilised in terms of senior management appointments and technical skills upliftment (National Treasury, 2011).

Poor governance, meanwhile, leads to poor financial management, ill-advised appointments and misguided patriotism in service delivery (Dlalisa, 2009). Dlalisa (2009:107-8) suggests that in order to promote good governance in local government and thus improve service delivery, the following should be considered:

- Assessment of investigative capacity currently existing within local government;
- Education and training on the ethics of good governance for both councillors and municipal officials on a continuous basis; and
- An in-depth communication strategy on professional ethics and public service values driven by top management and leadership.

3.5.1 Institutional governance

This dimension of governance is concerned with the ability of state capacity and local government to manage activities through institutional mechanisms. This includes structural arrangements, decision-making processes and the interaction and relationship between government officials, public agencies and communities. The emphasis is on an efficient and effective public administration... a critical element of good governance (Dlalisa, 2009).

The MIG is provided to municipalities to upgrade their infrastructure, while Municipal System Improvement Grants (MSIGs) and Financial Management Grants (FMGs) are provided to enhance municipal capacity and for capacity-building initiatives. This is to ensure municipal institution capacity is strengthened to promote good governance. Mpumalanga Province has used some of this grant to appoint interns for capacity building and FMG for financial management reporting and upgrading financial system support (AGSA, 2013).

Dlalisa (2009:23) further argues, citing Brantingam (1996), that local government capacity to design and accomplish its mandate is an important component of institutional governance. It embraces regulatory, administrative, technical and revenue capacity. The regulatory capacity involves the establishment of rules, laws, by-laws, mechanisms and procedures at all levels that ensure service delivery.

Governance is viewed as an efficient, transparent, accountable public administration; with bureaucratic competence to design and implement appropriate development policies and the capability to manage both the public and private sector (Leftwich, 1993:612).

3.5.2 Technical governance

Dlalisa (2009:23), citing Boeninger (1992), says the technical dimension focuses on resource constraints and technical know-how relating to resource mobilisation and utilisation, quality service delivery and economic development. It is concerned with levels of education, manpower skills, expertise and the knowledge required to make and implement technical decisions effectively.

Governance requires technical capacity in local government in order to promote efficiency and cost effectiveness in its operations. The human resources and capacity-building measures are important elements of governance (Dlalisa, 2009). Good governance in many developing countries centres around accountability, qualification and transparency in the administrative machinery (Cloete, 2006; Dlalisa, 2009).

Boex *et al.* (2011:4) state that municipal governance is about performing basic municipal functions with a degree of effectiveness. Local government governance can be divided into three dimensions: technical, administrative and operational. The technical dimension is further sub-divided into three aspects: namely political leadership/governance, administrative aspects of municipal governance and fiscal aspects of the municipal sector, as per the table below.

Table 3-8: Technical dimensions of municipal governance, and their constituents (Source: Boex *et al.*, 2011:5)

Political/governance aspects of municipal governance	Administrative aspects of municipal governance	Fiscal aspects of municipal governance
Local political power structure	Regulatory authority, including spatial planning and local economic development (LED)	Expenditure assignment
Local electoral systems	Local public financial management (PFM) and procurement	Local revenue
Political party systems	Local HR administration	Intergovernmental fiscal transfers
Participation/accountability	Local service delivery	Local borrowing

For local government to function effectively in terms of administrative aspects, it requires power in four broad areas of local administration. These are: (i) make, change and enforce plans and regulations; (ii) authority to administer and manage local government finances and manage local procurement; (iii) engage in its own local human resource management and make local employment decisions; and (iv) flexibly administer and deliver local government services (Boex *et al.*, 2011:13).

Boex *et al.* (2011:16-17) argue that the ultimate objective of municipal governance is to create a structure that enables municipalities to improve services to their constituents. In order for municipalities to be well-positioned to engage in responsive public service delivery, they must improve communication with civil society and also develop effective and responsive service delivery plans. Such operational guidance can provide the framework for municipal capacity.

3.5.3 Project governance

Singo (2012:7) maintains that the global trend towards democratization and decentralisation has implications for local governance as local governments assume responsibility for infrastructure implementation. However, there is no consensus about the definition of project governance. Bernardo (2014:59) stipulates that corporate governance theories, such as stakeholder theory, can be applied to projects. Project stakeholder management is one of project manager competence and is now one of the process areas in the Project Management Body of Knowledge (PMBOK).

Ahola, Ruuska, Artto and Kujala (2014:1322) argue that there are two streams, one treating project governance as a process internal to a specific project and the second stream treating project governance as an external process to a specific project. The professional bodies and authors (e.g. Abednego & Ogunlana, 2006; APM, 2004) have characterized project governance as a continuous managerial decision-making process.

However Bekker, Parham and Hall (2009) attempt to define it thus:

“Project governance is a set of management systems, rules, protocols, relationships and structures that provide the framework within which decisions are made for project development and implementation to achieve the intended business or strategic motivation.”

Governance framework provides a framework usefully linking professional work, in both technical and managerial forms (Heywood *et al.*, 2010). The project governance framework covers the following core elements: role and responsibilities; linking project objectives with the organisation; decision-making process and levels; methodologies; competences; the communication process and the control process. Since the project objectives are aligned to the organisation strategy, performance indicator information must be readily available to stakeholders (Bernardo, 2014:61-64).

Josie (2008:20) argues that other conditions of a governance and institutional nature include compliance with proper planning and accountability guidelines set by different national departments. These conditions are attached in Appendix D. They include being accountable for integrating the construction of the elements that comprise residential bulk infrastructure services. However, politically informed conditions include adherence to specific labour-intensive methods and policies of transformation in the awarding of contracts. This condition is in line with the Expanded Public Works Programme (EPWP) projects.

Organisation strategy includes the organisational structure. Project-based organisation (PBO) has the majority of services or products produced through a project (Pemsel & Muller, 2012). The governance of knowledge is critical as a performance indicator (Bernardo, 2014). PBO needs both formal and relational governance mechanisms when managing knowledge-based activities. These organisations are known for having boundaries and context and a culture of empowering employees (Pemsel & Muller, 2012:867). Local municipalities use Project Management Units (PMUs) for that function.

Koma (2010:115), citing Kanyne (2006:116), states that weak leadership in strategic management (including corporate governance) may involve a shortage of skills to implement financial management legislation; misplacement of skills within municipalities; political considerations in the appointment of senior management without required qualifications... the last having tremendously weakened the performance of municipalities. CoGTA (2014a) believes that good governance is at the heart of effective functioning of municipalities.

The Project Management Framework (1999:8) uses Lotus Notes database throughout a project life cycle. The diagram below is interactive and is used extensively.

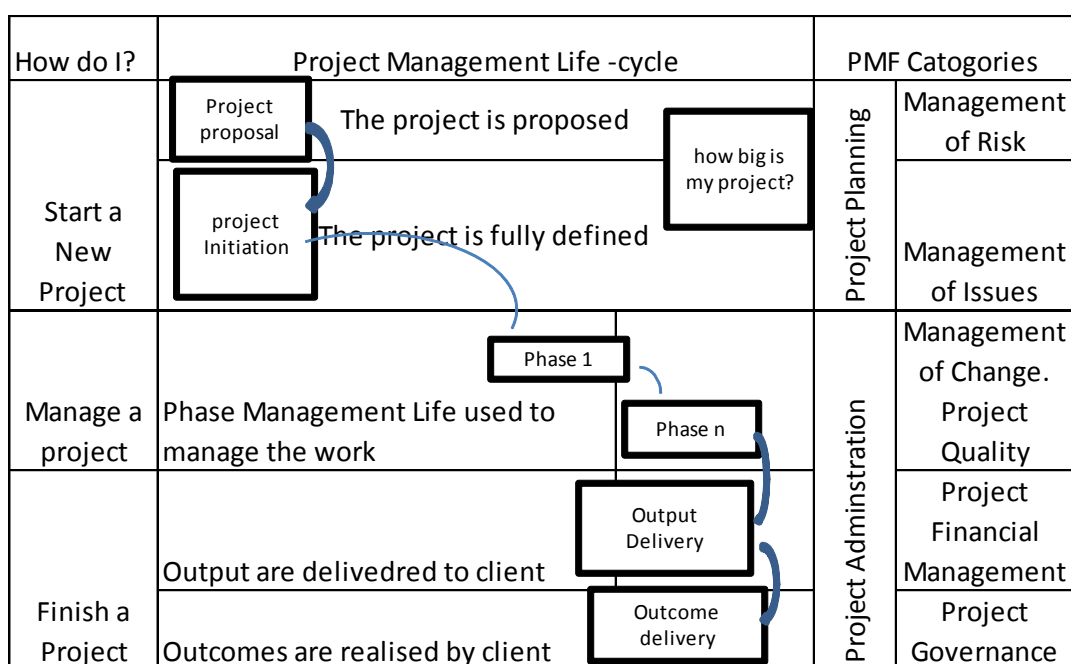


Figure 3-2: Project Management Framework diagram (Source: Project Management Framework, 1999).

3.6 PROJECT DELIVERY SYSTEMS

Chen, Liu, Lin and Lin (2011:5456) described a Project Delivery System (PDS) as being how project participants are organised to integrate, transforming the owners' goals and objectives into a completed project. There are three indicators for PDS selection: Artificial Neural Network (ANN), Data Envelopment Analysis (DEA), and Data Envelopment Analysis-Bound Variable (DEA-BND). ANN does not rely on existing experience and knowledge but extracts the interval rules from existing training samples. DEA does not rely on pre-estimated parameters but avoids subjectivity by simplifying calculation and reducing deviation. DEA-BND (Bound Variable) Framework is selected to examine the validity of project data.

The suitability of the PDS selected for the project greatly influences efficiency in conducting such a project. Focusing on schedule, cost, quality and contract management, PDS selection combines elements of ANN and DEA. It is composed of three parts: selecting similar projects, examining indicator value, and training and predicting (Chen *et al.*, 2011).

Selecting similar projects increases the accuracy prediction of the ANN model. A similar project is retrieved from the database that is full of project data and, according to the figure below:

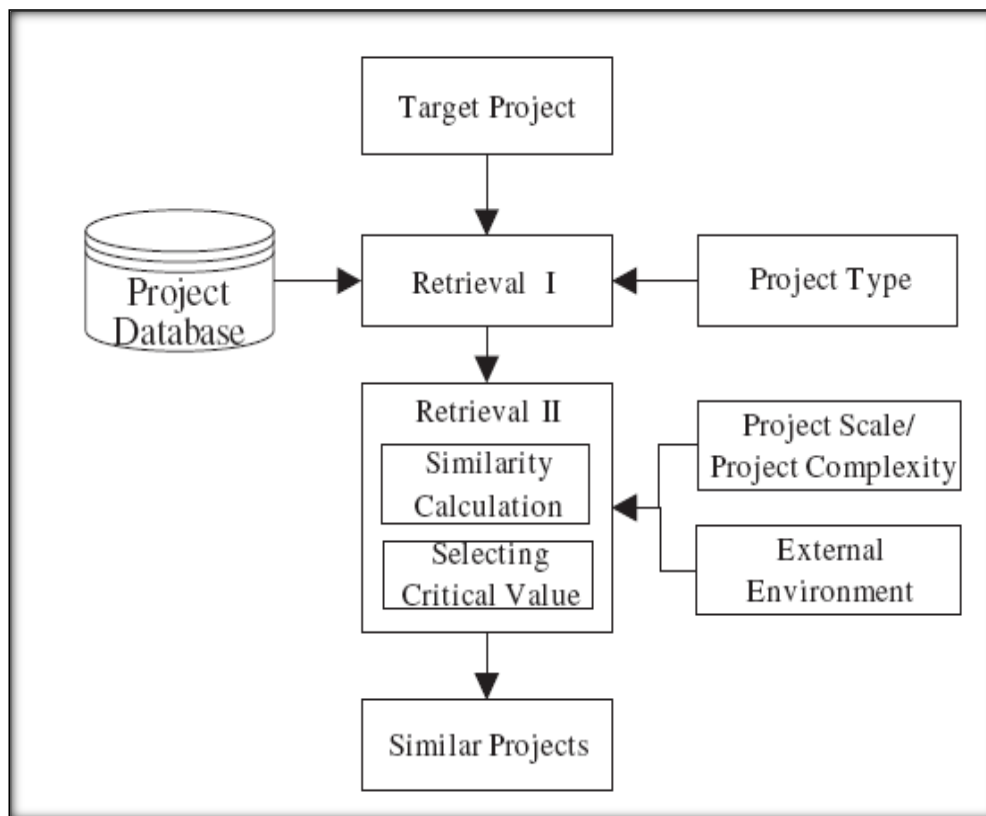


Figure 3-3: Selection procedure of similar projects (Source: Chen *et al.*, 2011)

The indicator value can only be found once different values are input, and then alternative PDSs are predicted from which the owner can choose the optimal one. Parts of the indicator values of similar projects are examined and modified in order to be effectively applied to the ANN model (Chen *et al.*, 2011).

The last stage involves applying the ANN to training the modified similar projects, formulating the non-line. The function between indicators and PDS predicts suitable PDS for the target project (Chen *et al.*, 2011).

3.7 PROCUREMENT

According to Mohlala (2015), procurement processes are covered in the Constitution of South Africa. Section 217 states:

“When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods and services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective.”

The Project Management Institute (2008:55) defines such a plan as a process of documenting project purchasing decisions, specifying the approach and identifying potential sellers. The City of Johannesburg (2006:7) maintains that its supply chain management policy should ascribe to a procurement system that is fair, equitable, transparent, competitive and cost effective in terms of Section 217 of the Constitution of South Africa (No. 108 of 1996). The city further subscribes to Best Practices in Supply Chain Management (SCM). The council can delegate powers to the City Manager to enforce reasonable cost-effective measures for the prevention of fraud, corruption, favouritism and unfair and irregular practices in the implementation of policy (City of Johannesburg (2006:10).

Amathole District Municipality (2010) says that SCM challenges include a lack of empowerment through existing processes. Policies and procedures are non-responsive to government delivery goals. A procurement plan has been developed to address non-spending on projects. A procurement plan is defined as activities, processes and procedures to be utilised for procuring goods, services and capital assets. The plan addresses the following objectives:

- Meet the requirements of SCM;
- Provide clear information on upcoming procurement and costs thereof; and
- Provide ways of ensuring that budgeted funding is spent in the same financial year.

Procurement plans ensure the resources required to support strategic and operational commitments are properly budgeted for and procured at the correct time. It is important that a procurement plan be linked to IDP and budget.

Procurement strategy is a choice made in determining what is to be delivered through a particular contract, as reflected by the figure below. The strategy looks into how secondary procurement objectives are promoted during the implementation phase of an infrastructure project.

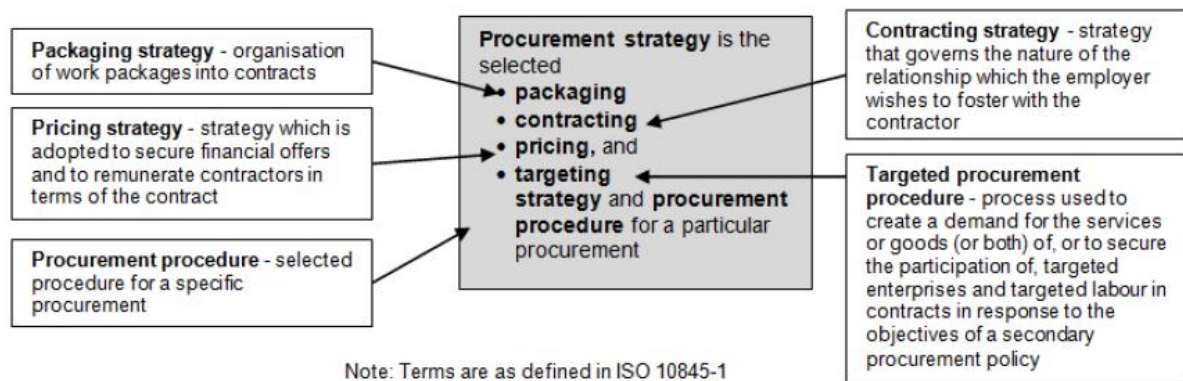


Figure 3-4: Components of a procurement strategy according to ISO 10845-1. Source: Watermeyer, 2014)

The strategy has the potential to contribute to “efficiency” during implementation and reduce the gap between achieved and projected outcomes (Watermeyer, 2014).

3.7.1 Targeted i-procurement

The Construction Industry Development Board (CIDB) Act No. 38 of 2000 mandates the promotion of procurement reform and standardisation with regard to the construction industry. The Construction Industry Development Regulation of 2004, as amended, the Standard for Uniformity in Construction Procurement and the CIDB Code of Conduct give effect to the objectives of the CIDB Act. According to the regulations, public service clients must advertise tenders on the i-tender and register awards of contracts on the CIDB register of projects (CIDB, 2013). This will ensure that CIDB-registered contractors get some of the tenders.

CIDB (2014:14) defines targeted procurement as an innovative approach to procurement that addresses shortcomings of previous models. Targeted procurement is effectively implemented with minimal interference to a contractor’s ability to perform. Bentall, Beusch and de Veen (1999:7) maintain that a targeted procurement system rewards those tenderers who meet or exceed certain specified socio-economic targets including, and not limited to, local labour, targeted groups of workers, local resources and specified SMMEs in the tender.

3.7.2 Preferential procurement

Preferential procurement attempts to create opportunities for contractors to enter the industry. The Preferential Procurement Policy Framework Act No. 5 of 2000 (PPPFA) has as an objective:

“to provide for categories of preferences in the allocation of contracts and the protection or advancement of persons disadvantaged by unfair discrimination” (Mohlala, 2015)

The DPLG (2006a:26) maintains that the tender document must be based on the final project design. It is the responsibility of the consulting engineer to ensure the prescribed preferential procurement procedures are clearly stipulated in the tender document. After closing of the tender, the consulting engineer will evaluate it and submit a report, with recommendations, to the municipality. The municipality will evaluate and endorse the tender outcome. Procurement processes can take an average of eight months.

Procurement has been identified as one of the systems requiring the greatest pressure in terms of strengthening governance within local government (National Treasury, 2011).

3.8 FRAMEWORK FORMULATION

Mouton and Marais (1990:141) state that most frameworks in the social sciences are characteristically precursors to subsequent theories. The following are four characteristics of theoretical frameworks: (i) they identify central problems concerning the phenomenon that ought to be investigated; (ii) they limit, isolate, simply and systematize the domain that is investigated; (iii) they provide a universe of discourse within which the phenomenon may be discussed, and (iv) they provide explanatory sketches and the means for making predictions.

3.8.1 Project Management Framework

Project Management Framework (1999) introduces the Input Transformation Outcome (ITO) model, which allows the project to be defined with objectives in mind. This requires clear project specification as an initial step. The work of the project can then be planned to produce outputs and resource estimates. The model is depicted below:

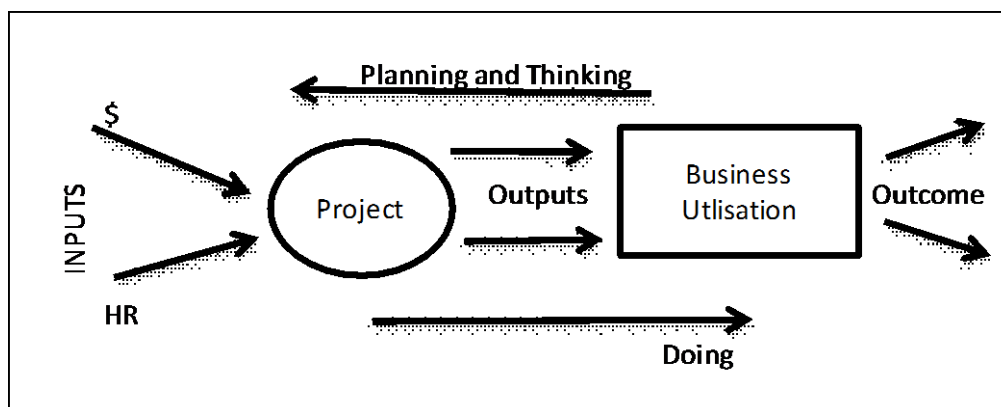


Figure 3-5: ITO Model (Source: Project Management Framework, 1999)

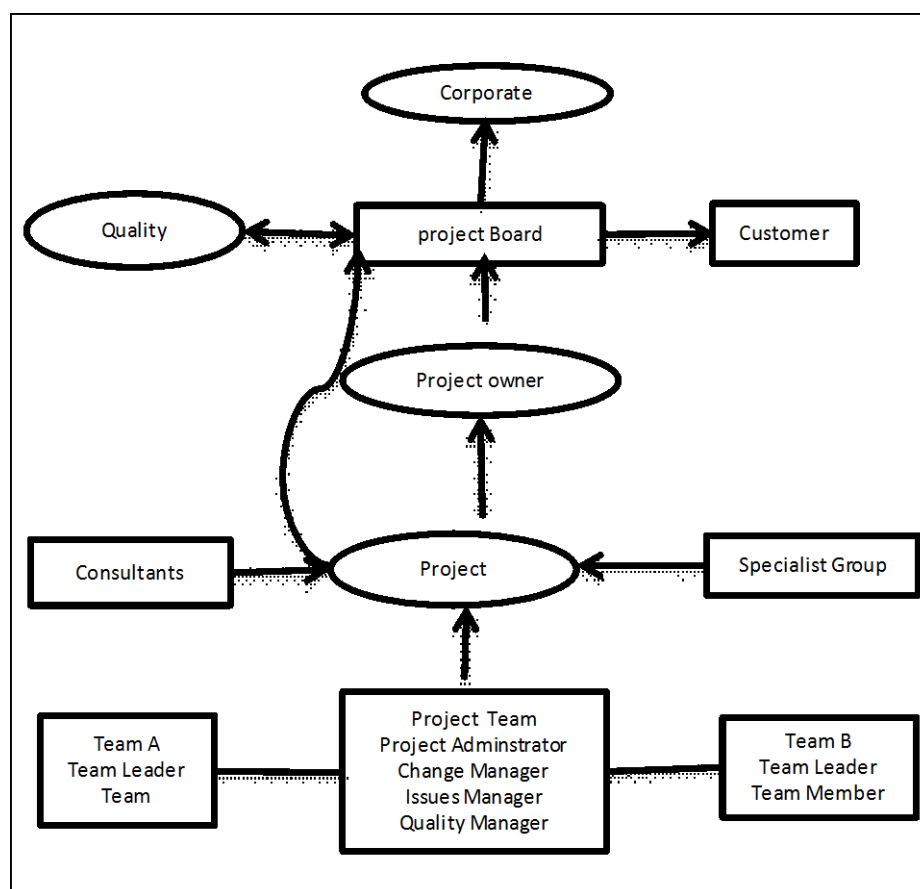
The following are major elements of the model:

- Outcomes: the results, change and effects that the project aims for.

- Business Utilisation: the process of stakeholders using the outputs to generate outcomes.
- Outputs: the physical deliverables of the project, such as computer systems, reports or new construction.
- Project: the total set of activities and tasks required to convert inputs into outputs. The actual work being done.
- Inputs: the resources directed into a project (both physical and intellectual) including money, people, data, etc.

Rumelhart, Hinton and McClelland (undated:46) maintain that a model should be analysed in the environment within which the system is supposed to operate.

Figure 3-6: Project Governance Model (Source: Project Management Framework, 1999)



Project Management Framework (1999:20) argues that a Project Governance Model (PGM) can be adjusted to the size and complexity of the project. A PGM includes the following roles:

- Business Unit (BU) Customer: the stakeholder group that will receive the output from the project. These are either clients or users.
- Quality adviser: reviews project deliverables and compares them against standards.

- Specialist group: internal or external group providing specialist expertise or service to the project.
- Consultant: any people outside the project team who are contracted to provide the project with specialist service.

Bhawan and Delhi (2006:22) argue that a critical issue under monitoring and evaluation is the creation of durable assets that strengthen rural infrastructure and local economic development. Dolamo (undated:6) maintains that an indicator should be identified as a tool to measure the performance or the level of how service is rendered.

Palmer and Mabuntana (2000:1) proposed a framework for the financial viability and sustainability of regional water supply services providers. This linked decisions made with regard to the service level provided to consumers of water demand. Breetzke (2009:21-22) suggested a development levy Framework, a cost surface Framework and accessibility Frameworks.

3.9 SUMMARY

The main goals of local municipalities are provision of services with equitable provision of service across the country while the MIG is about redressing service backlog. However local governments in South Africa must take cognizance of their role change following the setting of the United Nations Millennium Development Goals

Revenue management, inclusive of collection, can determine the success or failure of a municipality. Local governments in South Africa are entitled to an equitable share of revenue and either conditional or unconditional grants to enable them to execute their mandate. These grants can be either Provincial Infrastructure Grants (PIGs) or MIGs used for infrastructural projects. Tax revenue may be divided into four principal types: (1) individual and corporate income tax; (2) sales tax; (3) property tax; and (4) motor vehicle licenses.

The basic elements of the formula for calculating the national totals with the calculation of the total allocation to municipalities, $MIG_{(F)}$, is calculated as the difference between the total allocations made to the MIG through the national budget process. Since local governments provide services to their citizens on behalf of the state and the government, inter-governmental transfers accrue to them for these services (Garay *et al.*, 2011:46).

Fiscal sustainability highlights the importance of increasing the level of own resources, thereby limiting deficits and “debt”, and the results show that if the subsidies and grants formula is adjusted to a capped limit on grants for current expenditures, fiscal balances of local government finance in South Africa could become unstable.

However, fiscal transfer has resulted in another portion of funding being retained to fund project-based applications by municipalities that meet pre-determined criteria. This will be disbursed through a Special Municipal Infrastructure Fund (SMIF), being a component of the MIG (DPLG, 2004c:8).

Intergovernmental fiscal transfers provide decentralised government with the financial resources needed to discharge their local public functions while also helping to reduce fiscal imbalance. There has been a shift in South Africa from traditional financing, owning and managing public projects. Alternative Service Delivery (ASD) arrangements have been widely used with the most recent one being the Municipal Infrastructure Support Agency (MISA) established in 2011.

The MIG is a conditional grant to municipalities and its management must be undertaken at municipal level, including its planning, budgeting, financial management and operational management. However, effective management and utilisation of capital funding falls within the responsibility of the Municipal Manager with MFMA providing the financial management system. Financial management capacity will assist local municipalities to perform basic treasury functions such as billing ratepayers and keeping a proper credit control system.

Project management is about management of triple constraint by a qualified project manager. The success of the project can be ensured by not blaming owners or contractors but through shared responsibility and focusing on finding solutions when problems occur. Alzahrani and Emsley (2013:321) conclude that construction projects and their success are closely related to the contractors.

Governance framework provides a framework that usefully links professional work, in both technical and managerial forms, while project governance framework covers roles and responsibilities; linking project objectives with organisation; decision-making process and levels; methodologies; competences; communication processes and control processes. However, weak leadership in strategic management; misplacement of skills within municipalities; and political considerations in the appointment of senior managers without the necessary qualifications, have tremendously weakened the performance of municipalities. Good governance is at the heart of the effective functioning of municipalities.

A Project Delivery System (PDS) is described as being how project participants are organised to integrate, transforming the owners' goals and objectives into a completed project. There are three indicators for PDS selection: Artificial Neural Network (ANN), Data Envelopment Analysis (DEA), and Data Envelopment Analysis-Bound Variable (DEA-BND). The last stage involves applying the ANN into training the modified similar projects, formulating the non-line. Functions between indicators and PDS predict suitable PDS for target projects.

Processes for project cost control, monitoring and procurement must be addressed to enhance utilisation of municipal funds. Delays in procurement processes have resulted in projects being completed late and often over-budgeted. Procurement must be seen as a strategy where municipalities attain and satisfy their mandates and obligations.

There are two basic procurement strategies that can be utilised by the municipalities: corporate procurement strategy and project procurement strategy. In order for local governments to function effectively in terms of administrative aspects, they require authority to administer and manage local government finances and manage local procurement.

Models in social sciences are characteristically precursors to subsequent theories while Project Management framework introduces the Input Transformation Outcome (ITO) model that allows the project to be defined with objectives in mind, requiring clear project specification as an initial step.

3.10 LINK TO THE NEXT CHAPTER

The next chapter addresses the research methodology, together with its limitations; data collection and analysis; and ethical considerations.

CHAPTER FOUR – RESEARCH METHODOLOGY

4.1 OVERVIEW OF THE CHAPTER

The chapter focuses on the type of study undertaken by the researcher and further explains the rationale behind the methodology employed in data collection and analysis. A multi-case study approach was used as a methodological framework. Questionnaires as quantitative data collection instruments for secondary data and as qualitative data collection methods are discussed in detail. The chapter reflects on the population as well as the sample for study. A structured questionnaire is attached in Appendix J. The researcher drew particular attention to ethical issues and the ways in which the data was analysed.

The research methodology provides a summary of research questions, while describing the aim of the research and the nature of a methodology to be employed. The research identifies the population, the rationale for unit of analysis and the initial stages of the research including research options, bias in research and case studies as research methodology. Insight acquired into quantitative and qualitative researches assisted the researcher in choosing the best option for the research and deciding to utilise mixed method research.

4.2 RESEARCH APPROACH

According to Kumar (2014:18), the mixed methods research (MMR) approach is valuable for both social research and practice. This can be structured, unstructured or both. The researcher took the structured route with the main purpose of quantifying and exploring with mixed method a phenomenon to yield greater depth. The larger sample size was used for quantitative and smaller sample for qualitative. The local municipalities in the North West Province served for the quantitative approach while the smaller sample included Rustenburg Local Municipality (RLM), City of Matlosana and Tlokwe Local Municipality.

Kumar (2014:19) says MMR is based on the assumption that to enhance the accuracy and meaningfulness of researcher conclusion, the researcher needs to have a full picture of the situation and reconfirm the findings by using both paradigms. Hence the MMR approach to both of the paradigms.

The mixed methods approach aims to reach the research objective by combining the strengths of different methods and paradigms (Kumar, 2014:20)

Kumar (2014:25) maintains that the rationale underpinning this approach is primarily based on the ability of the methods of a paradigm to provide accurate answers to all research questions; and mixed methods provide a better and more complete picture of the phenomenon than a single method alone.

Kumar (2014:31) concluded that since MMR presents itself as both qualitative and quantitative, this is a positivist paradigm.

4.3 THE NATURE OF A METHODOLOGY

Sonali, Corley and Corley (2006:1822-1823) state that all science is based on paradigmatic thinking involving distinct assumptions on the nature of reality, how one come to know that reality and how systematically one accesses what can be known about reality. Lubbe (1996:52) maintains that scientific methodology should form the basis for any academic research. This ensures that the research adds to the body of knowledge.

The quantitative research measures employed in this study target local municipalities in North West Province. However, qualitative research provides the control and precision that elude the qualitative approach as a tool for triangulation (Sonali *et al.*, 2006). According to Bryman and Bell (2007:646), triangulation implies that an investigation employing a method associated with one research strategy is crosschecked against the results of using a method associated with another research strategy.

Lubbe (1996:52) argues that a methodology may serve as a set of rules where evaluation of facts can be used to draw inferences. Lubbe (1996) lists some of the primary benefits of scientific methodology such as facilitating communication between scientists, ensuring an acceptable logical structure and institutionalising conceptual frameworks for communication. The researcher used the table below to determine which research method to use. This Table 4.1 below resulted in the researcher using the mixed method approach.

Table 4-1: Approach to use for research (Source: Leedy & Ormrod, 2013:99)

No.	Use the approach if	Quantitative	Qualitative
1.	The researcher believes that	An objective reality can be measured	Multiple possible realities can be constructed by different individuals
2.	Audience	Familiar with/supportive of quantitative studies	Familiar with/supportive of qualitative studies
3.	Research question	Confirmatory,	Explanatory, interpretive

No.	Use the approach if	Quantitative	Qualitative
		predictive	
4.	Available literature	Relatively large	Limited
5.	Research focus	Covers a lot of breadth	Involves in-depth study
6.	Time available	Relatively short	Relatively long
7.	Ability/desire to work with people	Medium to low	High
8.	Desire for structure	High	Low
9.	Skills in the areas	High	Low
10.	Writing skills	Technical, scientific writing	Literary, narrative writing

In this study, quantitative measures are gathered using questionnaires and qualitative measures are provided through utilisation of secondary data and focus group interviews. Creswell (2008) defines mixed methods research as being both a method and methodology. It is a research that involves collecting, analysing and integrating quantitative and qualitative research into a single study.

Kruger and Muller (1990:19) believe focus groups produce qualitative data that gives insight into opinions of the participants while Marshal and Rossman (2006) believe focus groups provide validity and reliability of results.

Lubbe (2004:32) sees the collection of data, be it primary or secondary, as requiring protocols. This ensures the data collected is adequate and dependable. Steps should be taken to ensure that the data is collected in such a way that the collected information is in accordance with the pre-defined design to tackle the problem.

Ryan and Bernard (2000) maintain that data collection is a strategy for obtaining information systematically from participants through focus groups. The key elements applied in this research are focus groups and analysis of documents (Safman & Sobal, 2004).

Lubbe (2003) concludes that the primary benefits of a scientific methodology are therefore that

- It facilitates communication between scientists, allowing them to share experiences. It also makes replication of the research easier. Replication of research is always necessary to safeguard against unintentional errors as well as deception or fraud.

- It ensures that an acceptable logic structure is being used. Scientific research requires both empirical observation and valid logical reasoning. The methodology is an articulation of valid logical reasoning. The rules of classification, definition, deduction and indirect sampling, if used, must be articulated in the methodology.
- It institutionalises conceptual frameworks for communication, rules of reasoning, procedures and methods for observance and verification. Methodology demands conformity. At the same time, care must be taken that methodology does not hinder new discoveries and, by implication, scientific progress.

4.3.1 Limitation of the research methodology

The research methodology had a wide range of limitations. However, the researcher hoped to limit the effects of the limitations described below.

4.3.2 Location of respondents

The research is about local municipalities in North West Province. There are four district municipalities, 20 local municipalities and 255 towns or villages as reflected by Gaffney (2004:894-942) and as tabulated below:

Table 4-2: Number of districts, local municipalities and towns in North West Province (Source: Gaffney, 2004)

DISTRICT	NUMBER OF	
	MUNICIPALITIES	TOWNS
Bojanala Platinum	5	74
Dr Ruth Segomotsi Mompati	6	66
Ngaka Modiri Molema District	5	78
Dr Kenneth Kaunda District	4	37
Total	20	225

4.3.3 Population

Leedy and Ormrod (2013:206) suggest that the researcher conducting a descriptive study may need to describe one or more characteristics of a fairly large population. A group or subset of the population enables generalization from the results obtained. Abudaheer (2008) defines a population as the total number of subjects that meet both the inclusion and exclusion criteria.

It is important to note that conclusions will be drawn from inference statistics about the population. The researcher used estimates for population parameters. A parameter is defined as a characteristic or quality of a population. However, within the context of quantitative data analysis, a parameter is a mean or standard deviation of the entire population (Leedy & Ormrod, 2013). The figure below shows the spread of the population throughout North West Province.

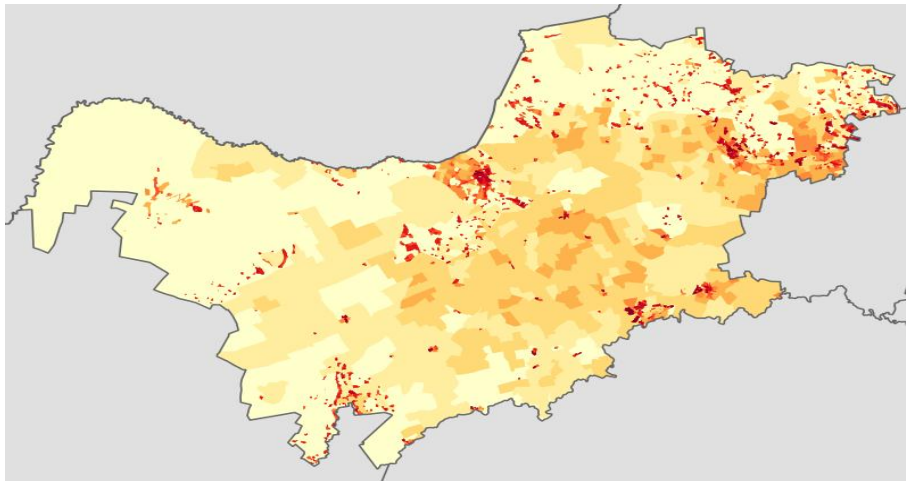


Figure 4-1: North West Province (Source: Wikipedia, 2014)

In 2011 the population of North West Province was estimated at 3,278,652 (out of a total of an estimated 50, 283,599 people then living in South Africa); 65 percent of the people in North West Province lived in the rural areas (figures according to Census 2011, released in July 2003). The province has a number of rural areas and encompasses many local and district municipalities from the former Bophuthatswana homeland.

Sampling

In order to decide on the size and composition of a research sample, the following were taken into consideration: composition of the questionnaire, the procedures of survey administration and the modes of questionnaire dissemination and retrieval.

The information about the number of employees in North West Province local municipalities was sourced from local municipalities by phoning each Skills Development Facilitator (SDF) and in some instances the Human Resources Manager. Some were helpful while others referred the researcher to the municipal manager. The second batch of information was retrieved from Local Government Sector Education Training Authority (LGSETA) Sector Skills Plan (SSP) workplace plans. There were discrepancies between the two sets of figures. The numbers reflected below are average of both numbers, from the SETA and from local municipalities..

Table 4-3: Staff complements (LGSETA, 2013)

No.	District Municipalities	Local Municipalities	No. of employees
1	Dr. Kenneth Kaunda	Tlokwe	845
		Ventersdrop	138
		City of Matlosana	1,172
		Maquassi Hills	284
2	Bojanala Platinum	Moses Kotane	431
		Rustenburg	871
		Madibeng	464
		Moretele	233
		Kgetlengriver	228
3	Dr. Ruth Segomotsi Mompoti	Naledi	453
		Mamusa	188
		Greater Taung	314
		Kagisano-Molopo	134
		Lekwa-Teemane	239
4	Ngaka Modiri Molema	Mafikeng	776
		Ditsobotla	304
		Ramotshere Moiloa	324

No.	District Municipalities	Local Municipalities	No. of employees
		Tswaing	311
		Ratlou	152
Total number of employees			8,164

The Population comprises Technical Division, PMU and Procurement staff, which is estimated to be approximately ten percent of the total number of employees and is not empirically based.

Polit and Beck (2010) maintain that random sampling is the vehicle through which a statistical framework for generalization can be enacted. Simple random sampling is where every member of the population has an equal chance of being selected. The approach is simple when the population is small (Leedy & Ormrod, 2013; Tolmie, Muijs & McAteer, 2011; Hesse-Biber, 2010). Eight hundred and sixteen (816) questionnaires were distributed.

Hesse-Biber (2010:53) argues that according to Onwuegbuzie and Collins (2007), a set of minimum sample size guidelines for qualitative and quantitative projects can be suggested, as outlined in the table below.

Table 4-4: Minimum Sample size Recommendations for Most Common Quantitative and Qualitative Research Design (Source: Hesse-Biber, 2010:53)

Research design	Minimum sample size suggestion
Quantitative research design	
Correlation analysis	64 participants for one-tailed hypotheses 82 participants for two-tailed hypotheses
Casual-comparative analysis	51 participants per group for one-tailed hypotheses 64 participants for one-tailed hypotheses
Experimental analysis	21 participants per group for one-tailed hypotheses
Qualitative research design	
Case study	3-5 participants
Phenomenological	10 interviews
Grounded theory	20 -30 interviews
Ethnography	1 cultural group 30-50 interviews

The target population was employees working in the procurement, finance, technical and PMU offices. The researcher received 401 completed questionnaires from the respondents. The simple random sample is most basic form of probability sample (Bryman & Bell, 2007). Taking 401 employees from a population of 816 gives each a 1:20.4 sampling fraction using the formula below:

Equation 4.1: Sampling fraction (Sources: Bryman & Bell, 2007; Bryman, 2012)

$$\text{Sampling fraction} = n/N = 49.14$$

where n is quantity of sample, which is 401,

N is the population, which is 816

4.3.4 Purposeful sampling

Purposeful sampling was used in qualitative research approach with three considerations: selection of participants for the study, sampling strategy and the size of the sample (Creswell, 2013). The researcher selected individuals and sites for the study as they c purposefully inform understanding of the research problem and the central phenomenon in the study. The researcher used the City of Matlosana, Rustenburg and Tlokwe Local Municipalities for qualitative data collection.

These locations were selected based on the staff complement (noted in table 4.3 above). A secondary consideration was that their MIG allocation was among the highest in the province. Financial ratios were calculated based on annual reports with financial statements, audited annual reports from the Provincial Auditor-General (NW) and local municipalities respectively.

4.3.5 Concurrent sampling design

In concurrent sampling design, the samples from each study do not inform one another at the sampling stage. This is done to increase validity of research findings with a goal of achieving agreement between qualitative and quantitative findings (Hesse-Biber, 2010)

4.4 INITIAL STAGES OF THE RESEARCH

The research strategy employed was based on the approach described by Remenyi and Williams (1995) and is shown in the figure below:

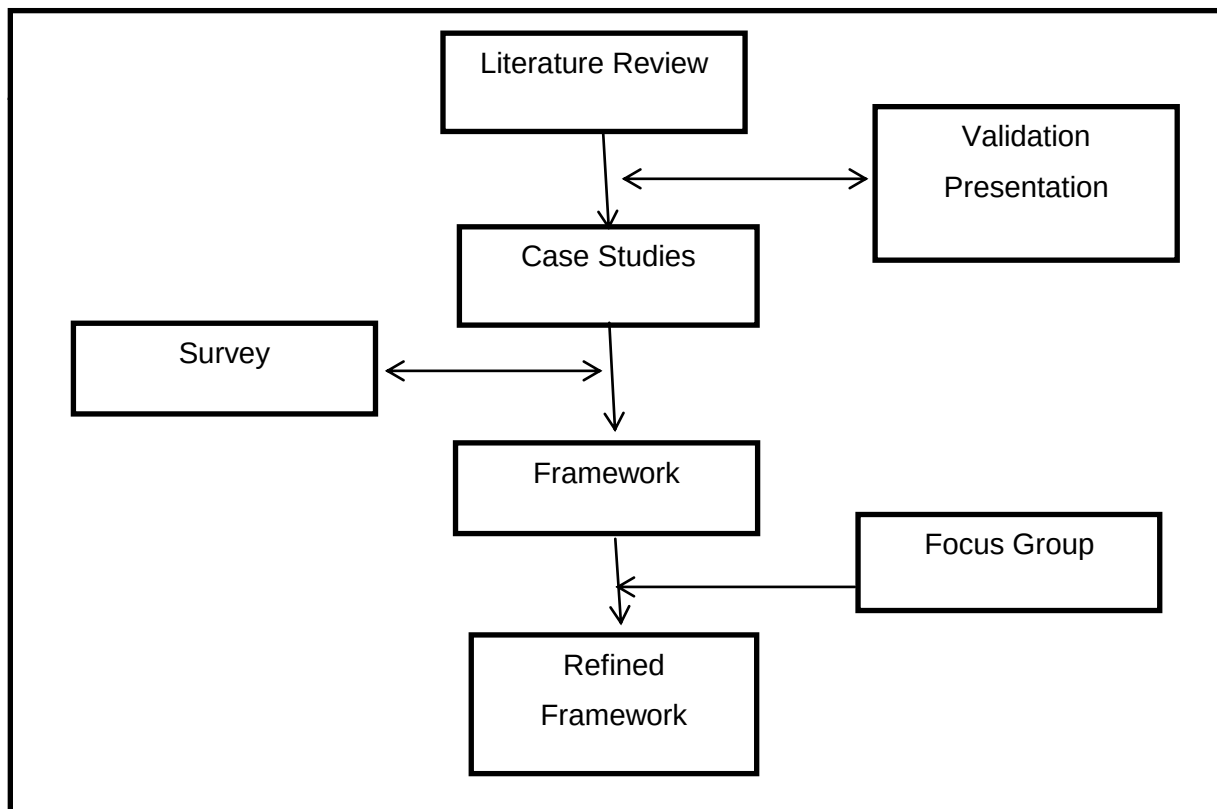


Figure 4-2: Adapted Initial stages of research (Source: Remenyi & Williams, 1995)

4.5 RESEARCH OPTIONS

There are different taxonomies of research approaches with one of the most common being empirical or theoretical studies. Empirical study is based on, or guided by, the results of observation. The research theorist studies the subject through the writings of others (Remenyi, 1996). The reason for selecting this design is that it entails an empirical study, which is of a qualitative nature (Marshall & Rossman, 2006).

4.6 BIAS IN RESEARCH

According to Mouton and Marais (1990:81), the researcher's affiliation may result in responses being biased. Reputable organisations are likely to attract positive respondents who answer questions with seriousness and authenticity, while suspicious or unknown organisations will react negatively to the interview. Mouton (1990) found the following effects resulted in differences between the researcher and participants: the existence of racial effect, gender, status, and urban-rural and dress effects.

Remenyi (1996:25) argues that since business and management researches are relatively recent, there is much to be concerned about the validity of the methods used. Practitioners must pay attention to the value added to the body of accumulated knowledge.

4.7 RELIABILITY AND VALIDITY OF THE RESEARCH

Adams and Lawrence (2015:69) state that reliability means consistency of findings while validity is about accuracy of findings. Molukanele (2009) maintains that reliability and validity are central issues in all measurements since both are concerned with how concrete measures are connected to constructs.

4.7.1. Reliability of the research

According to Adams and Lawrence (2015:69) and Bashir, Afzal and Azeem (2008:38), reliability of study is about the expectation that similar result when the same study is repeated under a similar methodology. Adams and Lawrence (2015:69) further argue that replication of the study is one way to test the reliability. This is actually done by the researcher in seeking patterns in the study (Adams & Lawrence, 2015:69). Reliability is the stability or consistency of measurement (Delpont, 2005; Remenyi *et al.*, 2010).

Mohlala (2015:35) says reliability is *“the extent to which results are consistent over time and accurate representation of the total population under study and if the results of a study can be reproduced under a similar methodology”*. Response formats must be designed in such way that they ensure responses are reliable (Cant, Gerber-Nel, Nel & Kotze, 2005).

According to Adams & Lawrence (2015:90) internal consistency is used to assess the reliability of the scale and the consistency in the way the participants respond to multiple items on the scale. Internal consistency was used for the study and Cronbach's alpha (α) per figure below

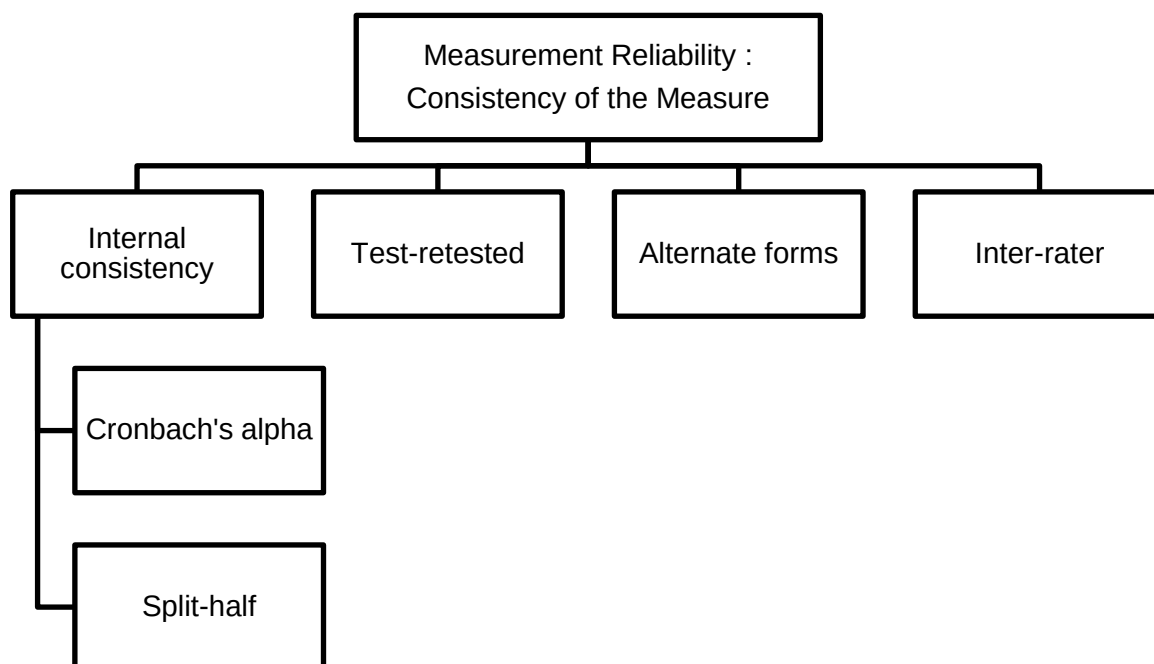


Figure 4-3 Types of Reliability of Individual Measures (Adams & Lawrence, 2015:92)

The researcher will be using a Likert scale in the questionnaires. This makes it imperative to calculate and report Cronbach's coefficient when using Likert-type scales (Gliem & Gliem, 2003). Cronbach's alpha computes the correlation between responses to all of the items in a scale (Adams & Lawrence, 2015:90).

Bryman and Bell (2007:164) argue that Cronbach's alpha is commonly used to test internal reliability. Alpha coefficient varies between 1 and 0 with 1 denoting perfect internal reliability and 0 no internal reliability. However, Tavakol and Dennick (2011) suggest that the acceptable values range from 0.75 to 0.95. A low value of alpha could be due to a low number of questions, poor interrelatedness between items or a heterogeneous construct. The measurement of reliability is based on the Cronbach's instrument and Means Inter item.

Bashir *et al.* (2008:39) argue that reliability is a concept used for testing quantitative research. Hence a reliability test of any qualitative study is its quality. Bashir *et al.* (2008), citing Patton (2001) suggest three questions for reliability of qualitative research, namely:

- What techniques and methods were used to ensure the integrity, validity and accuracy of the findings?
- What does the researcher bring to the study in terms of experience and qualification?
- What assumptions undergird the study?

The annual reports were used for qualitative approach and the Auditor General's annual reports were used for reliability. The reliability rests on the authority of the Office of Auditor-General as a Chapter 9 institution. This was emphasised through examination of trustworthiness, which is crucial (Bashir *et al.*, 2008)

4.7.2 Validity of the research

Adams and Lawrence (2015) and Bashir *et al.* (2008) argue that the results cannot be valid unless they are reliable. However the results can be reliable but not valid. Adams and Lawrence (2015:71) say “*validity is prerequisite for validity but reliability alone is not sufficient to demonstrate validity.*”

Validity is defined as the degree to which what is observed or measured is the same as what was purported to be observed (Babbie, 2004; Remenyi *et al.*, 2010). However, Bashir *et al.* (2008:37) portray validity as determining whether the instrument measures what it was intended to measure. However, engaging multiple methods such as observation, interviews and recordings can lead to more valid and reliable construction of realities (Bashir *et al.*, 2008:42).

The validity of study is examined by internal validity and external validity (Adams & Lawrence, 2015).

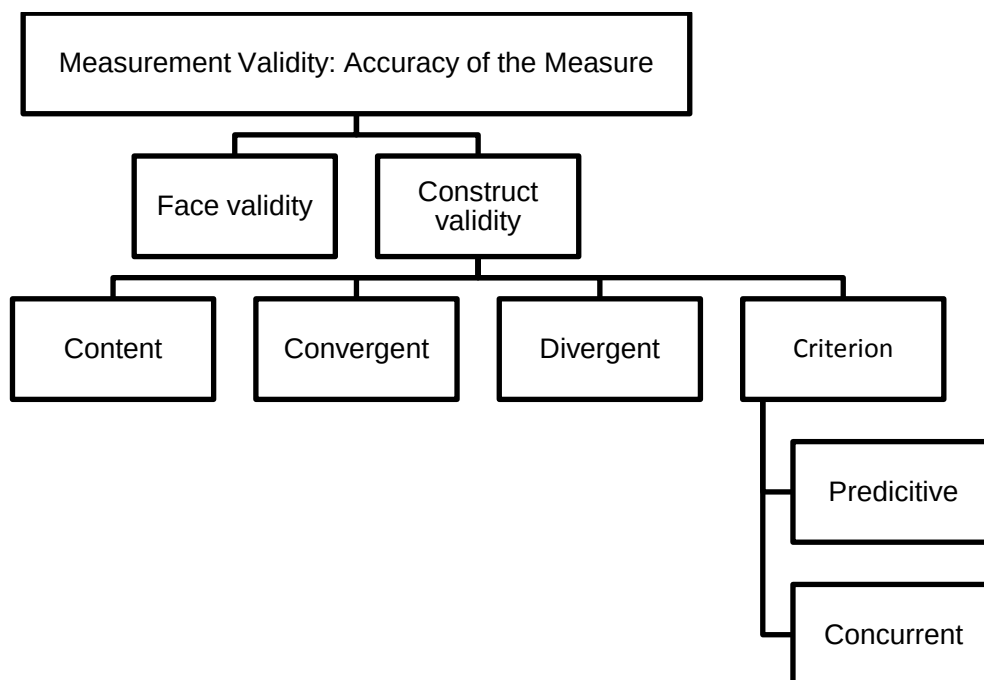


Figure 4-4 Types of Validity of Individual Measures (Source Adams & Lawrence, 2015:95)

Face validity is not commonly used by most researchers as it is untested and sometimes based on one person's opinion while construct validity is concerned with a measure being reflective of the hypothetical construct of a variable (Adams & Lawrence, 2015:93).

Validity of the instrument was further ensured by using a variety of instruments, such as a focus group and audited financial and annual reports from the North West Province Auditor-General in Rustenburg.

4.8 MIXED METHOD RESEARCH

Bryman and Bell (2011) used the term “mixed method research” (MMR) and proposed three approaches to mixed methods research:

- Triangulation refers to the use of quantitative research to corroborate qualitative research findings, and vice versa.
- Facilitation is an approach where one research strategy is used in order to aid research using a different strategy.
- Complementarity occurs when two research strategies are employed in order that different aspects of an investigation can be validated.

The researcher will be using the triangulation approach for this study. Archibald, Radil, Zhang and Hanson (2015:7) note that MMR has become increasingly popular over the last 25 years. MMR is defined as the collection and integration of qualitative and quantitative data in a single study (Archibald *et al.*, 2015:7; Hesse-Biber, 2010:3).

Adams and Smith (2003:194) consider qualitative research as seeking to explore the point and position of “the insider”, the aim being to understand the meanings, perceptions and experiences of those involved. Quantitative research is based on measurement and counting, while qualitative research tends to refrain from using such numerical values (Flick, 2011).

In contrast Lubbe (2003) and Archibald *et al.* (2015) maintain that quantitative and qualitative techniques do not conflict but are actually complementary, although some qualitative data cannot be quantified.

Neuman (2003:16) describes differences in quantitative and qualitative style to illustrate the above-mentioned points, as tabulated below:

Table 4-5 Quantitative Style versus Qualitative Style (Source: Neuman, 2003)

QUANTITATIVE STYLE	QUALITATIVE STYLE
Measure objective facts	Construct social reality, cultural meaning
Focus on variable	Focus on interactive processes, event
Reliability is key	Authenticity is key
Independent of context	Situationally constrained
Researcher is detached	Research is involved

Remenyi (1996:32) argues that once evidence has been collected, it must be interpreted by means of different approaches. In case study, research examines features of many people or units, either at one time period or across a period (Neuman, 2003). Data collected in case studies is more detailed, varied and extensive. Neuman (2003:330) and Bryman and Bell (2007:649) maintain that most qualitative research seeks to construct representation based on in-depth, detailed knowledge of cases as illustrated in table 4.3. Baskerville and Pries-Heje (1995:5) argue that the qualitative approach, such as ethnography, has defined units of analysis. Creswell (2008) suggests, according to the figure below, that explanatory mixed methods research is when the researcher collects quantitative data, then follows up with qualitative data to answer research questions.

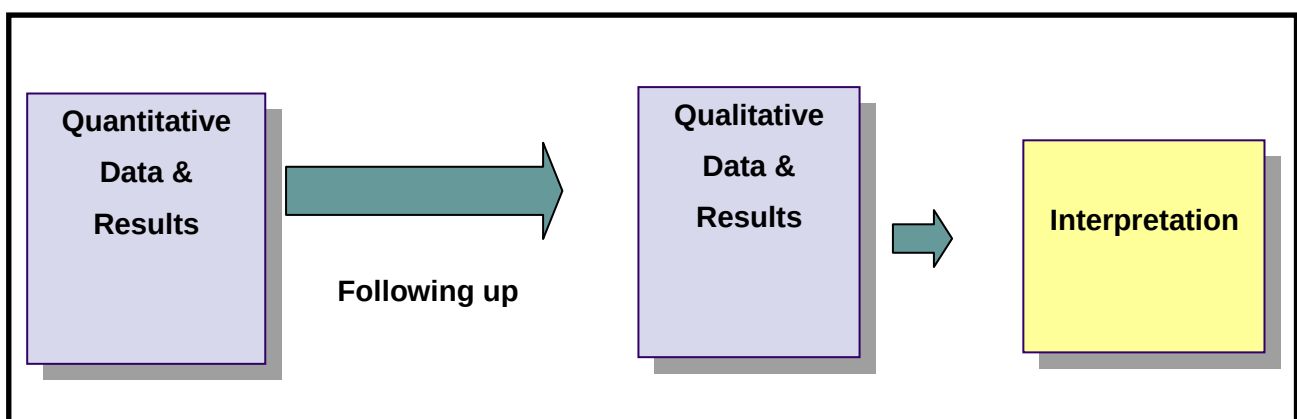


Figure 4-5 Explanatory Mixed Methods Research (Source: Creswell, 2008)

The same approach was followed in this study. The researcher used a questionnaire, while statistical analysis for quantitative data and documents were used for qualitative data collection.

4.9 DATA COLLECTION

It is important to note that the material being studied determines the quality of analysis (Corbin & Strauss, 2008). The choice of the instrument and technique will be dependent on the aspects as stated below (Cant *et al.*, 2005):

- The complexity and versatility of the format in which data will be collected;
- The quality and quantity of data that can be collected using a certain method;
- Control over the sample, which varies with different survey types;
- The quality and accuracy of the data that can be collected with survey type;
- The speed with which the research can be conducted;
- The total cost of the survey type; and
- The uses of various survey types.

Leedy and Ormrod (2013:80) maintain that planning for data collection is critical for a research project. The researcher must answer four questions: identifying which data to collect; where the data is located; how will the data be obtained; and, lastly, how will it be interpreted. Mouton and Marias (1990) and Gill, Stewart, Treasure and Chadwick (2008) state that there are varieties of data collection. The researcher will use a questionnaire, plus secondary data, while a focus group will be used to collect data as a measurement instrument.

4.9.1 Questionnaire

The questionnaire is the primary research instrument used in the study. A questionnaire is a data collection instrument used to gather primary data in survey-based studies and partly, for indirect observation (Wegner, 2000; Mouton & Marias, 1990). The researcher used a questionnaire to collect data from 401 local government employees. Data is collected in a tight structure within quantitative research. This evidence was collected using a structured questionnaire (Remenyi *et al.*, 2010). Leedy and Ormrod (2013:193) suggest a Likert scale be used for most of the questions because of its ease to compile and to obtain multi-dimensional attitudes. A summated attitude scale consists of a collection of statements about the attitudinal object (Welman & Kruger 2001; Leedy & Ormrod, 2013).

Tolmie *et al.* (2011:295) define Likert scale items as fixed response items in a questionnaire. The researcher used, underlying the scale, the degree of agreement, with statements marked in terms of four explicit points (Tolmie *et al.*, 2011; Cant *et al.*, 2005). However, Riley *et al.* (2000:121) argue that the approach of Likert is to recognise that attitudes are not held independently within a person but exist in a coherent whole.

A questionnaire is a research tool that is used to collect data from some basis of remoteness. In a quantitative research, descriptive study involves measuring one or more variables (Leedy & Ormrod, 2013).

4.9.1.1 Questionnaire construction

Questionnaire studies aim at receiving comparable answers from all participants and must be constructed in such way that they encourage respondents to cooperate and yield a high response rate that can be used and interpreted (Flick, 2011).

Leedy and Ormrod (2013:196-200) suggested 12 guidelines for developing a questionnaire: keeping it short; respondent's task simple and concrete; provide straightforward specific instruction; use simple, clear, unambiguous language; give a rationale for any items where purpose may be unclear; check for unwarranted assumptions implicit in the questions; word questions in a way that they do not give clues about any preferred or more desirable response; determine in advance how the response will be coded; check for consistency; scrutinise the almost-final product one more time to make sure it addresses research needs; and, finally, make the questionnaire attractive and good-looking.

The questionnaire development matrix (Appendix I) was used to develop a final questionnaire (Appendix J). It assisted in deconstructing each research problem into sub-problems; formulating a research question aligned with each sub-problem; deconstructing each research question into a section containing thematically interrelated questionnaire questions; determining the appropriate quantification scales for each question; determining the data type of each set of response options; determining the appropriate data measures for each question; and determining the appropriate statistical test for the specific data types (Lubbe & Kloppe, 2012). The matrix meets three design goals suggested by Martin, Loubser and Van Wyk (2002:216), which are:

- To maximise the relevance and accuracy of data collected;
- To maximise the participation and co-operation of the target respondents; and
- To facilitate the collection and analysis of the data.

Administration procedure

The researcher obtained consent from the Department of Local Government and Tradition (DLGT) to conduct research in different district and local municipalities in North West Province. The letter of permission is attached as Appendix D2. The services of a field worker were used to administer and collect the questionnaires.

Limitation of questionnaire

The downside to using questionnaires as research tools is that most people receiving them do not return them. In some cases, those who do return them may not be representative of the original sample. Furthermore, by stating in advance all the questions that will be asked and thereby eliminating other questions that could be asked regarding the issue or phenomena, the researcher is apt to include only limited and possibly distorted information (Leedy & Ormrod, 2013).

The second limitation is brought into place by using a Likert scale. Tolmie *et al.* (2011:38) argue that the scale is limiting and some information might not be captured. It is for this reason that the researcher is using a multi-method research approach.

4.9.2 Secondary data

Welman and Kruger (2001:179) caution that the researcher's first preference should be for primary data rather than secondary sources of information. The reason for this is that with each transfer of material, information may be inadvertently or deliberately distorted.

Secondary data sources that were used included audited annual reports, annual reports with financial, income and expense statements, balance sheets and MIG allocation information from 2009/10 to 2013/14 financial years, from the Department of Human Settlement and Traditions (DHST), local municipalities and the Provincial Auditor-General respectively. This covers five years as per the statutory requirement that financials be kept for that length of time. In accordance with Section 13(2)(a) of the National Archives and Records Service (NARS) Act, no public records under the control of any government body may be transferred to an archives repository, destroyed, erased or disposed of without written authority from the National Archivist (Ngoepe, 2008). Ngoepe (2008:133) further emphasised that retrieval of records is critical to the DPLG for accountability and proper management of MIG projects.

Gilbert, Churchill and Iacobucci (2002) argue that if secondary research is able to satisfy the information needs of the researcher, then primary research is not necessary. Primary data was used to lay a theoretical foundation for this study. The data came from published books, theses, journals and conference papers relating to MIG projects, procurement and project management, municipal funding, allocation and revenue collection.

The DHST of North West MIG Division was consulted for information on MIG allocation for each local and district municipality during the financial years 2004/05 to 2013/14. Platt (1981:121) argues that documentary research is not clear-cut and not necessarily a well-organised category in sociological method. However, this material was organised according to financial years, district and local municipalities per allocation, expenditure, unspent and rollover. Flick (2011) warns that data collection in qualitative research pursues different aims from that in quantitative research.

Grbich (2009) defines content analysis as:

“a systematic coding and categorising approach which you can use to unobtrusively explore large amounts of textual information in order to ascertain the trends and patterns of words used, their frequency, their relationships and structures and discourses of communication.”

Issues that always surround documents relate to evidence and proof. These are defined as being, among others: authenticity of a document; the availability of the relevant documents; sampling; establishing the extent to which documents can be taken to tell the truth they describe; and finally, how to decide on the inferences made from the document (Flick, 2011; Platt, 1981).

Permission was sought before officials were consulted. The letter seeking research permission is attached as Appendix H2. The second set of information was sought from the National Department of Human Settlement and, for comparison purposes, the National Treasury Department. The third set of data was received from the Provincial Auditor-General's Offices in Rustenburg.

Audited annual reports and financial statements from 2009/10 to 2013/14 for Rustenburg Local Municipality, Tlokwe Local Municipality and the City of Matlosana were sought from the individual municipalities. Financial ratios were determined for the financial years from 2009/10 to 2013/14. These ratios are liability, liquidity and expenditure management arenas, the latter being gearing, current ratio and operating expense v/s revenue ratios.

Three metros were used for a comparative study. These are Tshwane, Ekurhuleni and eThekweni Metro. The City of Tshwane Metropolitan Municipality (CTMM) and eThekweni were studied in detail, based on research that has already been conducted. The eThekweni Metro was chosen because of the Vuna award it won. Criteria for this award included: service delivery, local economic development, financial viability and grant expenditure. These relate to institutional transformation and good governance (Subban, 2008:66). These are discussed in Chapter 6 of this study.

4.9.3 Focus group

Gill *et al.*, (2008) and Dilshad and Latif (2013) define a focus group as a group discussion on a particular topic organised for research purposes. A focus group is a research approach for collecting evidence, or a form of group interview with a specialised group of individuals (Remenyi *et al.*, 2010; Bryman & Bell, 2007).

Dilshad and Latif (2013) assert that this form of interview ensures high-quality data is collected in the appropriate social context (citing Patton, 2002), which helps in understanding a specific problem from the participant's viewpoint. The particular strength of focus groups is confirmed by De Vos, Strydom, Fouche and Delport (2005) as the ability to produce a concentrated amount of data, relying on the interactions of the group to produce the data.

A focus group needs to be carefully composed to get the best quality of discussion (Gill *et al.*, 2008). Groups normally consist of four to ten members with a moderator leading the discussion for about two to three hours (Sekaran, 2003; Remenyi *et al.*, 2010; Dilshad & Latif, 2013). Gill *et al.* (2008) argue, however, that the optimum size is six to eight participants, though they can be successful with as few as three and as many as 14. However a small group risks limiting the discussion while large groups can be chaotic. The researcher aimed for five to seven participants and hence minimised limitations to the study.

Focus groups have become a popular method for researchers examining ways in which people—in conjunction with one another—construe the general topics. Furthermore the technique allows the researcher to develop a deeper understanding of why people feel the way they do. The setting allows participants to bring issues of importance to the fore about the topic and challenge each other's points of view. Focus groups permit the researcher to study the ways in which individuals collectively make sense of phenomena and construct meaning around it (Bryman & Bell, 2007).

However, focus groups can be costly. Bias is another problem. The output of a focus group meeting is largely dependent on the facilitator or moderator (De Vos *et al.*, 2005; Dilshad & Latif, 2013). Sekaran (2003:220) and Bryman and Bell (2007:513) maintain that the choice of moderator is critical as he/she introduces the topic, observes and takes notes and/or tapes the discussion. The moderator ensures that everybody participates and nobody dominates the group. Gill *et al.* (2008) believe the researcher can act as moderator.

The moderator must take cognisance of the fact that participants have valuable views and the ability to respond actively, must guide discussion rather than join in with it, and should be prepared for views that may be unpalatably critical of the topic that is important to the researcher. If the moderator appears comfortable, this will make participants feel relaxed (Gill *et al.*, 2008:294). Dilshad and Latif (2013) argue that the experience and skill of a moderator dictates the quality of data.

This study's focus group will consist of members of Integrated Municipal Infrastructure (IMI) as stated in Chapter 1 under data collection. This group shares common characteristics as members are directly involved with MIG projects in the province, specifically North West (Dilshad & Latif, 2013). This ensures optimal participation.

The session should start by ensuring that participants are at ease. This can be done by serving refreshments and engaging in small talk while avoiding the main issue of the focus group. The moderator starts by thanking participants for coming and briefly states the purpose of the group; explains why they were selected for the group interview; describes the confidentiality rules; and finally asks those present whether they have any questions (Dilshad & Latif, 2013).

Tape recording and transcription get over the problem of writing down not only exactly what people said but also who said what. This will also reveal whether the person who made a comment is an opinion leader or merely dominated the discussion. Recording will assist the researcher in establishing the process where meaning is collectively constructed within each session. The research will pick up the type of language that was used and how it was used during the focus interview. This will also be coupled with note-taking and the sorting assistance of other field workers (Bryman & Bell, 2007; 513-14; Gill *et al.*, 2008:294; Dilshad & Latif, 2013:195).

Dilshad and Latif (2013) suggest that analysis be carried out immediately. There are, however, two ways of reporting, namely reporting a summary of the findings and giving the subject's words verbatim (citing Anderson, 1990). The researcher intends using the first style as it pertains to the study undertaken. The researcher uses a focus group to refine the Framework, which is described in Chapter 8.

Preparing an interview schedule for a focus group involves making sure questions are specific. The question order should relate to the importance of issues in the research agenda (Gill *et al.*, 2008). Secondly, the researcher must state clearly the objective of the focus group. Thirdly, the time and venue should be specified. The venue must be convenient for participants and free from interference (Dilshad & Latif, 2013:194).

4.10 DATA ANALYSIS

The mixed method involves the collection, analysis and integration of quantitative and qualitative data in a single or multiphase study (Hesse-Biber, 2010). Quantitative and qualitative researches differ in their approaches to data analysis (Burnard, Gill, Stewart, Treasure & Chadwick, 2008:430).

Burnard *et al.* (2008:429) maintain that there are two fundamental approaches to qualitative data analysis, these being the deductive and the inductive approaches. Deductive approaches use a structure or predetermined framework to analyse data. The inductive approach involves analysing data with little or no predetermined theory, structure or framework.

Statistical analysis was performed on the collected questionnaire as per the questionnaire matrix development attached in Appendix B. These include descriptive statistics, inference and factor analysis. Salkind (2014:9) suggests that inferential statistics are used to make inferences from a small group to a possibly large group of data. However, factor analysis is technique based how well various item are related to one another and form clusters or factors (Salkind, 2014:317).

The researcher presented findings in a descriptive manner, and statistically for data collected through the questionnaire. On most of the questions using a Likert scale, correlation tests could be performed, such as Phi co-efficient, the contingency coefficient and Cramer's V, the lambda co-efficient or the uncertainty coefficient (U), or the Pearson significance test.

Inferential statistics allowed the researcher to draw inferences about the larger population from a relatively small population. More specifically, inferential statistics have fulfilled two main functions, namely estimating a population from random sampling and testing statistically based hypotheses (Leedy & Ormrod, 2013).

Richard and Morse (2013:134) argue that preparing data for analysis is a process of transformation. The researcher was able to transform the information into a form that could be handled and manipulated in the process of analysis. SPSS was used for analysis.

Secondary data about MIG allocation information was sought at local municipality level, reflecting allocation, plus spent and unspent amounts. The researcher used both graphs and tables for illustration. The graphs are depicted in Chapter 6 and tables with actual monetary values are attached in Appendix M.

Systematic analysis of focus group transcripts is crucial. Recordings should be transcribed verbatim and speakers identified so that the researcher can follow the contributions of each individual (Gill *et al.*, 2008).

The analysis forms the basis for recommendations and reflects the outcome of the assessment of the questionnaires and their content analysis.

4.10.1 Quantitative method data analysis

Data preparation is a process of checking and ensuring high quality data is gathered. It includes converting this into electronic format so that it can be read and manipulated by computer software (Cant *et al.*, 2005). Cant *et al.* (2005:187) suggest the following steps: validation, editing, coding, data entry and data cleaning.

Construction of a data matrix is one of the first steps in analysis of quantitative data with a compilation of all variables for every study unit and all responses for every case (Flick, 2011). The table below is an example of data matrix and is then transformed into numerical values.

Variables						
Study unit	Gender	Age	Profession	School degree	Q1: grade of consent	Q2: grade of consent
Class 1	M	21	Student	High school	5	3
Class 2	F	28	Sales person	Grammar school	3	4
Class 3	M		Taxi driver	Public school	1	1
Class 4	F	25	Physician	Without	2	5

Table 4-6: Data matrix 1 (Source: Flick, 2011).

Below is the table as it applies to the current study.

Variables					
Questions/ Respondents	1	2	3	4	49
	Age	Gender	Working experience	MIG Involvement	Project closure
1					
2					
401					

A code plan was developed in advance showing which number is code for possible answers. For example gender, with male being 1 and female 2 (Flick, 2011).

Variable						
Study unit	V1	V2	V3	V4	V5	V6
01	2	21	4	4	5	3
02	1	28	1	2	3	4
03	2	999	3	3	1	1
04	1	25	5	1	2	5

Table 4-7: Data matrix 2 (Source: Flick, 2011)

Variable						
Study unit	V1	V2	V3	V4	V48	V49
01						
02						
401						

The next step is cleaning data. This involves checking whether data was entered in the right column. Gaps, as in the table 2 above, where the age is missing, must be corrected. Data coding and entry will invariably have errors if entered manually. It is therefore critical for the researcher to check data for errors before starting data analysis (Cant *et al.*, 2005).

Cant *et al.* (2005:203) suggest the following advanced procedures be performed as part of data cleaning and analysis tasks: (i) the weighting of selected responses; (ii) re-specification of selected variables; (iii) calculation of summated scores for multiple-item scales; (iv) creation of dummy variable; (iv) standardisation of selected variables; (v) reverse coding; and (vi) transformation of selected scales.

The data analysis stage is approached with the analysis objectives in mind. To set these objectives, the researcher referred back to the research objectives. Achieving the analysis objectives helps the researcher to achieve the research objectives. The researcher used SPSS for statistical analysis.

4.10.2 Documentary analysis

The researcher can use three possible analysis methods for documentary analysis, namely qualitative content analysis, semiotics and hermeneutics. The researcher used qualitative content analysis for documentary analysis (Bryman & Bell, 2007). Hsieh and Shannon (2005:1277) describe content analysis, citing Rosengren (1981), as a family of analytic approaches ranging from impressionistic, intuitive, interpretive analyses to systematic, strict textual analyses.

Qualitative content analysis is one of the numerous research methods used to analyse text data. Its focus is on the characteristics of language as communication with attention to the content's contextual meaning. Text data can be in print or electronic form or obtained from focus groups, or printed media such as articles and manual (Hsieh & Shannon, 2005:1278, citing Kondrack & Wellman, 2002).

There are three distinct approaches to content analysis, namely conventional, directed and summative (Hsieh & Shannon, 2005:1277). These different approaches are summarised by the table below.

Table 4-8: Major coding differences among three approaches to Content Analysis (Source: Hseih & Shannon, 2005:1296)

Type of content analysis	Study starts with	Timing of Defining Codes or keywords	Source of codes or keywords
Conventional content analysis	Observation	Codes are defined during data analysis	Codes are derived from data
Directed content analysis	Theory	Codes are defined before and during data analysis	Codes are derived from theory or relevant research findings.
Summative content analysis	Keywords	Keywords are identified before and during data analysis	Keywords are derived from interest of researchers or review of literature

The researcher is using summative content analysis as the study involves counting and summarising keywords or context. This is followed by interpretation of underlying context. Hsieh and Shannon (2005:1283) state that summative content analysis starts with identifying and quantifying certain words or context in text with the purpose of understanding the contextual use of the words or the content. The analysis involves not only counting but also exploring usage. The focus goes beyond latent content analysis to focus on discovering the underlying meanings of words. Leedy and Ormrod (2013:148) stretched this further by including tabulating the frequencies of each characteristic. The researcher uses such tabulation and statistical analyses to interpret the data as it reflects the problem.

The researcher's report should cover the following: description of material under study; precise definition and description of the characteristics the research is seeking; coding procedure; tabulation for each characteristic; and description of patterns that data reflect (Leedy & Ormrod, 2013:150).

Leedy and Ormrod (2013) summarise it as follows:

Table 4-9: Content Analyses (Source: Leedy & Ormrod, 2013)

Purpose	Focus	Methods of data collection	Methods of Data Analysis
To identify the specific characteristics of a body of material.	Any verbal, visual or behavioural form of communication.	• Identification and possible sampling of specific material to be analyzed. • Coding of the material in terms of predetermined and precisely defined characteristics.	• Tabulation of the frequency of each characteristic. • Descriptive or inferential statistical analyses as needed to answer the research question.

4.10.3 Qualitative Content Analysis – disadvantages and limitations

Hsieh and Shannon (2005:1285) argue that content analysis findings are limited by lack of attention to the broader meanings presented in data. Trustworthiness in this type of study relies on credibility. Secondly, Gerbic and Stacey (2005:47) argue that the researcher would be faced with significant amounts of data requiring much time for analysis. This limitation can be overcome by use of qualitative analysis software such as NUDIST (Non-numerical Unstructured Data Indexing, Searching and Theorising) and NVivo.

4.11 ETHICAL CONSIDERATIONS IN MIXED METHODS RESEARCH

Ethical issues are the concerns and dilemmas that arise over the proper way to execute research while still creating a conducive environment for the research and for participants (Singo, 2012). The research here was underpinned by three ethical principles: (1) mutual respect, (2) non-coercion, and (3) no manipulation. Creswell (2013:58) argues that ethical clearance must be sought from the university or institution where the researcher is conducting research.

Muller (2007) suggested the following ethical considerations (which were also observed by the researcher): communicating the aims of the research to participants; informing participants of what will happen to the findings; and obtaining consent.

An ethical clearance was issued by North-West University's Research Ethics Committee, together with a code of ethics to provide guidelines. A copy of the ethical clearance is attached as Appendix F1. The researcher gained local permission from the sites and provided participants with disclosure regarding the purpose of study. A letter from the Department of Local Government and Traditions is attached as Appendix F.2.2. Ethical issues involved avoiding the deception of participants and maintaining confidentiality.

The results obtained from quantitative data led to phase 2, which involved secondary documentary analysis. The researcher believes this two-phased data collection would lead to successful completion of the research. Leedy and Ormrod (2013:263) argue that the researcher normally uses results from quantitative data from phase 1 to choose a sub-sample to interview in an explanatory design. Phase 2 of the data collection is the documentary analyses, which are dealt with in item 3.92 above.

4.12 GEOGRAPHIC DELIMITATION

The area of research was limited to one provincial geographical area, i.e. North West Province, South Africa. Comparisons were made with other provinces with similar MIG allocations to that of North West Province such as Free State, Mpumalanga and Limpopo. The researcher looked into local government budget allocation for each province from 2009/10 to 2013/14.

4.13 SUMMARY AND CONCLUSIONS

The researcher devoted time and attention to issues of methodology. The research itself utilized the multi-method approach, relying on both quantitative and qualitative data.

This chapter outlines the research based on the literature review in Chapter 3. It has emphasised the fundamental research concepts underpinning the methodology adopted in the study. This involves data selection, and designing an effective measuring instrument, namely a questionnaire, documentary analysis and a focus group interview.

The main ingredients considered and discussed have included measurement questions, measurement scales and data, reliability and validity. The chapter further explained how the questionnaire was constructed from a questionnaire development matrix. Finally the questionnaire was developed and the data collected is presented in the next chapter, Chapter 5.

Qualitative data is collected from documents such as the National Treasury database, The DoRA for annual allocations for local government, annual reports for case studies, and annual reports of the Auditor-General (AG). Chapter 6 presents qualitative data, analysis and interpretation.

Chapter 7 deals with discussion of results and formulation of a framework. This framework is later subjected to a focus group interview in Chapter 8. The refined framework is the result of inputs from the group.

4.14 LINK TO THE NEXT CHAPTER

The next chapter, which is Chapter 5, focuses on the interpretation and analysis of the collected quantitative data. The research used statistical analysis to interpret data and address research objectives.

CHAPTER FIVE – QUANTITATIVE DATA PRESENTATION AND INTERPRETATION

5.1 CHAPTER LAYOUT

This chapter outlines the interpretation of the respondents' ratings of the instrument with discrete, dichotomous and continuum data sets. This is followed by interpretation of the results of the linear regressions; interpretation of the results of the multiple linear regressions of the respondents' demographics; and the instrument construct variables. Interpretation follows of the main findings or results in relation to each research question and finally the derived research framework concludes the chapter.

5.2 INTRODUCTION

This chapter deliberates on the research findings and provides interpretation of the results. In the survey administered in municipalities in North West Province, research questions were asked and the analysis was completed based on the application of a range of statistical modelling methods such as descriptive statistics, linear regression, multiple-linear regression, T-test, cross-tabulation, Pearson Chi-square, Cramer's V and Lambda according to the Questionnaire Development Matrix (Klopper & Lubbe, 2012).

The descriptive statistics describe the distribution of respondents according to their general personal particulars such as age group, gender, years working at municipalities, respondents' perspective of involvement in MIG, respondents' position at work, qualifications, adequacy of the assigned budget for MIG projects, MIG human resources, training of functional areas, management buy-in to MIG, MIG team accountability, business accountability to MIG, empowerment of project team members and monitoring of project team leaders.

The T-test compares and determines if two sets of data are significantly different from each other, and is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. The researcher applied the paired T-test in this study to determine if the means of the male and female respondents differed.

Simple linear regression allows the researcher to look at the linear relationship between one normally distributed interval predictor and one normally distributed interval outcome variable. This statistical technique relies on one predictor that is regressed against the criterion variable.

Multiple linear regressions provide the calculation of the multiple correlation coefficients R , which is an index of correlation between a set of independent variables and the dependent variable. More importantly, the technique provides an explanation of how much of the dependent variable is explained by a set of predictors, by providing an index of the proportion of variance explained in the dependent variable by the set of independent variables (R^2). Pearson's chi-squared test (χ^2) is a statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between the sets arose by chance. It is suitable for unpaired data from large samples. The p-value or the Sig. value provides additional information, that is, on how far down in the significant quadrant or region the results lie.

5.3 PART 2: GENERAL PERSONAL PARTICULARS

5.3.1 Response rate

The total number of questionnaires received from respondents was 401. Out of the total of 816 questionnaires distributed, 401 were completed and returned, which is a 49 percent response rate by employees of the local municipalities. Data analysis in the quantitative paradigm does not in itself provide answers to research questions but answers are found in data interpretation (De Vos *et al.*, 2005). The study population includes 401 participants from a large population ($N = 816$) of employees of municipalities.

Various scales were utilised in the questionnaire, but the researcher only rated those relating to the utilisation of municipal funds. Tables 5.1, 5.2 and 5.3 highlight the results of the respondents' rating of the instrument items. The self-developed questionnaire was administered to the employees of municipalities in North West Province. In addition to the reliability testing that the researcher carried out, the researcher decided to analyse how respondents rated the items in the questionnaire.

All the main items were rated on a Likert scale of 4, running as follows: Scale 4: Strongly disagreeing; 3: disagreeing; 2: agreeing and 1: strongly agreeing. From the analysis in table 5.1, all the instrument items were rated between 1 and 2, that is, either strongly agreeing or agreeing; in table 5.2, all the instrument items were rated between 1 and 2, that is, either strongly agreeing or agreeing; as well as 3 that is disagreeing and in some instances a 50:50 split between agreeing and disagreeing; lastly in table 5.3, all the instrument items were rated between 1 and 2, that is, either strongly agreeing or agreeing; as well as a small number of ratings of 3 and 4, that is, disagreeing or strongly disagreeing.

The respondents devoted high levels of significance to the instrument items. The researcher concludes that the instrument possibly asked the correct questions pertaining to utilisation of municipal funds.

5.3.2 Age groups of respondents

Figure 5.1 illustrates the age groups of the respondents from the municipalities in North West Province.

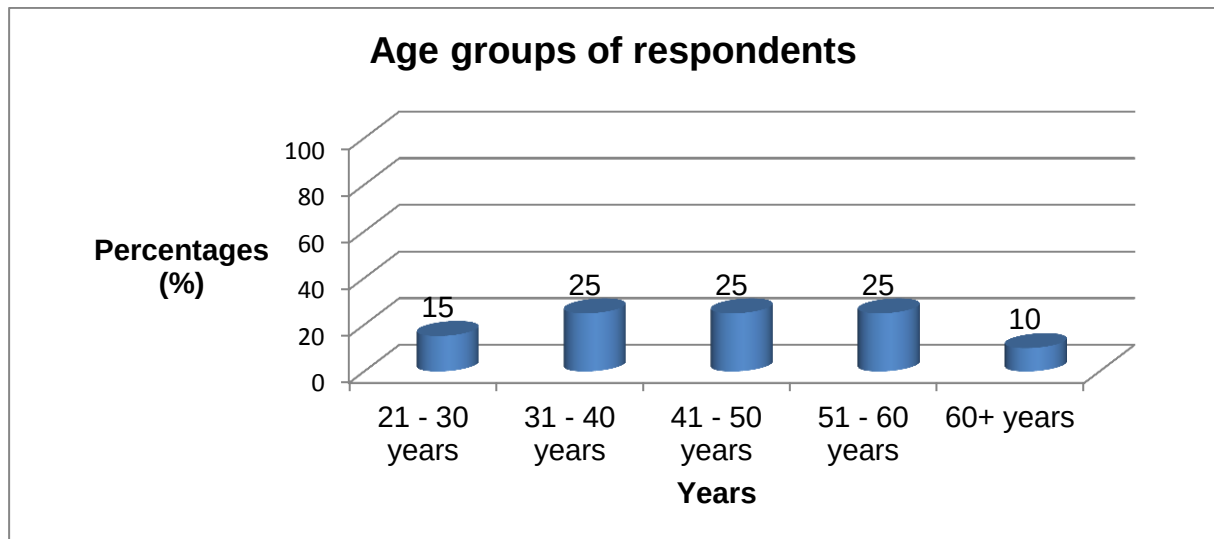


Figure 5-1: Age groups of respondents

Figure 5.1 above shows that the majority of respondents were in the age groups of 31 - 40 years, 41 - 50 years and 51 - 50 years with (25 percent) each respectively, and the minority were in the age groups of 21 - 30 years and 60+ years with 15 percent and 10 percent respectively. The above figure shows that the province favours hiring younger employees with only 10 percent being over 60 years of age.

Mofokeng (2012) argues that the age of respondents is usually related to their experience profile. Seventy-five percent of respondents were in the age categories between 31 and 60 years. Since the retirement age in local municipalities is between 55 and 60, they might be retained due to their scarce skills, a need for continuity and for the development of younger employees. However municipalities in North West Province maintain similar succession progression to normal organisations.

5.3.3 Gender of respondents

Figure 5.2 illustrates the gender of the respondents from the municipalities in North West Province.

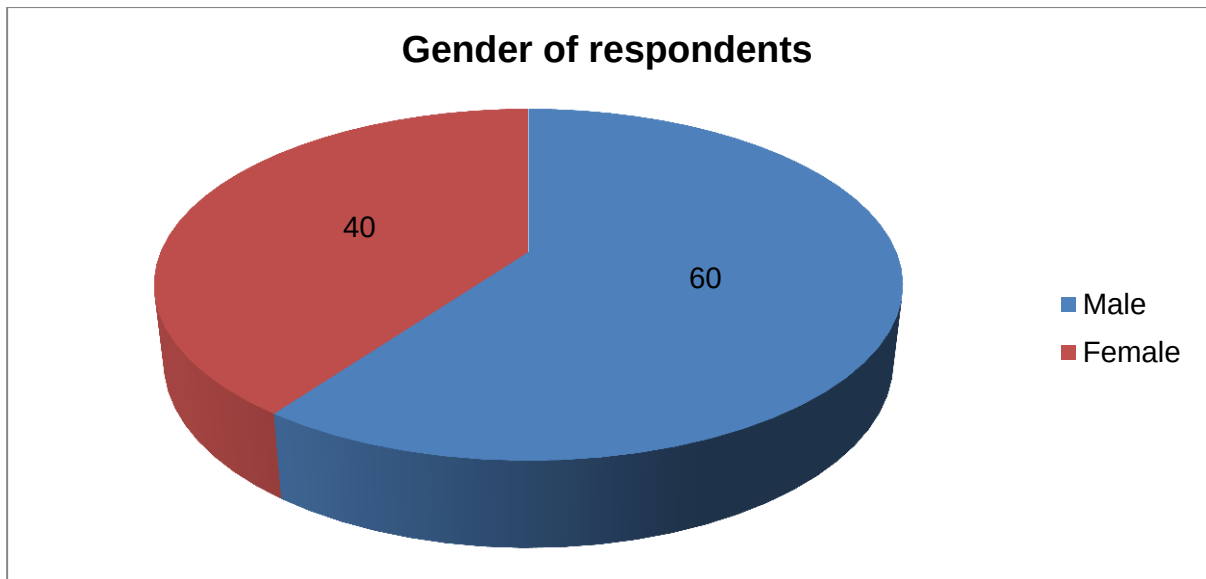


Figure 5-2: Gender of respondents

Figure 5.2 shows that of the respondents, 60 percent were males and 40 percent were females. This shows that local municipalities' technical divisions are still predominantly male workplaces. This is steadily changing as indicated by the percentage. Gender and racial ratios provide public service with competent employees and people that understand their needs and culture and speak their language (Kahn, 2009:300).

5.3.4 Number of years respondents had been employed in the municipality

Figure 5.3 highlights the number of years the respondents had worked at the municipality.

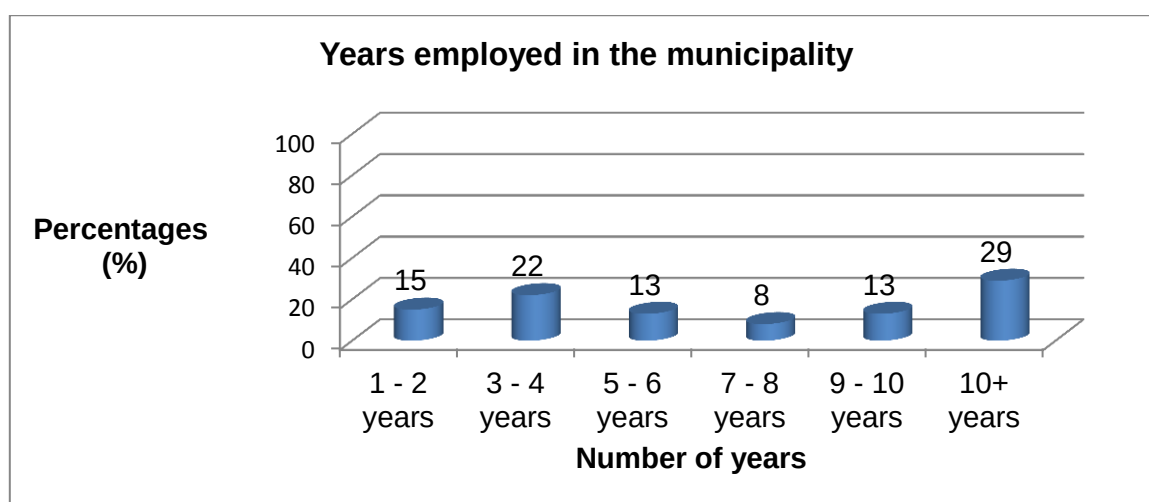


Figure 5-3: Number of years respondents have been employed in the municipality

Figure 5.3 reflects that the majority of the respondents (29 percent) have worked at the municipalities for more than 10 years and 22 percent for 3 - 4 years with the least number of respondents at 8 percent working at municipalities for 7 - 8 years. This implies that the majority of employees have adequate experience to work with MIG in municipalities, as well as showing that most of the staff have been exposed to MIG projects for a substantial number of years, as MIG was launched in 2004. Secondly, they are familiar with the operation of their local municipalities, together with appropriate legalisation implementation such as the PMFA, Municipal Systems, Municipal Structure and the DoRA.

5.3.5 Involvement in MIG for project or business perspectives

Figure 5.4 highlights the different perspectives of respondents who were involved in MIG at the municipality.

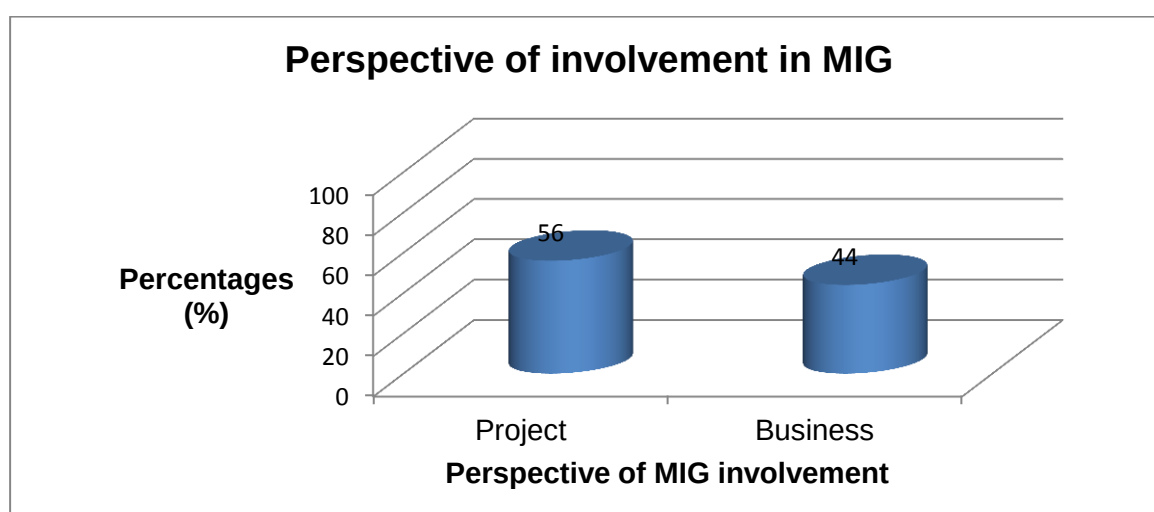


Figure 5.4: Respondents' perspective of involvement in MIG

Figure 5.4 illustrates how 56 percent of the respondents were involved in MIG from a project perspective and 44 percent from a business's perspective. These infer that the majority of the respondents are involved in MIG for project-related purposes, which confirms that local government is a point of implementation (Singo, 2012). Municipalities must gear themselves to deliver project within triple constraints.

5.3.6 Number of times respondents have been involved in MIG

Figure 5.5 highlights the number of times respondents have been involved in MIG in municipalities.

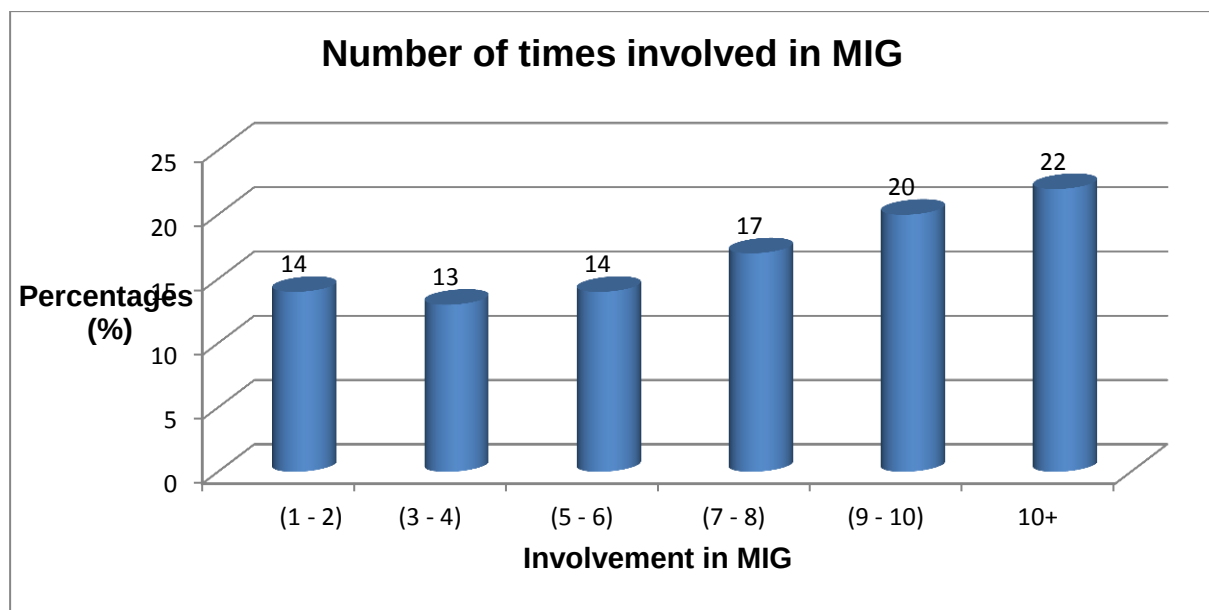


Figure 5-4 Number of times respondents have been involved in MIG

Figure 5.4 indicates that the largest number (22 percent) of the respondents have been involved in MIG more than 10 times, 20 percent of the respondents have been involved MIG 9 - 10 times, and the least number of respondents, 13 percent, have been involved in MIG 3 - 4 times. This implies that municipal employees in North West Province have adequate experience in MIG. More than 75 percent of the provincial staff complement had been exposed to MIG projects. Figure 5.5 also shows that 85 percent had more than three years' experience and exposure in MIG.

Twenty-two percent (22 percent) have been exposed to MIG for more than 10 years, and serve as a backbone for PMU and PMO. As one investigates further, there is a progression in terms of people being interested in MIG projects. This is due to the fact that MIG is part of the IDP (Integrated Development Plan) processes. IDP processes require a consultative process with all relevant stakeholders.

5.3.7 Positions held by the respondents at municipalities

Figure 5.5 indicates the positions held by the respondents in municipalities.

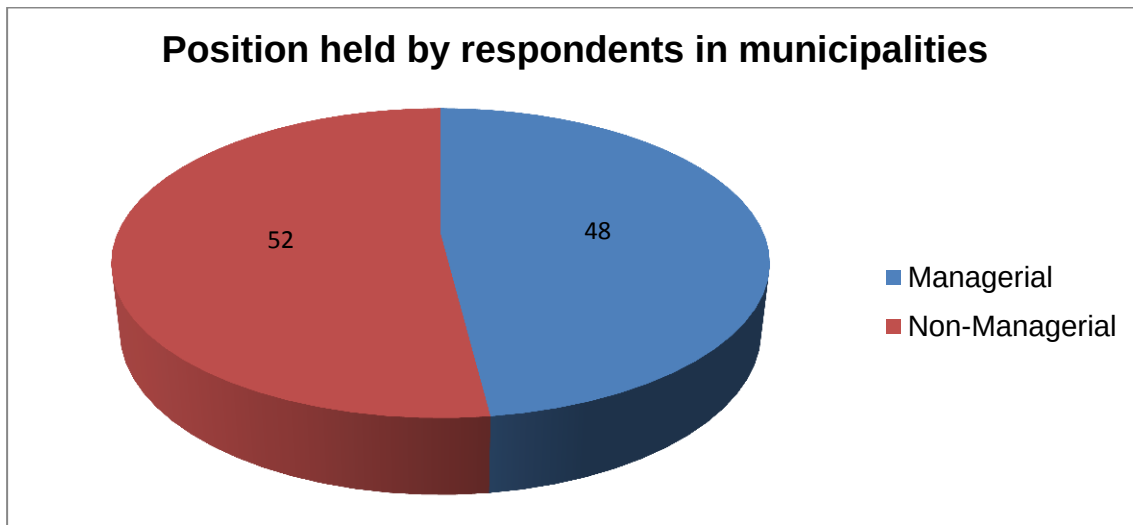


Figure 5-5 Positions held by the respondents at municipalities

Figure 5.5 shows that 52 percent of respondents are in managerial positions in municipalities with the minority (48 percent) in non-managerial positions. This infers that these respondents are in a better position to be involved in MIG whether from a business or a project perspective. The figure highlights different levels of positions held by municipal employees. The non-managerial positions have either a limited level of authority or none at all.

Movement and resource utilization might be controlled by both management and internal processes. This split assists in project implementation as seniority comes with authority and eases resource utilization. The MIG projects are implemented through consulting engineering and contractors. One of the main competences of managers in this regard is contract management.

5.3.8 Respondents' project management qualification

Figure 5.6 illustrates whether the respondents have a project management qualification

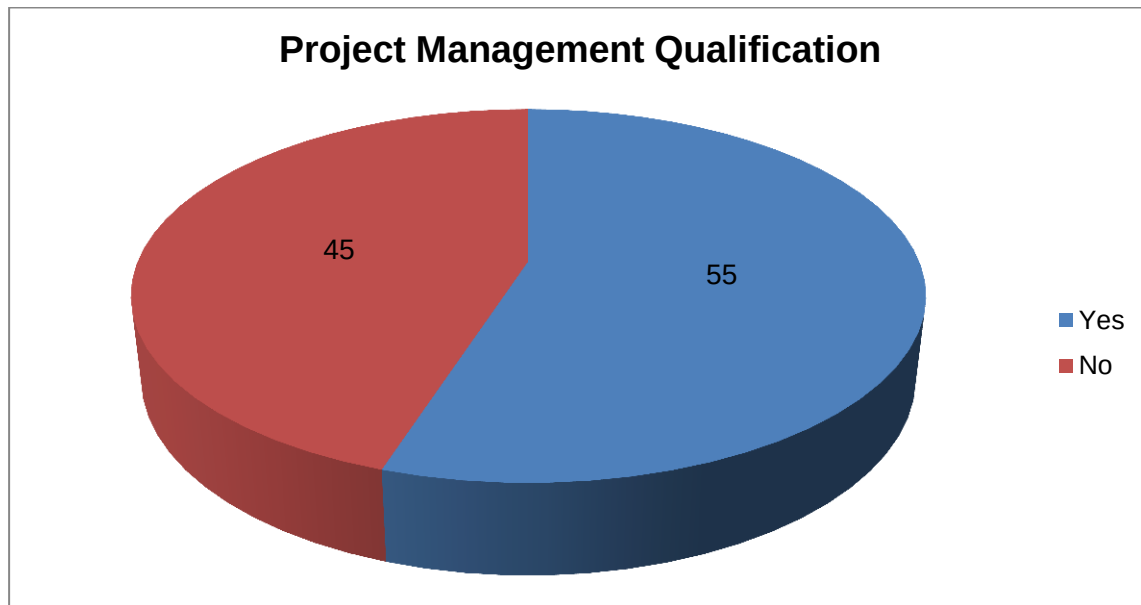


Figure 5-6 Respondents' project management qualification

Figure 5.6 indicates that the majority (55 percent) of respondents agreed that they have a project management qualification and 45 percent indicated that they do not have any project management qualification. This indicates that most of the municipalities in North West Province are capable of carrying out projects successfully because of the respondents' qualifications and experience in MIG.

It is evident that much still has to be done in ensuring that more employees within municipalities have adequate project management qualifications, because there is an inference that the majority of respondents with project management qualifications might be the older employees there. This could pose a threat to MIG implementation if these older workers retire. Project management is identified as one of the integral training needs for MIG project implementation (DPLG, 2014).

Table 5.1 summarises the answers of respondents from the municipalities in North West Province

Statements	Strongly Agree # (%)	Agree # (%)	Disagree # (%)	Strongly disagree # (%)
	1	2	3	4
The budget assigned to the project was appropriate.	0 (0)	250(62)	151(38)	0(0)
MIG had enough human resources assigned to it in your functional area.	100 (25)	150 (37)	150(38)	1(0)
Your functional area received sufficient and timely training.	100 (25)	150 (37)	100 (25)	51(13)
Was the management buy-in to MIG suitable?	(181) 45	59 (15)	130(32)	31 (8)
Satisfactory accountability was placed on the MIG team for their function in the project.	100 (25)	150 (37)	100 (25)	51(13)
Satisfactory accountability was placed on the business for their function in MIG.	100(25)	150 (37)	100(25)	51 (13)
Project team members are empowered to fulfil their functions.	0 (0)	262(65)	138 (35)	1(0)
Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions.	30 (8)	201 (50)	(131) 32	39 (10)

Table 5.1 presents the responses to the statements relating to attitudes of the employees towards fiscal policy in the National Treasury. The respondents were requested to respond to four statements thereon. They were asked to rate each item on a scale of 1 to 4 (1 = strongly agree; 2 = agree; 3 = disagree and 4 = strongly disagree).

Out of 401 responses received, 62 percent of respondents agreed that the budget assigned to the project was appropriate, 62 percent of respondents felt MIG had sufficient human resources in their functional areas, 62 percent also agreed that their functional areas received sufficient and timely training, and 60 percent of the respondents agreed there was management buy-in.

Sixty-two percent (62 percent) agreed that there was satisfactory accountability placed on the MIG team for their function in the project, 62 percent of the respondents agreed that satisfactory accountability was placed on the business for their function in MIG, 65 percent of the respondents concurred that project team members were empowered to fulfil their functions and lastly 58 percent of respondents agreed that project team leaders were sufficiently monitored to ensure that they were fulfilling their functions.

Allocation of resources in a PMU is pivotal for project implementation. This is also reflected in the overall strategic objectives of the municipality. According to Raine *et al.* (2011:1-2) both aligned and pooled budget must be assigned to achieve a common objective. Project success is tied up with appropriate budgetary allowance as reflected in the graph above, with 62 percent of respondents agreeing.

Capacity building of municipal functionaries strengthens the project implementation and improves performance (Aijaz, 2010). Areas of training must address the local issues such as basic services for rural areas, community mobilisation and resource management and preparation of detailed infrastructure project reports as in Uttarakhand Academy of Administration in Nainital, India (Aijaz, 2010). Mitchell and Thurmaier (2011) suggested the need for budgetary collaboration because of its significant impact on accountability.

This is carried out for financial savings and to reduce duplication of services (Raine *et al.*, 2011:2). Project teams must fulfil their functions in order that projects are successfully completed. Enticott and Entwistle (2005) describe this as modernisation of local government. Modernisation includes devolution of power to local managers to encourage quick decision-making. This offers freedom and flexibility to facilitate the governance of local issues and would assist tremendously with MIG spending. Ring (2008) maintains that success of the programme involves good information policy, inclusive of dissemination. This is encapsulated in the project communication plan.

This places the burden on the project manager to ensure that every team member is familiar with the policies, procedures and change request systems that are appropriate and applicable for each individual project.

A total of 38 percent of the respondents disagreed that the budget allocated to the project was appropriate, 38 percent of the respondents did not agree that MIG had enough human resources in their functional areas, 38 percent also disagreed that their functional areas received sufficient and timely training, 40 percent of the respondents did not agree that there was management buy-in, 38 percent disagreed that there was satisfactory accountability placed on the MIG team for their function in the project, 38 percent of the respondents disagreed that satisfactory accountability was placed on the business for their function in MIG, and 35 percent of the respondents did not agree that project team members were empowered to fulfil their functions.

Lastly, 42 percent of the respondents disagreed that project team leaders were sufficiently monitored to ensure that they were fulfilling their functions. King (2007:360) suggests that ignoring training can impede economic development and limit access to employment opportunities, as was depicted by the 30 percent who disagree about training being provided. Five percent strongly disagreed that sufficient and timely training was provided. This goes against the MIG objective that deals with the developmental capacity of local municipalities and project-related training.

5.4 PEARSON'S CHI-SQUARE ANALYSIS OF CROSS-TABULATIONS UTILISING AGE GROUP AND GENDER.

Cross-tabulation was carried out utilising the age group of the respondents, which produced a statistically significant relationship between age groups and statements in the general personal particulars of the respondents. The relationship statistical significant produced a Pearson's Chi-square effect ranging between 22.69 and 423.67 with coefficients ranging from 0.001 to 0.031. These highlighted that for the following statements, through cross-tabulation a significant relationship existed with the age group of the municipal employees, to whom questionnaires were administered:

- How long have you been working at the respective municipality?
- How many times were you involved in MIG?
- Do you have any project management qualification?
- MIG had enough human resources assigned to it in your functional area.
- Your functional area received sufficient and timely training, and

- Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions.

Cross-tabulation also highlighted the lack of any significant relationship between age and all those statements for which Pearson's Chi-square coefficients were at more than 0.05 significant level. Based on the Chi-square approximation, the Lambda and Cramer V coefficients, Cramer's V coefficients produced are the same as the Pearson Chi-square coefficients. They are derived from Chi-square coefficients, and showed significant statistical relationship between the variables. However, it is important to note that all the other variables indicated significant statistical relationships in Pearson and Cramer's V. They indicated weak relationship based on the Lambda coefficients produced; their values did not provide any help in predicting the age group.

For gender, a cross-tabulation was carried out, which produced a statistically significant relationship between gender and only two of the statements in the general personal particulars of the respondents. The relationship statistical significant produced a Pearson's Chi-square effect ranged between 14.25 and 235.30 with coefficients ranging from 0.001 and 0.014. These highlighted that for the following statements, through cross-tabulation a significant relationship existed with the gender of the municipal employees to whom questionnaires were administered:

- How long have you been working at the respective municipality?
- Your functional area received sufficient and timely training.

Cramer's V and Lambda coefficients could not be calculated because their asymptotic standard errors were equal to zero. It was imperative to highlight the fact that most of the variables showed no significant relationship with gender.

5.5 PART 3: THIS SECTION MEASURES THE UNDER-EXPENDITURE OF MUNICIPAL FUNDS.

5.5.1 Familiarity of respondents with the MIG booklet

Figure 5.8 illustrates the respondents' familiarity with the MIG booklet in the municipalities

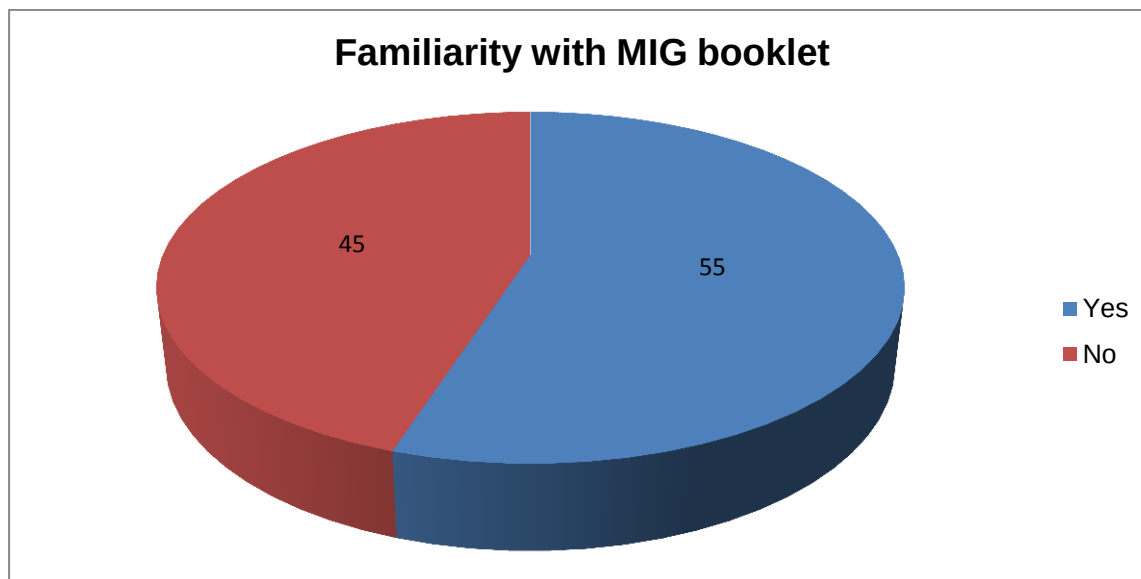


Figure 5-7 Familiarity of respondents with the MIG booklet

Figure 5.8 shows that the majority (55 percent) of respondents were familiar with the MIG booklet, but 45 percent of the respondents were not familiar with it. This might be the case because some respondents were not in managerial positions, so they did not make infrastructural decisions.

Table 5.2 This table summarises the answers from respondents in the municipalities with regard to the under-expenditure of municipal funds in North West Province.

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
	# (%)	#(%)	# (%)	# (%)
	1	2	3	4
MIG policies and procedures are available to everyone involved	0(0)	251(63)	150(37)	0(0)
Project management unit (PMU) well resourced	31(8)	201(50)	138(34)	31 (8)
Qualified manager head PMU	0(0)	240(60)	161(40)	0(0)
Conditions for applying for MIG funding are well explained to all project team members	0 (0)	142 (35)	259(65)	0(0)
Your functional area of MIG was implemented within the timelines originally stipulated by the project plan	60(15)	200(50)	120(30)	21(5)
MIG projects are aligned with MIG allocation	0(0)	141(35)	259(65)	0 (0)
An appropriate planning measure was implemented for MIG	20(5)	121(30)	260(65)	0(0)
There is adequate management support and commitment through MIG roll out projects	0(0)	270(67)	131(33)	0 (0)

Statements	Strongly Agree # (%)	Agree # (%)	Disagree # (%)	Strongly Disagree # (%)
The link between municipal intervention and national government funded projects is explicit	261(65)	0(0)	140(35)	0(0)
Project processes are developed to ensure the project is delivered effectively	0(0)	261(65)	140(35)	0(0)
A mechanism exists where community members are consulted about their preferences for services.	180(45)	50(13)	171(42)	0(0)
The original business case adhered to for MIG	25(6)	170 (42)	185(47)	21(5)
Priorities of communities are discussed during planning phase	0(0)	199(50)	180(45)	22 (5)
Did you participate in any change management event?	199(50)	0(0)	(182)45	20(5)
Were you part of a change management team during MIG?	0(0)	192(48)	(209)52	0(0)
Sufficient change management was performed throughout the phase of MIG	0(0)	269(67)	(132)33	0(0)
The list of MIG-funded projects is transparent	0(0)	200(50)	(201)50	0(0)

Table 5.2 presents the responses to the statements relating to attitudes of employees towards MIG under-expenditure. The respondents were requested to respond to four statements thereon. They were asked to rate each item on a scale of 1 to 4 (1 = strongly agree; 2 = agree; 3 = disagree and 4 = strongly disagree).

Out of the 401 responses received, 67 percent of the respondents agreed that projects implemented within municipalities are linked to Integrated Development Programme (IDP) implementation, 67 percent of the respondents also indicated that there is adequate management support and commitment through MIG rollout projects, 67 percent also concurred that sufficient change management was performed throughout the phases of MIG, 65 percent reiterated that project processes are developed to ensure the project is delivered effectively and 63 percent of the respondents highlighted that MIG policies and procedures are available to everyone involved. Ring (2008) maintains that success of such a programme depends on good information policy, inclusive of dissemination.

This places the burden on the project manager in ensuring that every team member is familiar with policies and procedures. PMU is the vehicle used to execute projects within the MIG ambit. Myeza (2009) says that there is a general lack of resources for local government to devote to strategic planning, resulting in municipalities having difficulty in measuring their performance. According to the DPLG (2005), each municipality must establish project management capacity.

According to MFMA Circular No. 59 (2003), a maximum of 5 percent may be used for project management costs that are infrastructure project-related. A professional employee enhances an institution's effectiveness and productivity, which in turn translates into quality service delivery for all communities (Kahn, 2009). A qualified PMU manager provides the unit with necessary information, a list of priority projects and project status, including financial information: that is why 60 percent of the respondents agree that the unit was headed by a qualified manager. It is important to note that the project priority list is drawn up and approved by a municipality councillor.

Lamie, Water and Water (2012) argue that growth management strategies need to match the objectives of the economic development strategy. MIG projects redress the imbalances of the past and enhance management buy-in; hence there is a strong indication of adequate management support and commitment through MIG rollout projects. An Integrated Development Plan (IDP) is a five-year strategic development plan that serves as the principal strategic management instrument. It reflects municipal priorities and ensures available resources are used accordingly (Myeza, 2009).

This was reflected by the majority of the respondents who indicated that the projects implemented were linked to IDP implementation. The IDP serves as a centrality of community-based planning (Ngxiza, 2010).

Furthermore, there is a link between municipal intervention and national government-funded projects. The Plan-Process-Result (PPR) approach and its application to municipal urban plans were successful in the Portuguese cities of Lisbon and Oporto (Oliveira & Pinho, 2009). CMMI models define sets of best practices grouped into process areas that product development organizations implement to improve the predictability of their project costs and schedules (Beynon, 2007).

Project processes drive the project and maintain it on track. Sixty-five percent (65 percent) of the respondents highlighted that processes were developed in order to ensure efficient project delivery. This indicates that respondents are familiar with the existing processes and they understand project management. Since MIG allocation for municipalities is based on a formula, MIG funding provides for community participation, awareness and project-level communication (DPLG, 2006c). This consultation is also carried out through the IDP process.

There is a need for strategic focus in local government that manages changes and fluctuation more effectively in order to respond to rapid economic changes (Odendaal, 2003). It is clear from the response that adequate change management was performed during the phases of MIG.

Some 65 percent of respondents disagreed that conditions for applying for MIG funding were well explained to all project team members; 65 percent of the respondents indicated that no appropriate planning measure was implemented for MIG; 52 percent of respondents disagreed that the original business case was adhered to for MIG; and 52 percent of respondents indicated that they were not part of the change management during MIG.

Government spending can have a significant effect on the economy and the lives of the poor and marginalised communities. One of the necessary functions is to correct distortions in the allocation of funds (Garay *et al.*, 2011). However, allocation of MIGs is directed to well-capacitated local municipalities, if not, it is via a District Municipality (DPLG, 2005). A minimum of 95 percent of the MIG allocation must be appropriated on a municipality's capital budget (MFMA Circular No. 59, 2003). Failure to complete the project on time has an impact on the project cost, which in turn escalates the implementation costs of projects for municipalities, hence, 35 percent of the respondents disagreed that MIGs were implemented within timelines.

The MIG booklet specifies that municipal allocation for infrastructure be based on a formula mechanism. Then the allocation for each type of infrastructure is added to a municipality's total MIG allocation for the year (DPLG, 2006). Sixty-five percent (65 percent) of respondents believe MIG projects are not aligned with the MIG allocation. Beynon (2007) defines the project as a managed set of interrelated resources that delivers one or more products to a customer or end user.

Project success depends largely on adhering to the project plan and managing triple constraint. Some ways to achieve project success come through the use of participative planning techniques (Faguet, 2004). But the majority of respondents indicated that there were no appropriate planning measures in place within municipalities. Fifty-two percent of respondents had never been involved in a change management team during an MIG project and this obviously impacted negatively on the project outcomes.

According to Subban (2008:128) many local authorities have found it necessary to formulate strategies to address change management, local economic development and public participation through the IDP. Dlalisa (2009:18), citing Craythorne (2003), maintains that public participation is about encouraging involvement of communities in matters of governance and those matters that affect them.

The respondents are split regarding adherence of the business case to MIG with 48 percent agreeing and 52 percent disagreeing respectively. The MIG programme is an integral part of providing municipal services to communities. The scope and detail of the business case is at the discretion of the municipality as long as it is based on the feasibility study and addresses sustainability issues (DPLG, 2005). The programme is within the NSDP framework (Swilling, 2006). Community participation and plans are discussed during the planning phase, according to the MIG booklet (DPLG, 2006a).

It is imperative that municipal employees be involved in change management that affects them (Wirtz, Lutje & Schierz, 2010; Wong & Woodrum, 2009). This is one of the internal barriers that can drastically affect project implementation. Mistakes and shortcomings within project and change management are known to be responsible for extensive delays and failures of government projects (Wirtz *et al.*, 2010). It is encouraging to see the 50:50 split of respondents between agreeing and disagreeing regarding being involved in change management events. Likewise, one of the MIG objectives is that distribution of funding to municipal infrastructure must be done in an equitable, transparent and efficient manner. This supports a co-ordinated approach to local development and maximises development outcomes (DPLG, 2005).

Spearman's rho is reported separately for statements relating to under-expenditure of municipal funds. The correlation coefficients, which are between -1 and 1, highlight a fairly positive finding in relation to municipal funds under-expenditure; there is a significant relationship (correlation co-efficient value 1.000) between municipal under-expenditure and MIG policies and procedures: municipal employees need to understand these sets of procedures in order to effectively provide services and implement projects to the related communities.

A significant (1.000) relation exists between qualified managers and a well-resourced project management unit. This is despite there being some variables with a weaker correlation co-efficient (-0.030), which means they are not more directly linked to the under-expenditure of municipal funding.

5.5.2 Turnaround time to appoint contractors

Figure 5.9 illustrates how long respondents from municipalities take to appoint contractors in North West Province

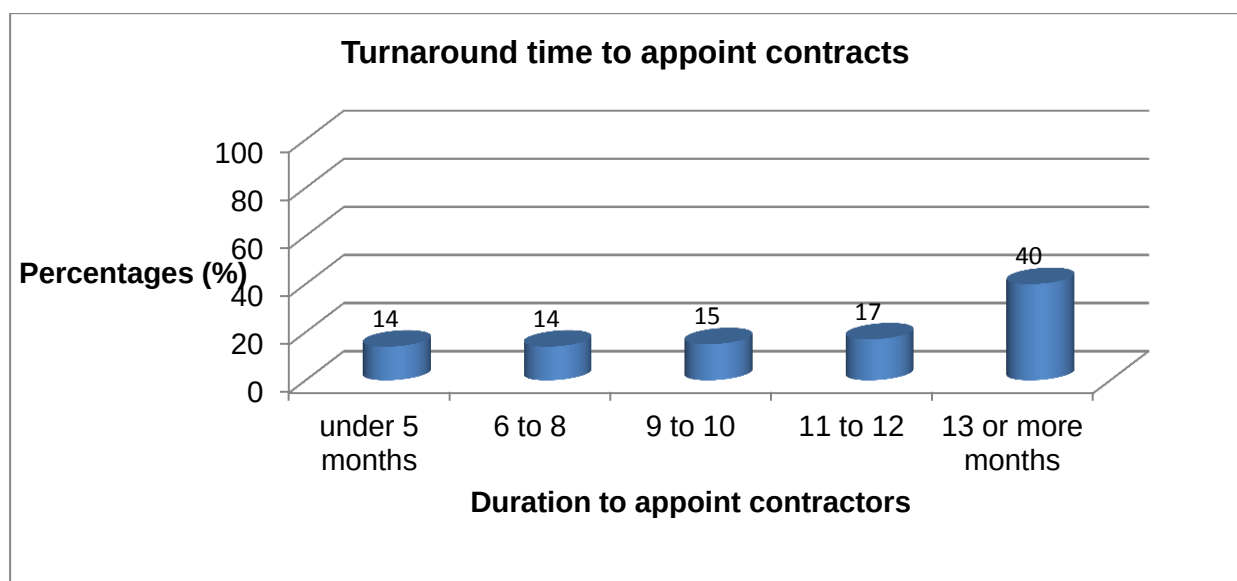


Figure 5-8 Turnaround time to appoint contractors

Figure 5.9 indicates that the majority (40 percent) of respondents take more than a year to appoint contractors while for the minority (14 percent each); it takes them between less than five months and 6 to 8 months respectively. The contractors are appointed after project registration (Palmer, 2008).

Contractors are appointed to perform the required duties and are monitored through PMU offices. According to the DPLG (2005), a PMU is required to intervene when performance of the projects does not conform to the requirements. Contract administration consists of ensuring that performance of both parties to the contract meets contractual requirements (Mulcahy, 2005).

Table 5.3 summarises the responses from the respondents at the municipalities with regard to the under-expenditure of municipal funds in North West Province.

Statements	Strongly Agree # (%)	Agree # (%)	Disagree # (%)	Strongly Disagree # (%)
	1	2	3	4
Non-performance of contractor and consultant are dealt with proactively	0(0)	0(0)	249(62)	152(38)
Project tender advertisement timelines are adhered to	90(22)	210(53)	101(25)	0(0)
Do you know the Municipality's business processes?	0(0)	8(2)	393(98)	0(0)
Communities are informed about project status	0(0)	141(35)	260(65)	0(0)
Service delivery reduces infrastructure backlog	100(25)	269(67)	32(8)	0(0)
The concurrent restructuring and centralisation process at your municipality had a negative effect on the MIG	0(0)	132(33)	269(67)	0(0)
The municipality ensures that they make ends meet	0(0)	292(73)	109(27)	0 (0)
Basic services and other development needs of the communities are addressed proactively.	260(65)	9(2)	132(33)	0(0)

Statements	Strongly Agree # (%)	Agree # (%)	Disagree # (%)	Strongly Disagree # (%)
Unauthorised expenditure is avoided as per Division of Revenue Act (DoRA) and MIG policy	89(22)	201(50)	81(20)	30(8)
MIG provides support to municipality to supply basic infrastructure development and improve service delivery	2(1)	269(67)	130(32)	0(0)
There is a link between service and expenditure	0(0)	260(65)	141(35)	0(0)
The municipality liaises with the government to ensure they operate within the legal and political parameters	0(0)	280(70)	121(30)	0(0)
Municipalities embark on participatory budget approach	0(0)	290(72)	111(28)	0(0)
Project closure reports are available to every project team member	301(75)	59(15)	0(0)	41(10)

Table 5.3 presents the responses to the statements relating to the attitudes of employees towards MIG projects. The respondents were requested to respond to four statements thereon. They were asked to rate each item on a scale of 1 to 4 (1 = strongly agree; 2 = agree; 3 = disagree and 4 = strongly disagree).

Out of 401 responses received, 90 percent of the respondents agreed that project closure reports were available to every project team member, 75 percent of the respondents indicated that there was adherence to project tender advertisement timelines, 73 percent concurred that the municipalities ensured they made ends meet.

Seventy-two percent reiterated that municipalities embarked on a participatory budget approach and 70 percent of the respondents highlighted that municipalities liaised with the government to ensure that they operated within the legal and political parameters. The service providers, consultants and contractors were appointed during the design phase. The procurement documentation must state the criteria used to evaluate proposals and tenders. Project tender advertisement timelines were adhered to, according to the majority of the respondents.

In line with the objective of the MIG initiative to address service delivery to the previously disadvantaged communities, the majority of respondents indicated that service delivery would indeed reduce infrastructure backlog. A Community Development Worker (CDW) collaborates with others to help fellow community members progressively meet their needs, achieve goals, realise their aspirations and maintain their wellbeing (DPLG, 2005). The majority indicated that municipalities do make ends meet during the MIG processes. Basic services and needs of the communities are enshrined in the Constitution of the Republic of South Africa as basic human rights. These are also taken care of proactively through the IDP process.

The overall allocation of MIG funds is through the DoRA. A certificate of compliance is issued upon completion of the project and submitted by the municipality to the Provincial and National MIG Management Units (DPLG, 2007); through this, municipalities ensured that there was no unauthorised expenditure. The MIG booklet makes provision for community development workers.

These workers ensure that gaps are identified within the communities during the awareness phase concerning the provision of basic services. Community Development Workers serve as a link between the ward committee and other project stakeholders. MIG funding was introduced to reduce infrastructure backlog among the poor and the marginalised, and improve service delivery. It is important that each municipality develops capacity to administer MIG funds and manage infrastructure to address the backlogs of one type or another (DPLG, 2005).

The link between service and expenditure is reflected by the majority of respondents. A municipality can select a range of different service delivery mechanisms to operate and maintain infrastructure, depending on the municipality's capacity. The MIG is about basic services and municipalities are leaders in service delivery. The municipalities are supported by other spheres of government in achieving sustainable basic services (DPLG, 2005).

According to the PMBOK, project closure reports signal the end of the project, handover to the beneficiary and the assignment of project team members to other existing projects. Project closure involves administrative closure and contract closure procedures (Mulcahy, 2005).

All the respondents (100 percent) disagreed that non-performance by contractor and consultant was dealt with proactively, with 98 percent of the respondents indicating that they did not know the municipality's business processes, 67 percent of respondents disagreeing that the concurrent restructuring and centralisation processes at their municipalities had a negative effect on the MIG, and 65 percent of respondents indicating that communities were not informed about project status by municipalities. The respondents strongly believed that non-performance by contractors and consultants were not dealt with proactively. This is reflected by all the respondents disagreeing with the statement.

The local municipalities could with advantage use the contractor performance table developed by Obika, Masimega, Segokgo and Overbry (2004). This measures five elements on a scale of 1 to 5, 1 being poor and 5 being excellent. The focus areas include mobilisation/organisation, understanding of contract, technical performance, site management and financial management.

The project perspective looks at triple constraints maintenance, which involves cost, time and quality. Their focus is on project completion, within budget, within pre-agreed standard and time allocation. The business approach, however, would look at business processes; how project managers can implement the project faster cost-effectively and while building organisational memory. Lack of community consultation and involvement affect stakeholder relationships negatively as they don't know why projects are not completed, and why there is no activity on certain projects.

5.6 INTERPRETATIONS OF RESULTS OF LINEAR REGRESSIONS USING AGE GROUP AS A DEMOGRAPHIC VARIABLE TO PREDICT RELATIONSHIP OF MUNICIPAL EMPLOYEES' RESPONSES

The linear regression performed indicates that the overall means for age groups were 1.45; 2.13; 2.45; 1.89; 2.65 and 2.35 respectively, with standard deviations of 0.498; 0.785; 0.771; 1.040; 0.478 and 0.478 respectively. The means and their standard deviations are similar; there is little skewness in the responses of the respondents from municipalities. This implies that there is significant positive relationship in the responses for the respondents from various age groups (average $t = 0.684$, average $p = 0.014$).

The perceptions of age groups in the municipality did not differ with respect to elements of project management qualification, sufficient human resources, project team leaders being sufficiently monitored to ensure they were fulfilling their functions, projects being implemented within municipalities while linked to Integrated Development Programme (IDP) implementation, sufficient change management being performed throughout the phases of the MIG.

Communities being informed about project status and there being a link between service and expenditure. The researcher concludes that the respondents rated the elements measured by the instrument in the same way irrespective of their age group, because the p value is less than the significant value of 0.05.

The linear regression summary indicates that age group gave significant and positive relationship ($R^2 = 0.407$), with (Adj. $R^2 = 0.326$) of the variance in the age group responses. This highlights that there is a minimal difference in the answers of the respondents, which indicates that there is a positive significant relationship with respect to elements of project management qualification, enough human resources, project team leaders being sufficiently monitored to ensure they were fulfilling their functions, that projects being implemented within municipalities are linked to Integrated Development Programme (IDP) implementation, that sufficient change management is being performed throughout the phases of the MIG, communities are being informed about project status and there being a link between service and expenditure.

The researcher concludes that age group contributed positively to the perceptions of the respondents on municipal funds utilisation in North West Province as a measure of under-expenditure of municipal funds.

Spearman's rho is reported separately for statements relating to under-expenditure of municipal funds. The correlation co-efficient, which is between -1 and 1, highlights a fairly positive relation to municipal funds under-expenditure; there is a significant relationship (correlation co-efficient value 1.000) between municipal under-expenditure and participation in change management, and non-performance of contractors and consultants is not dealt with proactively. Some of the variables show a weaker correlation co-efficient (-0.030), which means they are not more valuable to the under-expenditure of municipal funding.

5.7 RELIABILITY TESTING

The reliability of the data in this study is based on probability value and the researcher chose 10 percent to determine the level of significance. The data analysis uses techniques discussed earlier. The researcher used tables and graphs to present the results. Reliability and validity are central issues in all measurements and both are concerned with how measures are connected to constructs (Molukanele, 2009; Tavakol & Dennick, 2011).

Validity is concerned with the extent to which an instrument measures what it is intended to measure while reliability is about the ability of an instrument to measure consistently. It is imperative to calculate and report Cronbach's coefficient when using Likert-type scales (Gliem & Gliem, 2003).

Bryman and Bell (2007:164) argue that Cronbach's alpha is commonly used to test internal reliability. Alpha coefficient varies between 1 and 0 with 1 denoting perfect internal reliability and 0 no internal reliability.

However, Tavakol and Dennick (2011) suggest that the acceptable values range from 0.75 to 0.95. A low value of alpha could be due to a low number of questions, poor interrelatedness between items or a heterogeneous construct. The measurement of reliability is based on the Cronbach's instrument and Means Inter item.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardised Item	N of items
0.942	0.927	49

The table above with figure 0.942 has been accepted, as a rule of thumb, to denote an acceptable level of acceptance. The table reflects that there is an acceptable level of internal reliability.

5.8 CONCLUSION

This chapter presented the findings on the general personal information of the respondents in the various municipalities. The results however highlighted that non-performance by contractors and consultants were not dealt with proactively. Furthermore, there is no due consultation with the communities in regard to municipal processes.

It was evident that there was due diligence regarding adherence to project tender deadlines. The results highlighted that there was adequate management support and commitment through MIG rollout projects, and sufficient change management was performed throughout the phases of MIG. Chapter 6 will focus on the summary, findings, recommendations and conclusion to the study.

5.9 LINK TO THE NEXT CHAPTER

The next chapter deals with qualitative data. This data forms part of the secondary data.

CHAPTER SIX – QUALITATIVE DATA PRESENTATION

QUALITATIVE DATA PRESENTATION AND INTERPRETATION

6.1 CHAPTER LAYOUT

The researcher discusses the MIG allocation of North West Province, compared against Free State, Mpumalanga and Limpopo provinces from the 2008/09 to 2013/14 financial years. This is followed by MIG allocation per district municipality and their spending patterns. Next is a comparison between two metros in Gauteng Province—Tshwane and Ekurhuleni—and eThekweni in KwaZulu-Natal. Financial ratios were calculated for three local municipalities in North West Province, namely the City of Matlosana, and Rustenburg and Tlokwe local municipalities.

6.2 INTRODUCTION

The MIG is a conditional grant transferred to District and Local municipalities to redress basic services backlogs. Fund allocations are dependent on the capacity of the local municipality. When these are not capacitated, the function is normally carried out by the district municipality. This study focuses on the five-year period of financial years 2008/09 to 2013/14.

Different graphs depict the different spending and non-spending patterns of different municipalities, districts and metros. The concern of the study, as per the problem statement, is unspent funds that are transferred back to the National Treasury or rolled over to the following financial year.

6.3 MIG ALLOCATION PER DISTRICT

MIG allocations for North West Province have been grouped into district municipalities. This means that for Bojanala Platinum, MIG allocations include those of Moretele, Madibeng, Rustenburg, Kgetlengriver and Moses Kotane local municipalities. Individual local municipality allocations are listed in Appendix K. The focus of the study is on the financial years from 2009/10 to 2013/14.

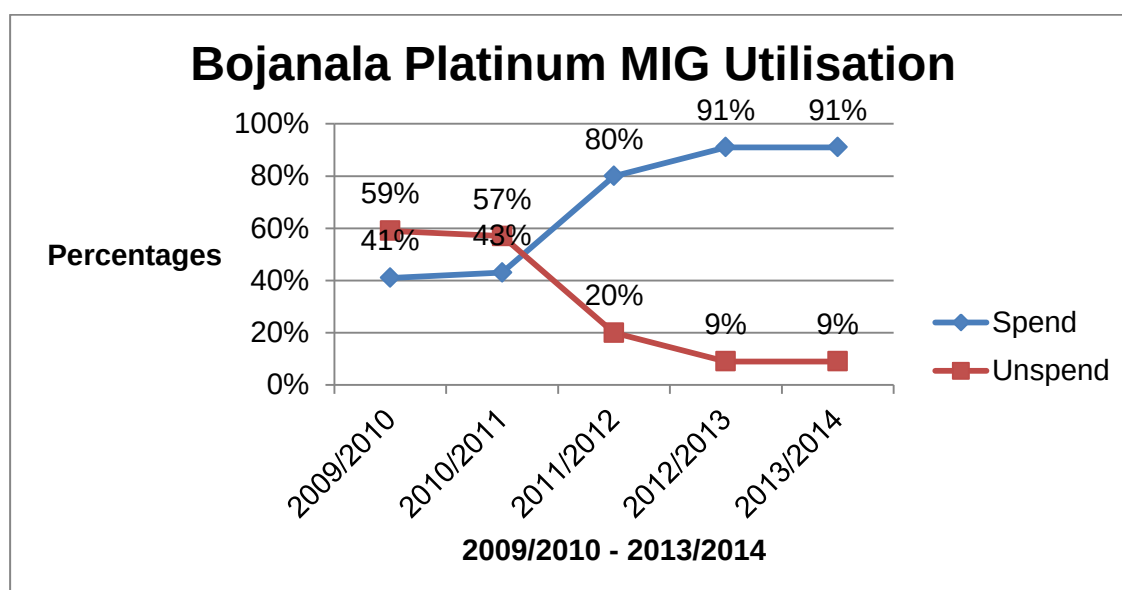
Table 6-1 : North West Province District Municipalities and local municipalities

No.	District Municipalities	Local Municipalities
DC037	Bojanala Platinum	NW 371 Moretele
		NW 372 Madibeng
		NW 373 Rustenburg
		NW 374 Kgetlengriver
		NW 375 Moses Kotane
DC038	Ngaka Modiri Molema	NW 381 Ratlou
		NW 382 Tswaing
		NW 383 Mafikeng
		NW 384 Ditsobotla
		NW 385 Ramotshere Moiloa
DC039	Dr. Ruth Segomotsi Mompati	NW 391 Kagisano-Molopo
		NW 392 Naledi
		NW 393 Mamusa
		NW 394 Greater Taung
		NW 395 Molopo
		NW 396 Lekwa-Teemane
DC040	Dr. Kenneth Kaunda	NW 401 Ventersdrop
		NW 402 Tlokwe
		NW 403 City of Matlosana
		NW 404 Maquassi Hills

It is important to note that Dr Kenneth Kaunda and Bojanala District municipalities do not receive MIG funds since they are not Water Services Authorities (WSAs). The amounts reflected are for the local municipalities under those districts.

6.3.1 DC37 Bojanala Platinum (BPDM)

According to the BPDM IDP 2007-2012, the district is a category C municipality and comprises five Category B local municipalities as listed in the table above. The district is home to 1,185,027 people, with 333,618 households in total of 122 wards. Forty-nine percent (49 percent) of the district's households earn below R800 per month and 67 percent earn less than R1, 600 per household (www.bojanala.gov.za).



Graph 6-1 Bojanala Platinum District Municipality MIG Allocation

Graph 6-2: Bojanala Platinum District Municipality MIG Allocation

Bojanala District Municipality executed some projects for local municipalities in the area. Other local municipalities were able to spend on, and execute, projects individually. Graph 6.1 highlights the expenditure by Bojanala District Municipality, which has a five-year financial horizon. The graph shows that most of the local municipalities in this district spent below 90 percent (which on average is 69 percent) of their MIG allocations. This implies that the Bojanala District municipalities have underspent by 31 percent on average for those financial years and the funds were carried over to the following financial years.

The highest expenditure was during the 2012/13 and 2013/14 financial year, and this was due to infrastructure projects that were neglected during preparation for the FIFA Soccer World Cup.

The appointment of contractors and consultants was speeded up due to previous under-spending and numerous protests in the district.

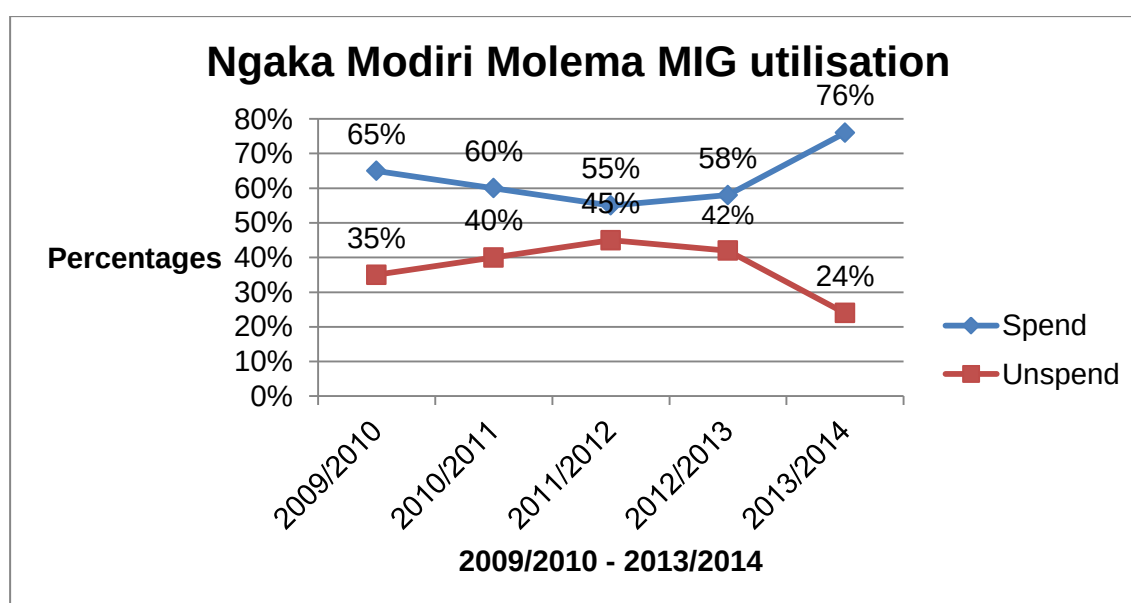
The late registration of projects and appointment of service providers are some of the reasons for the average 34 percent underspending. The third reason might be due to staff movements affecting project implementation.

There was a steady improvement in the subsequent financial years, 2012/13 and 2013/14, due to the turnaround strategy from CoGTA (DPLG, 2014). The table below reflects how much was unspent, and spend as against what was allocated.

Table 6-2 Bojanala Platinum MIG allocation and expenditure.

BOJANALA DISTRICT MUNICIPALITY MIG ALLOCATION for financial year 2009/10 to 2013/14			
	2009/10	2010/11	2011/12
Allocation	421 897 135.53	483 120 813.44	487 117 521.30
Spend	173 117 446.97	209 145 470.93	390 844 636.97
Unspent	248 779 688.56	273 975 342.51	96 272 884.33
	2012/13	2013/14	
Allocation	588 446 953.33	665 624 000.00	
Spend	533 495 059.47	603 770 283.08	
Unspent	54 951 893.86	61 853 716.92	

6.3.2 DC 38 Ngaka Modiri Molema



Graph 6-3 Ngaka Modiri Molema District Municipality MIG Allocation

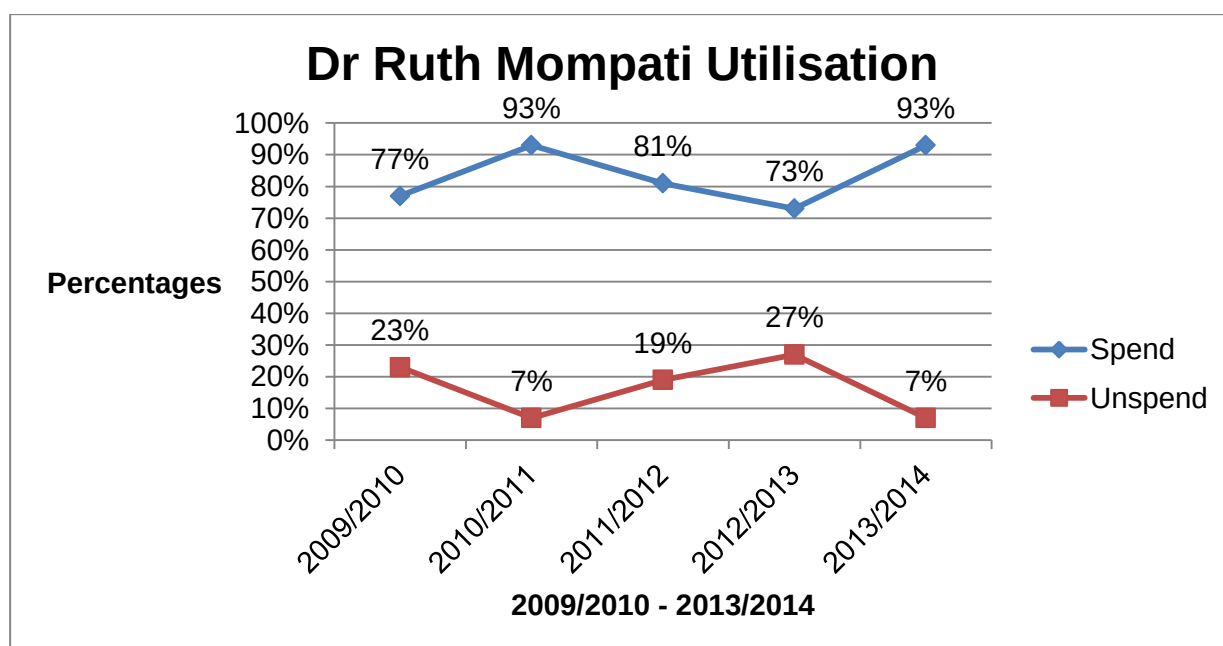
Graph 6-4: Ngaka Modiri Molema District Municipality MIG Allocation.

According to graph 6.2, the district municipality has significantly underspent during the financial year 2011/12 and this resulted in a backlog in providing basic service to the poor and the marginalised. The municipality on average spent 63 percent of its allocation during the period under study while 27 percent was rolled over to the following year or reallocated according to DoRA, Section 20(1). The table below reflects the actual amounts unspent, spend and allocation.

Table 6-3 Ngaka Modiri Molema MIG Allocation and expenditure

Ngaka Modiri Molema for financial year 2009/10 to 2013/14			
	2009/10	2010/11	2011/12
Allocation	86 138 921.06	99 947 779.96	118 868 555.34
Spend	55 860 725.89	60 131 363.97	64 911 553.81
Unspent	30 278 195.17	39 816 415.99	53 957 001.53
	2012/13	2013/14	
Allocation	144 014 660.80	167 294 000.00	
Spend	83 613 760.42	127 339 132.89	
Unspent	60 400 900.38	39 954 867.11	

6.3.3 DC 39 Dr Ruth Segomotsi Mompoti



Graph 6-5 Dr Ruth Segomotsi Mompoti District Municipality MIG Allocation

Graph 6-6: Dr Ruth Segomotsi Mompoti District Municipality MIG Allocation

Graph 6.3 highlights that the district is characterised by both high and low underspending. This is as a result of the lack of a sound financial management system and complete projects cost overrun (Koma, 2010).

The district has failed to spend, on average, 17 percent of its total allocation over a five-year period. This is due to capacity problems (Singo, 2012). It further highlights the underspending of 27 percent in one financial year, within the period of 2012/2013 This is due to the cumulative underspending of other local municipalities during the current financial year.

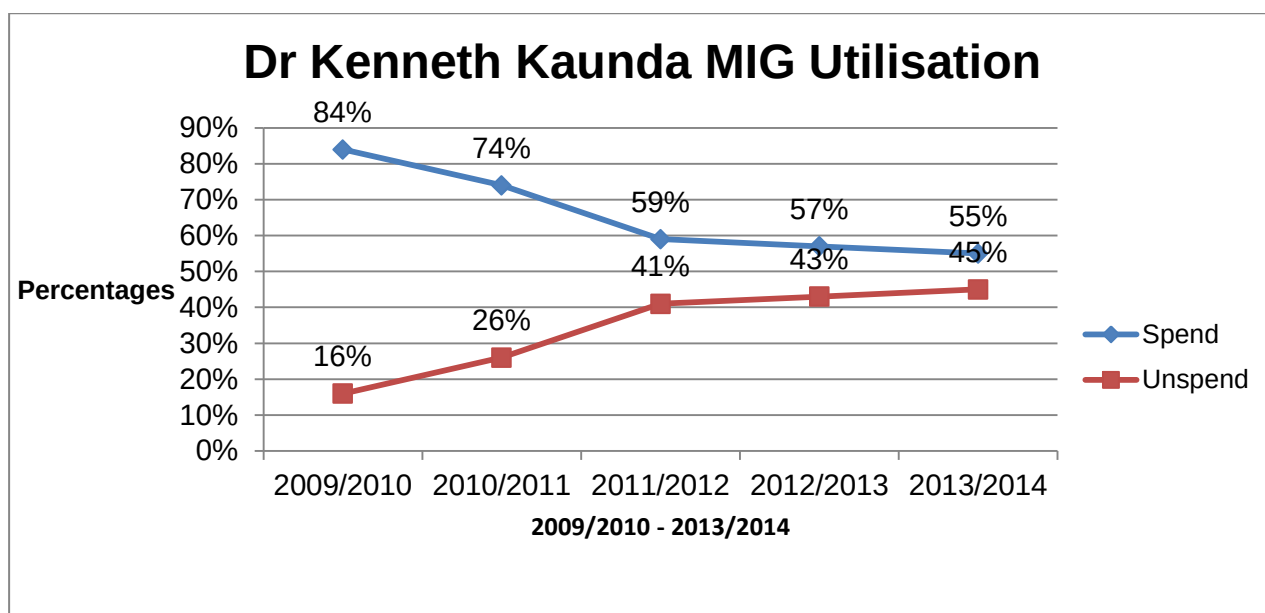
The table below shows how much was unspent, spend and allocation during the financial years under study.

Table 6-4 Dr Ruth Mompoti MIG Allocation and expenditure.

Dr Ruth Segomotsi Mompoti for financial year 2009/10 to 2013/14			
	2009/10	2010/11	2011/12
Allocation	133 883 054.99	143 179 000.00	179 937 321.14
Spend	103 129 793.53	133 621 045.59	144 929 720.83
Unspent	30 753 261.46	9 557 954.41	35 007 600.31
	2012/13	2013/14	
Allocation	231 278 145.45	225 538 000.00	
Spend	168 413 941.67	210 653 416.58	
Unspent	62 864 203.78	14 884 583.42	

6.3.4 DC 40 Dr Kenneth Kaunda

The Dr Kenneth Kaunda District Municipality (formerly called Southern) consists of four local municipalities. The district has a population of 849,992 with a high unemployment rate, high levels of poverty and food insecurity.



Graph 6-7 Dr Kenneth Kaunda District Municipality MIG Allocation

Dr Kenneth Kaunda District Municipality was responsible for executing MIG projects for Maquassi Hills Local Municipality with the exception of Tlokwe, Ventersdorp and City of Matlosana local municipalities. A total of 46 percent was unspent during the 2013/14 financial due to project registration being late. The district managed to spend 84 percent of its allocation during the 2009/10 financial year. This was mainly due to the 2010 FIFA World Cup in which Tlokwe hosted Spain. Complacency took over during 2011/12, which affected spending. Twenty-six percent (26 percent) of the allocation was unspent due to the contracts of many PMU staff coming to an end. They were probably looking for jobs by then. During the following financial year, their job situations were cleared and spending improved. Only an average of 34 percent—that is, for the five financial years under study—of the allocation was not spent.

The table shows the actual amounts that were not spent as against how much was allocated.

Table 6-5: Dr Kenneth Kaunda allocation and expenditure

Dr Kenneth Kaunda for financial year 2009/10 to 2013/14			
	2009/10	2010/11	2011/12
Allocation	142 358 235.13	164 030 939.89	183 261 250.21
Spend	119 139 059.81	121 959 642.13	108 519 189.94
Unspent	23 219 175.32	42 071 297.76	74 742 060.27
	2012/13	2013/14	
Allocation	222 150 000.00	134 455 392.54	
Spend	125 866 912.98	73 735 103.42	
Unspent	96 283 087.02	60 720 289.12	

6.3.5 District Municipality Comparative Analysis

Table 6-6: District Municipalities Comparative Analysis

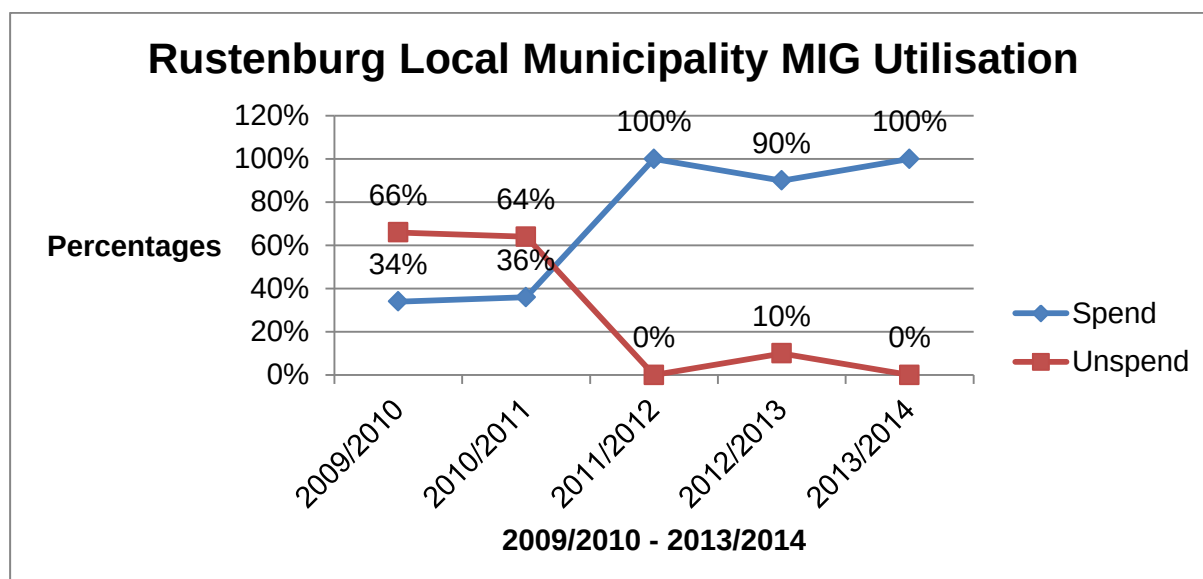
DISTRICT MUNICIPALITY	TOTAL			% UNSPENT
	ALLOCATION	SPENT	UNSPENT	
Bojanala Platinum	2 646 206 423.60	1 910 372 897.42	735 833 526.18	28%
Ngaka Modiri Molema	616 263 917.16	391 856 536.98	224 407 380.18	36%
Dr Ruth Segomotsi Mompoti	913 815 521.58	760 747 918.20	153 067 603.38	17%
Dr Kenneth Kaunda	846 255 817.77	549 219 908.28	297 035 909.49	35%

Bojanala District Municipality has three local municipalities that received large MIG amounts, namely Rustenburg, Madibeng and Moses Kotane. The district left only 28 percent unspent. This was due to the late appointment of contractors and non-alignment of MIG projects with the IDP process. Technical incapacity and adherence to IDP processes contributed to Ngaka Modiri Molema leaving 36 percent of the allocations unspent. This was due to a lack of technical capacity to execute the projects, and high staff turnover. Dr Ruth Mompoti is characterised by rural municipalities and a lack of technical staff. These contributed to a high level of underspending in the district.

Dr Kenneth Kaunda's performance and underspending were boosted by Tlokwe and the City of Matlosana's strong technical capacity and financial systems. Underspending can be attributed to Maquassi Hills' lack of infrastructure to implement projects. Hence the district itself runs some of the projects.

6.4 MIG ALLOCATION PER LOCAL MUNICIPALITY

This section highlights the MIG allocations per local municipality in North West Province. The researcher starts with Rustenburg, followed by Tlokwe and the City of Matlosana local municipalities.



Graph 6-8 Rustenburg Local Municipality MIG spending/underspending graphs

Rustenburg Local Municipality (RLM) did not have the capacity to implement MIG projects in 2011/12 with 34 percent of funds unspent. According to the AG's report, there were no adequate systems in place. The annual performance report of 74 percent of the planned target was not achieved during the financial year. Bid specifications were drafted in a biased manner, disadvantaging potential service providers. This resulted in tenders not being awarded and hence underspending.

There was underspending of 36 percent during financial year 2010/11 due to the fact that the local municipality was involved with the FIFA World Cup. It used other grants. Hence total spending in 2011/12 rose.

There was an improvement during the financial year 2012/13 when underspending was at 10 percent, following the dismissal of a senior manager for financial misconduct (AG Report 2012/13).

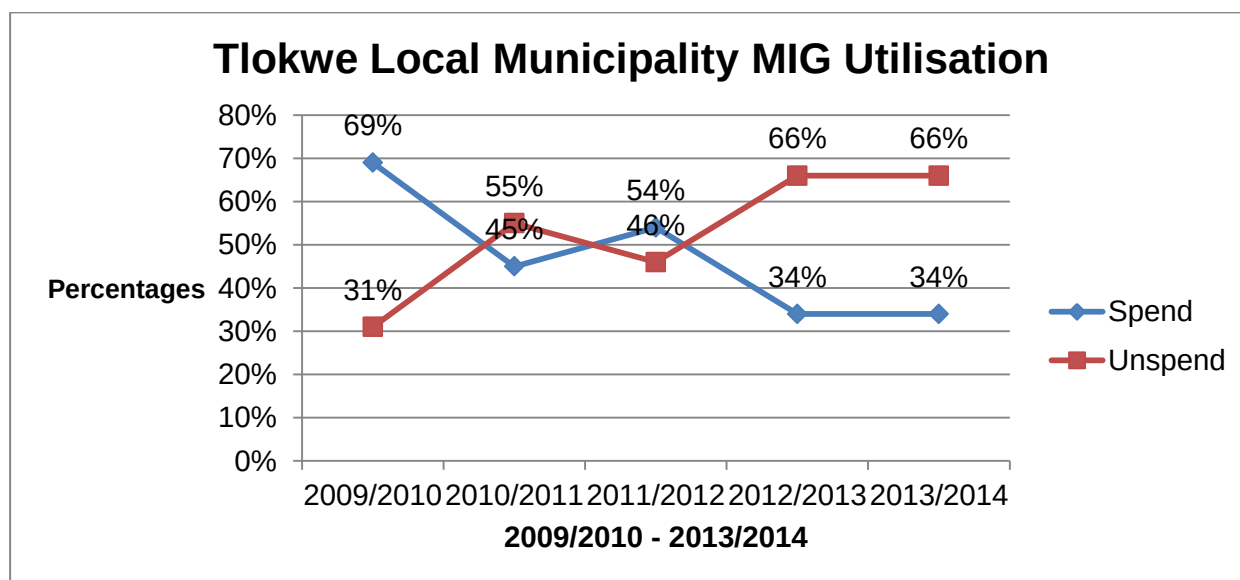
Just 10 percent was left unspent during 2012/13. This improvement in spending was due to proper planning, contributing to 72 percent spend. Rustenburg Local Municipality (RLM) hosted England during the 2010 FIFA World Cup and this was preceded by a capital injection. This necessitated—and fast-tracked—other infrastructure projects. Finally, the construction of Bafokeng Stadium enhanced infrastructure projects around Rustenburg and in neighbouring villages and towns. RLM has spent average of 90 percent of its allocation. According to the Auditor General's report of 2010/09, RLM has sufficient financial, technical and human resources.

Table 6-7: Rustenburg Local Municipality MIG allocation and expenditure.

Rustenburg Local Municipality			
	2009/10	2010/11	2011/12
Allocation	154 559 473.59	164 402 355.60	138 809 000.00
Spend	52 302 473.20	59 873 261.86	138 809 000.00
Unspent	102 257 000.39	104 529 093.74	-
	2012/13	2013/14	
Allocation	166 946 649.53	202 518 000.00	
Spend	149 590 148.44	202 518 000.00	
Unspent	17 356 501.09	-	

6.4.2 NW 402 Tlokwe

Tlokwe Local Municipality is situated on the N12 route connecting Johannesburg and Cape Town via Kimberley. It has a well-developed infrastructure that has sustained a positive economic growth rate throughout the transition period in South Africa. According to the Local Government Handbook, Tlokwe has an abundance of water and electricity, and holds great opportunities for growth. Gold mining is the dominant economic activity in the district.



Graph 6-9 Tlokwe Local Municipality

The local municipality spent 69 percent of its allocation during the 2009/10 financial year, not reflecting proper budgeting (National Treasury, 2012). The second contributing factor was the 2010 FIFA World Cup project.

This is also evident during 2010/11, where it underspent by 45 percent on MIG projects and underspent by 9 percent in its total municipality allocation, as few projects were completed due to the world cup activities.

On average the local municipality spent 47% of its allocation, which does not reflect proper planning in terms of the budgeting principles from National Treasury (National Treasury, 2012). The non-spending of 46 percent during the financial year 2011/12 was due to the municipality not working according the IDP guidelines (AG Report, 2012). Tlokwe local municipality maintained spending at an average of 75 percent during the period of the study. Its capacity to spend then improved to two digits during the financial year 2012/13 and 2013/14. The municipality did not submit project registration forms to the Department of Local Government and the national department (CoGTA) for the projects it intended implementing in the financial year 2013/14 and this has contributed to it not spending 12 percent of its allocation in 2013/14.

The table illustrates how much was unspent; spend against what was allocated

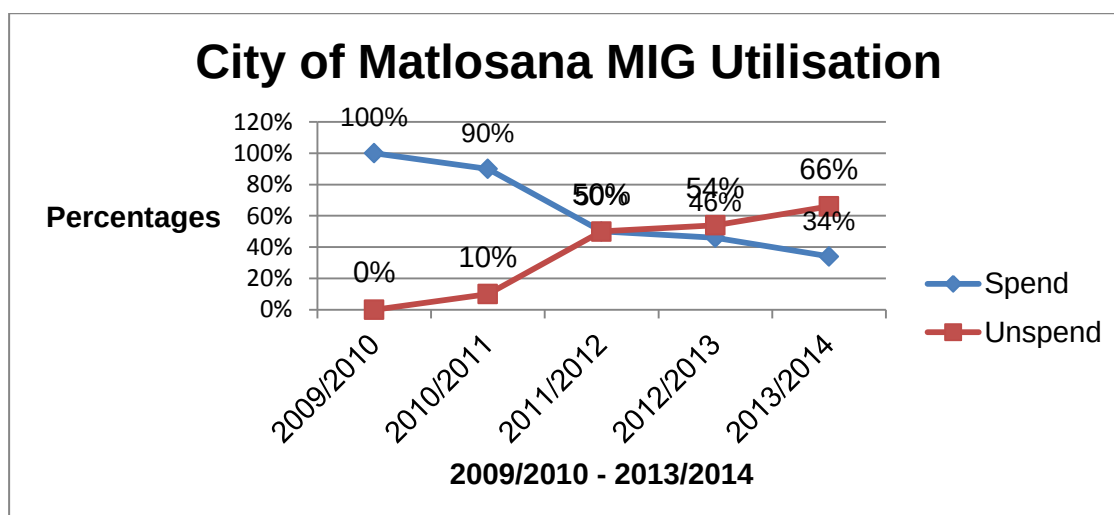
Table 6-8: Tlokwe LM MIG Allocation and expenditure

Tlokwe Local Municipality			
	2009/10	2010/11	2011/12
Allocation	35 686 309.48	28 428 000.00	34 190 507.08
Spend	24 447 000.00	12 925 518.84	18 580 463.20
Unspent	11 239 309.48	15 502 481.16	15 610 043.88
	2012/13	2013/14	
Allocation	41 317 000.00	41 475 000.00	
Spend	14 213 563.05	14 213 563.05	
Unspent	27 103 436.95	27 261 436.95	

6.4.3 NW 403 City of Matlosana

The City of Matlosana (formerly known as Klerksdorp) was found in 1837 and even today is regarded as the centre of the gold mining industry in North West Province. Mining is its main focus of industrial attraction together with Rustenburg (Van Aswegen, 2012).

It was through the Local Government Transition Act 209 of 1993 that the four local authorities, then known as Klerksdorp, Orkney, Stilfontein and Hartbeesfontein, were amalgamated into a single local municipality. This made the City of Matlosana into one of the biggest municipalities in North West Province.



Graph 6-10 City of Matlosana Local Municipality

The graph above shows how the City of Matlosana overspent its allocation by 36 percent on an average during the five period of the study. During the financial year 2009/10 there was 0 percent underspending, which reflected proper planning. Then complacency set in during 2010/11 due to the national focus being on the world cup. This has been rectified since with sound financial management. The city has developed capacity within and this is evident in the steady increase in its spending.

There has been a steady increase in the council spending pattern due to sound financial management systems, staffing of the project management unit (PMU), and strict monitoring and evaluation of the MIG projects. The city has spent on average 64 percent of its allocation, which is above the average for most local municipalities within North West Province. This has been due to proper planning, stakeholder engagement and sound financial management systems. The city has staffed its strategic units sufficiently. This is reflected in the number of employees in table 4.3, Chapter 4.

Table 6-9: City of Matlosana MIG Allocation and expenditure.

City of Matlosana			
	2009/10	2010/11	2011/12
Allocation	71 596 000.00	83 652 000.00	100 609 180.22
Spend	71 596 000.00	75 384 883.51	49 961 502.26
Unspent	-	8 267 116.49	50 647 677.96
	2012/13	2013/14	
Allocation	122 046 000.00	41 475 000.00	
Spend	56 503 144.07	14 213 563.05	
Unspent	65 542 855.93	27 261 436.95	

6.4.4 Local Municipality Comparative Analysis

Table 6-10 Local Municipalities Comparative Analysis

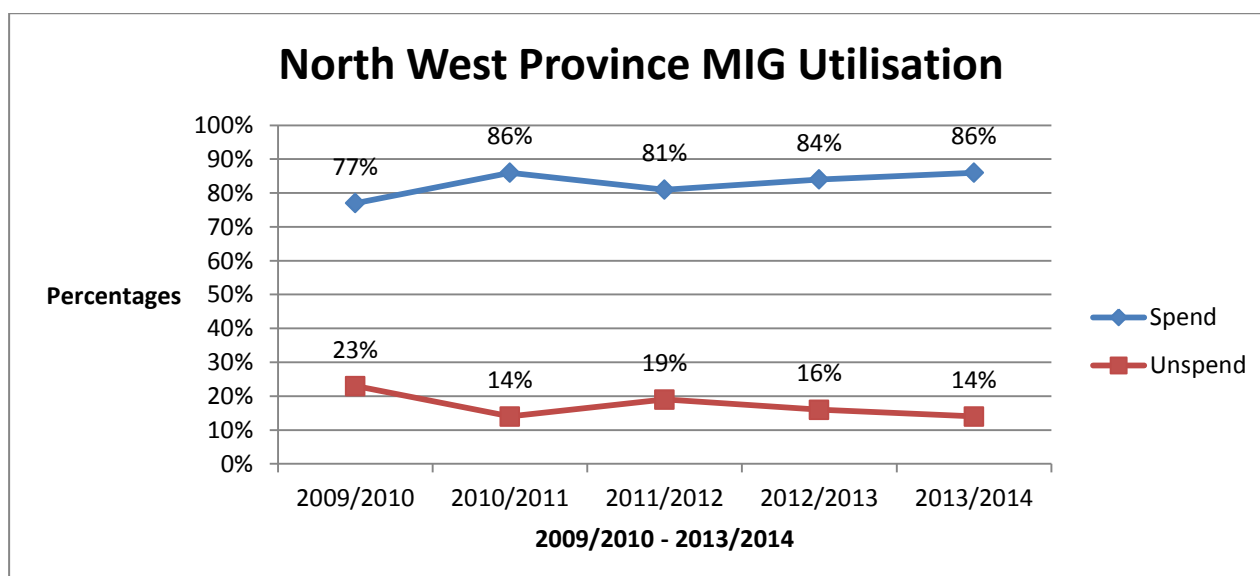
LOCAL MUNICIPALITY	TOTAL			% UNSPENT
	ALLOCATION	SPENT	UNSPENT	
Rustenburg	827 235 478.72	603 092 883.50	224 142 595.22	27%
Tlokwe	741 506 418.56	549 219 908.28	192 286 510.28	26%
City of Matlosana	419 378 180.22	267 659 092.89	151 719 087.33	36%

6.5 PROVINCE COMPARISON

This section compares how provinces spent their MIG allocations for the financial periods of 2009/2010 - 2013/2014. The discussion starts with North West, followed by Free State, Limpopo and finally Mpumalanga provinces (alphabetically after North West Province).

6.5.1 North West Province

North West Province is in the central north of South Africa bordering Botswana in the north, Limpopo and Gauteng in the east, Free State in the south with the Northern Cape. According to the National Census (2001) the province had 8, 2 percent of the country's population (Chuene, 2012). Chuene (2012:44) states that the province was facing enormous infrastructure backlog in 2007. To eradicate such a backlog would require the task being addressed in bulk.



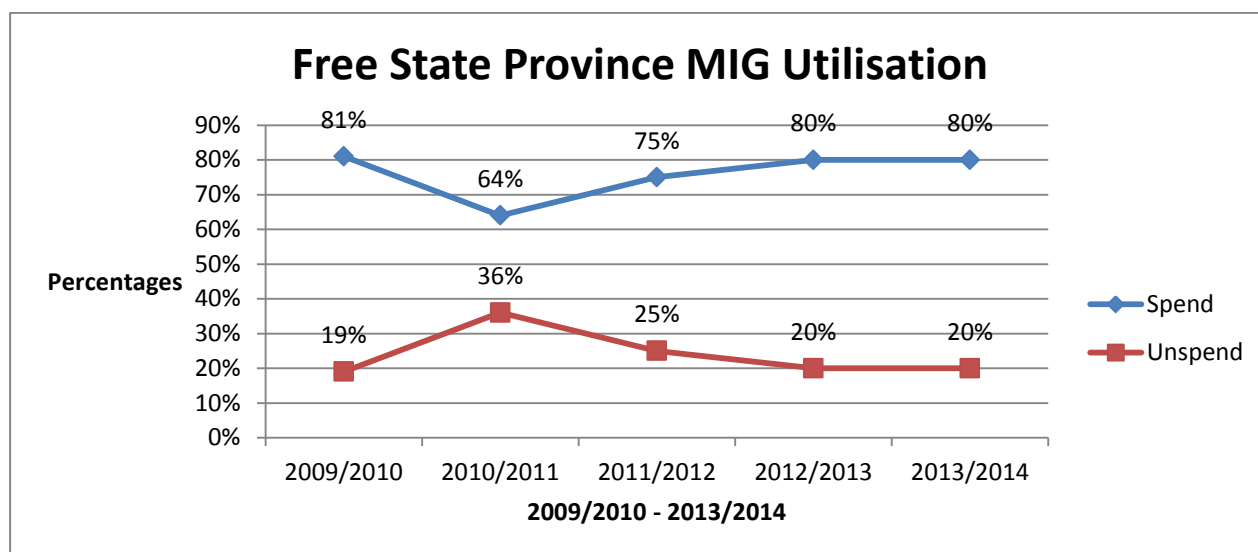
Graph 6-11 North West MIG Allocations

The province has performed well with spending; not overspending budget allocations. This is affirmed by the respondents in table 5.1, Chapter 5, regarding the appropriateness of budgets, and a resourced PMU. Training is still needed to increase technical and human resource capability. The province has spent on average 83 percent and underspent on average by 17 percent.

Table 6-11: North West MIG Allocation and Expenditure

North West Province for financial years 2009/10 to 2013/14					
	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Allocation	9,681,452.00	10,342,265.00	2,137,163.00	13,919,910.00	15,881,495.00
Spend	7,481,612.00	8,847,980.00	9,838,808.00	11,729,309.00	13,616,140.00
Unspent	2,199,840.00	1,494,285.00	2,298,355.00	2,190,601.00	2,265,355.00

6.5.2 Free State Province



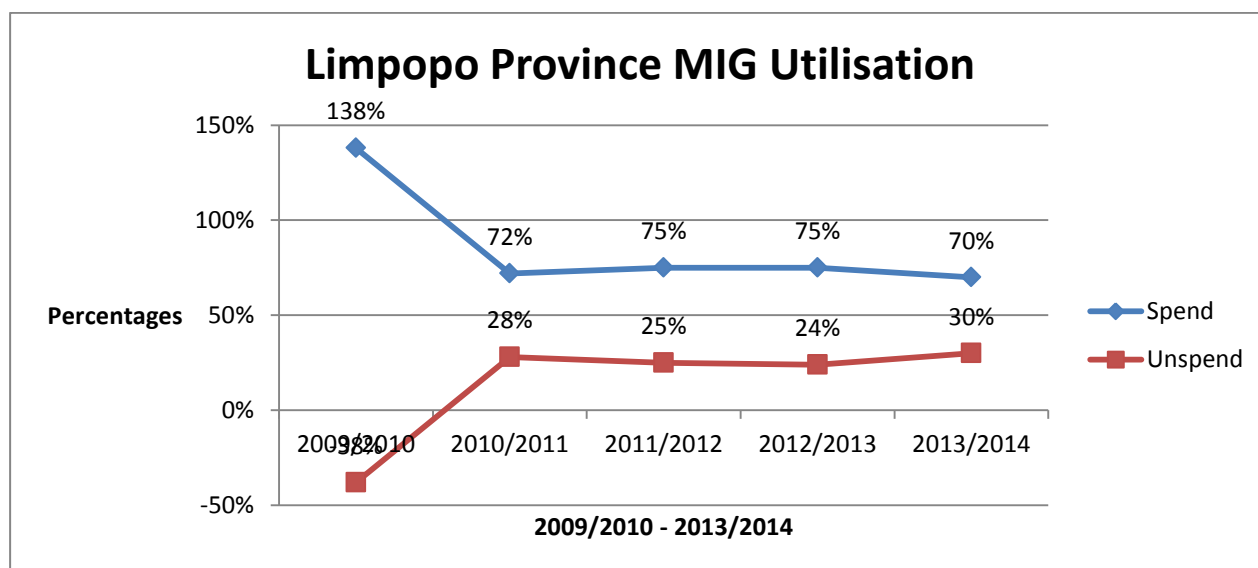
Graph 6-12 Free State Province MIG Allocations

Free State Province had the highest overall average of 24 percent unspent. The province only spent an average of 76 percent of MIG allocations for the respective financial period, an indication that in relation to other provinces it had underspent by much more.

Table 6-12: Free State MIG Allocation and Expenditure

Free State Province for financial years 2009/10 to 2013/14					
	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Allocation	8,171,501.00	2,129,708.00	13,396,503.00	14,836,081.00	16,523,558.00
Spend	6,635,360.00	1,362,516.00	10,058,703.00	11,798,535.00	13,136,905.00
Unspent	1,536,141.00	767,192.00	3,337,800.00	3,037,546.00	3,386,653.00

6.5.3 Limpopo Province



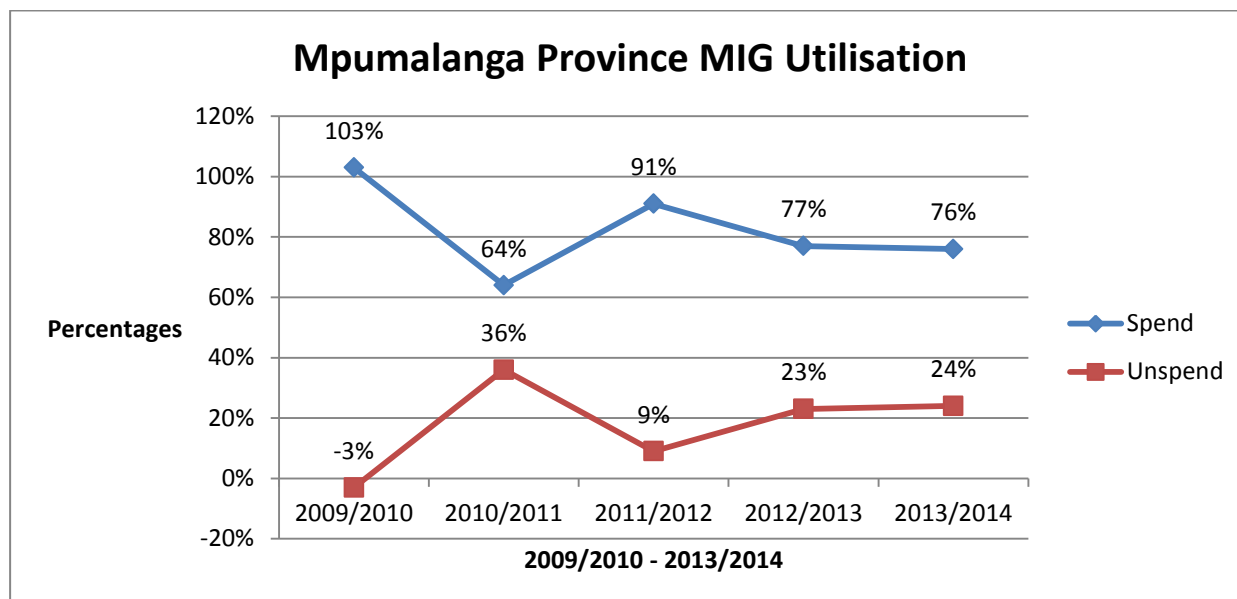
Graph 6-13 Limpopo Province MIG Allocations

Graph 6.10 indicates that Limpopo Province started overspending in 2009/2010 by 38 percent, then spending decreased by 28 percent in 2010/2011, but increased by 3 percent for 2011/2012 and 2012/2013 and ultimately decreased again to 70 percent. The province's average spending was 86 percent which was as a result of the overspending in 2009/2010. On average the province underspent by 14 percent.

Table 6-13: Limpopo Province MIG Allocation and Expenditure

Limpopo Province for financial year 2009/10 to 2013/14					
	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Allocation	5,023,204.00	3,161,042.00	13,400,496.00	14,465,210.00	17,683,855.00
Spend	6 945 17.00	2,269,968.00	9,989,266.00	1,092,517.00	12,320,376.00
Unspent	1,921,913.00	891,074.00	3,411,230.00	3 539 93.00	5,363,479.00

6.5.4 Mpumalanga Province



Graph 6-14 Mpumalanga Province MIG Allocations

From the graph above it is evident that Mpumalanga started with over-expenditure of 3 percent. There was an unspent amount of 36 percent during the financial year 2010/11 due to the focus on FIFA projects, while ignoring major MIG projects. Invoices were not being submitted on time. This was followed by overspending of 9 percent during 2011/12.

The spending pattern was adversely affected by the 2010 FIFA World Cup with invoices being paid late during 2011/10 while unspent funding was reflected in 2010/2011. There was a high level of underspending of 23 percent and 24 percent during 2012/13 and 2013/14 respectively. Underspending in 2012/13 and an unsuccessful application for a rollover resulted in the current year having to pay the prior year's projects. Services were not procured economically and there was a high level of non-compliance with SCM.

According to AGSA (2013), underspending was due to poor planning, poor budgeting and lack of project monitoring. This shows the province has unstable financial allocation utilisation, and that budgetary processes are not in line with the National Treasury regulations. The table below reflects the actual amount unspent, spent and allocated respectively.

Table 6-14: Mpumalanga Province Allocation and expenditure

Mpumalanga Province for financial years 2009/10 to 2013/14					
	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Allocation	7,403,209.00	2,872,916.00	10,440,750.00	14,299,093.00	16,756,866.00
Spend	7,611,059.00	1,826,297.00	9,457,718.00	10,966,412.00	12,809,022.00
Unspent	-207,850.00	1,046,619.00	983,032.00	3,332,681.00	3,947,844.00

6.5.5 Comparative Analysis

Table 6-15: Province Comparative Analysis

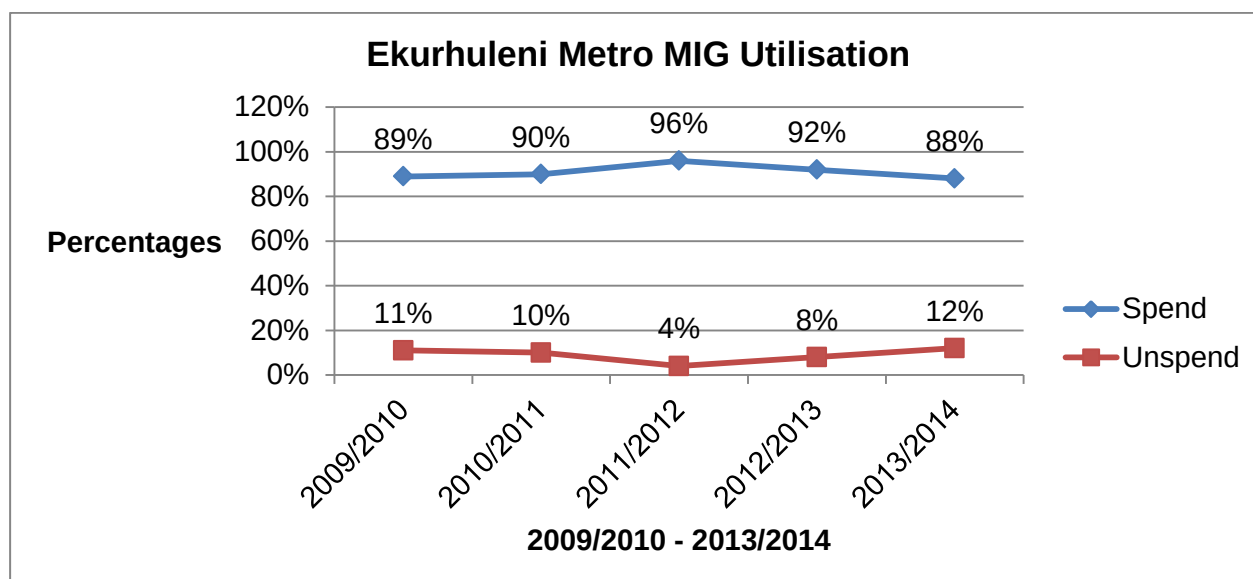
PROVINCE	TOTAL			% UNSPENT
	ALLOCATION	SPENT	UNSPENT	
North West	61,962,285.00	51,513,849.00	10,448,436.00	16.86
Free State	55,057,351.00	42,992,019.00	12,065,332.00	21.91
Mpumalanga	51,772,834.00	42,670,508.00	9,102,326.00	17.58
Limpopo	53,733,807.00	42,450,344.00	11,283,463.00	21.00

The table above highlights that Free State and Limpopo are the worst spenders of their allocations, because they have underspent in excess of 21 percent. North West Province and Mpumalanga managed to reduce their underspending by 16.86 and 17.58 percent respectively.

6.6 METROPOLITAN MUNICIPALITY

It is important to note that metropolitan municipalities do not receive MIG allocations, rather USDG/IUDGs, although some of the literature has referred to them as MIG cities. The researcher is comparing metros against their budgetary allocations, spending and non-spending, during the financial years under consideration.

6.6.1 Ekurhuleni Metro



Graph 6-15 Ekurhuleni Metro Allocations

Ekurhuleni failed to spend 11 percent of its allocation during the 2009/10 financial year due to staff vacancies in its organisation. Underspending decreased by 1 percent due to 2010 FIFA World Cup projects and the filling of vacant positions. The metro has spent on average 89 percent of its allocation. Improving the economy of Ekurhuleni in South Africa has been one outcome of the link between Ekurhuleni Metropolitan Municipality and Lewisham, in Britain, with both working in partnership with the South African Department of Labour.

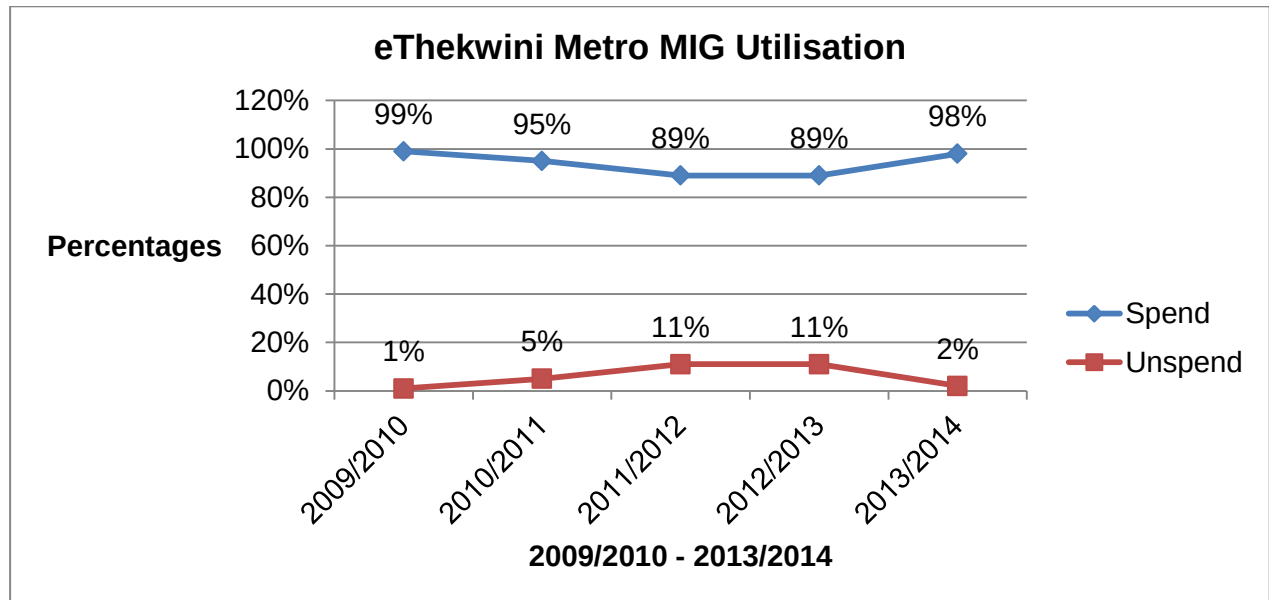
The partnership involved exchange of expertise, capacity building and policy reform. This is evident in the metro's spending pattern (Evan, 2009). The table below shows the amounts that were unspent, spent and allocated.

Table 6-16: Ekurhuleni Allocation and expenditure

Ekurhuleni Metro Allocation for 5 Financial years					
	2009/10	2010/11	2011/2012	2012/2013	2013/2014
Allocation	17,883,89.00	22,496,254.00	23,337,108.00	24,733,435.00	27,330,135.00
Spend	15,990,30.00	20,209,78.00	22,334,813.00	22,642,963.00	24,052,828.00
Unspent	1,892,759.00	2,286,476.00	1,002,295.00	2,090,472.00	3,277,307.00

6.6.2 eThekweni Metropolitan

Breetzke (2009) describes eThekweni metro as a coastal metropolitan area on the east coast of South Africa. It is one of the strongest municipalities in terms of human and financial resources. However the metropolitan is characterised by high levels of poverty and unemployment and historical marginalisation of the poor.



Graph 6-16 eThekweni Metro Allocations

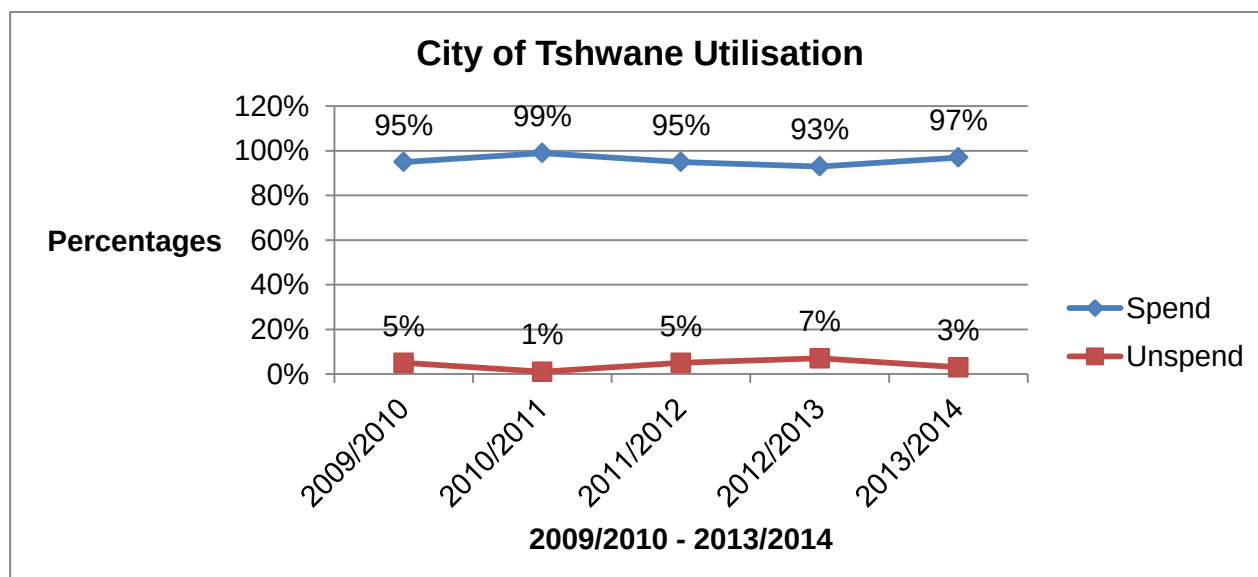
During 2009/11 the metro only left unspent 1 percent and 5 percent for 2009/10 and 2010/11 respectively. This high expenditure was due to a deliberate effort to improve infrastructure and service delivery, attracting tourism to the province.

eThekweni was one of the host cities for the 2010 FIFA World Cup in 2010 and had numerous fan parks throughout the city. The momentum slowed down in 2011/12 and 2012/13 with underspending at 11 percent in both years. This was due to complacency and staff turnover. Underspending dropped in 2013/14 to 2 percent due to numerous projects being approved and prioritised through IDP processes. eThekweni Metro has spent 94 percent of its allocation with some financial years' underspending being on average 1.5 percent (2009/10 and 2013/14). The partnership between Leeds City Council, in Britain, and Durban (eThekweni Metro) has paid off. Leeds worked with the South African local authority, police and residents (Evan, 2009).

Table 6-17: eThekweni Metro Allocation (2009/10 to 2013/14)

eThekweni Metro MIG for 5 Financial years					
	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Allocation	23,963,277.00	25,949,540.00	29,268,484.00	29,279,027.00	30,396,867.00
Spend	23,793,485.00	24,630,859.00	26,078,321.00	26,153,831.00	29,656,173.00
Unspent	169,792.00	1,318,681.00	3,190,163.00	3,125,196.00	740,694.00

6.6.3 City Of Tshwane



Graph 6-17 City of Tshwane Allocations

The City of Tshwane has executed its mandate with excellence, averaging 96 percent in terms of spending. Comparative analysis is based on the research conducted by Singo (2012). The researcher will first introduce the metro, display information pertaining to MIG allocation, then study and critically discuss the findings.

Table 6-18: City of Tshwane Allocation and expenditure

City of Tshwane for 5 financial years					
	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Allocation	16,096,125.00	17,563,156.00	21,807,006.00	25,685,517.00	26,500,719.00
Spend	15,371,043.00	17,312,150.00	20,675,622.00	23,956,760.00	25,673,376.00
Unspent	725,082.00	251,006.00	1,131,384.00	1,728,757.00	827,343.00

The City of Tshwane (CoT) Metropolitan Municipality (CTMM) is one of the three metropolitan municipalities in Gauteng Province. It is located in the north-western quadrant of Gauteng Province. It is part of the Gauteng Conurbation (Tshwane /Johannesburg/ Ekurhuleni) which are together growing into one of the major cities of the world (Singo, 2012).

6.6.4 Comparative analysis of metros

Table 6-19: Comparative analysis of metros

METROPOLITAN MUNICIPALITIES	TOTAL			% UNSPENT
	ALLOCATION	SPENT	UNSPENT	
Tshwane	107,652,523.00	102,988,951.00	4,663,572.00	4.33
Ekurhuleni	115,780,321.00	105,231,012.00	10,549,309.00	9.11
eThekwini	138,857,195.00	130,312,669.00	8, 544,526.00	6.15

The researcher (Singo, 2012) assessed only 2007/8 to 2009/10, splitting it into different strategic units and financial years.

Table 6-20: Summary of Funding Allocation and Expenditure for Infrastructure in CoT in financial year 2007/08 (Singo, 2012:87)

Strategic Unit	Approved Budget 2007/08	Cumulative/Actual Expenditure	Unspent/Over-spent	%
Waste Management	17,000,000.00	13,673,067.00	3,326,933.00	19.57%
Housing and Sustainable Human Settlements	452,695,000.00	186,957,340.00	265,737,660.00	58.70%
Public Works: Electricity	368,335,000.00	398,567,457.00	-30,232,457.00	-8.21%
Public Works: Roads and Stormwater	617,988,000.00	442,898,465.00	175,089,535.00	28.33%
Public Works:: Water and Sanitation	490,245,000.00	470,283,353.00	19,961,647.00	4.07%
	1,946,263,000.00	1,512,379,682.00	433,883,318.00	22.29%

The waste management, housing and sustainable human settlement, and roads and stormwater strategic units underperformed in terms of their allocations. The interview revealed that waste management and housing were understaffed. This affected their spending capacity. The departments that performed well highlighted being pro-active and using integrated planning, with staffing and stakeholder management ensuring proper utilisation of MIG funds.

Table 6-21: Summary of Funding Allocation and Expenditure for Infrastructure in CoT in financial year 2008/09 (Singo, 2012:88)

Strategic Unit	Approved Budget 2008/09	Cumulative/Actual Expenditure	Unspent/Over-spent	%
Waste Management	19,200,000.00	18,421,695.00	778,305.00	4.05%
Housing and Sustainable Human Settlements	245,334,988.00	282,598,572.00	-37,263,584.00	-15.19%
Public Works: Electricity	442,790,065.00	442,422,730.00	367,335.00	0.08%
Public Works: Roads and Stormwater	582,157,240.00	555,857,711.00	26,299,529.00	4.52%
Public Works:: Water and Sanitation	773,241,700.00	700,328,128.00	72,913,572.00	9.43%
	2,062,723,993.00	1,999,628,836.00	63,095,157.00	3.06%

There was an improvement in the spending of funds, with overspending only on housing. This improvement was due to proper staffing, community engagement in the planning and project execution and proper financial management.

Table 6-22: Summary of Funding Allocation and Expenditure for Infrastructure in CoT in financial year 2009/10 (Singo, 2012:88)

Strategic Unit	Approved Budget 2009/10	Cumulative/Actual Expenditure	Unspent/Over-spent	%
Waste Management	10,300,000.00	8,430,000.00	1,870,000.00	18.16%
Housing and Sustainable Human Settlements	431,964,145.00	168,046,526.00	263,917,619.00	61.10%
Public Works: Electricity	607,994,987.00	526,207,820.00	81,787,167.00	13.45%
Public Works: Roads and Stormwater	577,339,597.00	524,739,963.00	52,599,634.00	9.11%
Public Works:: Water and Sanitation	828,428,803.00	493,844,205.00	334,584,598.00	40.39%
	2,456,027,532.00	1,721,268,514.00	734,759,018.00	29.92%

There was a remarkable decrease in MIG spending on housing, water and sanitation. This was found to be due to delays in supply chain management and procurement processes with resultant tender delays and adjudication. This led to the appointment of consultants and contractors to implement projects.

It was found during the interview with the researcher (Singo, 1012) that participation processes in drafting the budget and IDP resulted in optimum spending. The CTMM maintains that it actively seeks community participation in matters affecting the community. Public participation has influenced officials, politicians and planners.

Other findings

There were fluctuations in spending in the Technical Section with particular reference to water projects. This was attributed to there being vacant positions within sector/department (Singo, 2012). The SALGA confined that involvement of a political office bearer in supply chain management can cause delays and lead to poor implementation of infrastructure projects (Singo, 2012:91).

Singo (2012:100) argues that CoGTA and SALGA suggested that procurement of infrastructure projects be centralised and managed from the National Department of Housing, working jointly with CoGTA and the National Treasury. This has sparked a debate since local governments are autonomous and have the constitutional right to make their own procurements. This claim was later denied by CoGTA (2014:3), which said it recognised decentralised spheres of local government as a “*distinctive, interdependent and interrelated sphere of government, as enshrined in the Constitution as an achievement*”.

Municipalities are adhering to policy framework and legislation in terms of service delivery but more needs to be done regarding compliance. It was found that some local municipalities have financially inefficient systems, including inefficient revenue collection. The Department of Finance suggested capacity building with a view to improving financial and managerial systems (Singo, 2012).

6.7 FINANCIAL RATIOS

The researcher focused on Tlokwe, the City of Matlosana and Rustenburg Local due to their staff complements and spending patterns as reflected in the graphs.

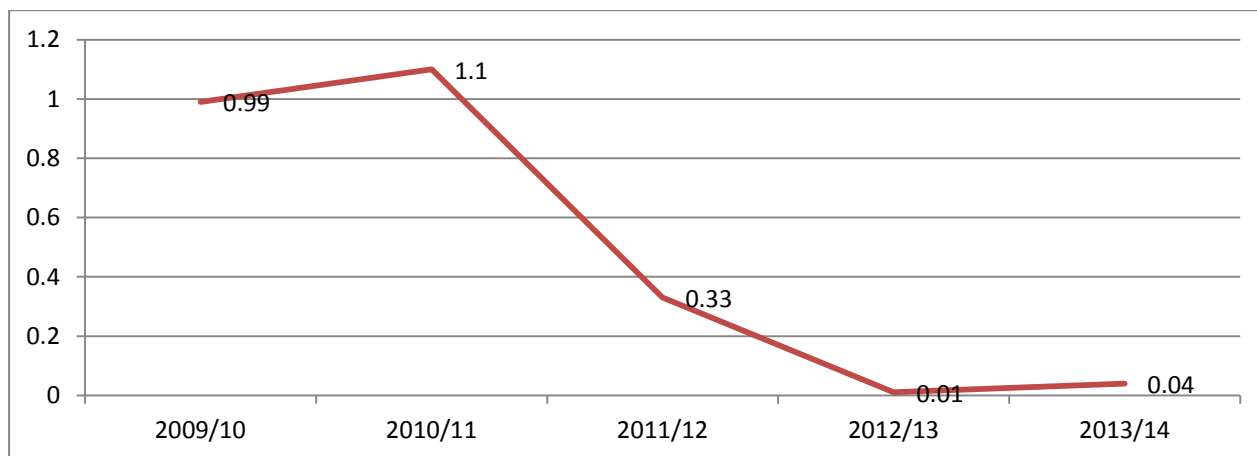
6.7.1 NW 373 Rustenburg Financial Ratios

Rustenburg Local Municipality (RLM) is a local municipality in Bojanala Platinum District Municipality, situated at the foot of the Magalies mountain range. Rustenburg (meaning “town of rest” or “resting place”) is the fastest growing municipality in South Africa with a population rising from 387,096 in 2001 to 449,776 in 2007 (Censor, 2011). According to Chuene (2012:51) Rustenburg recorded the second-highest level of service protests in local municipalities.

Table 6-23: Rustenburg Local Municipality Financial Ratios

RUSTENBURG LOCAL MUNICIPALITY					
	2009/10	2010/11	2011/12	2012/13	2013/14
<i>Liability management</i>					
Gearing	0.99	1.10	0.33	0.01	0.04
<i>Liquidity Management</i>					
Current ratio	1.51	1.14	1.32	1.41	0.96
<i>Expenditure management</i>					
Operating expenses/ Revenue	0.90	0.95	0.99	0.91	1.02

Liability management – Gearing Ratio (debt to equity ratio)



Graph 6-18 Gearing ratio for Rustenburg Local Municipality (2009/10 to 2013/14)

The debt to equity ratio of Rustenburg Local Municipality for 2009/10 is 0.99 or 0.99:1. This means the creditors of Rustenburg Local Municipality provide 99 cents of assets for each R1 of assets provided by stockholders. A ratio of less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

For 2010/11 the debt to equity ratio of Rustenburg Local Municipality increased to 1.10 or 1.10:1. This means the creditors of Rustenburg Local Municipality provide R1.10 for each R1 of assets provided by stockholders. A ratio of more than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

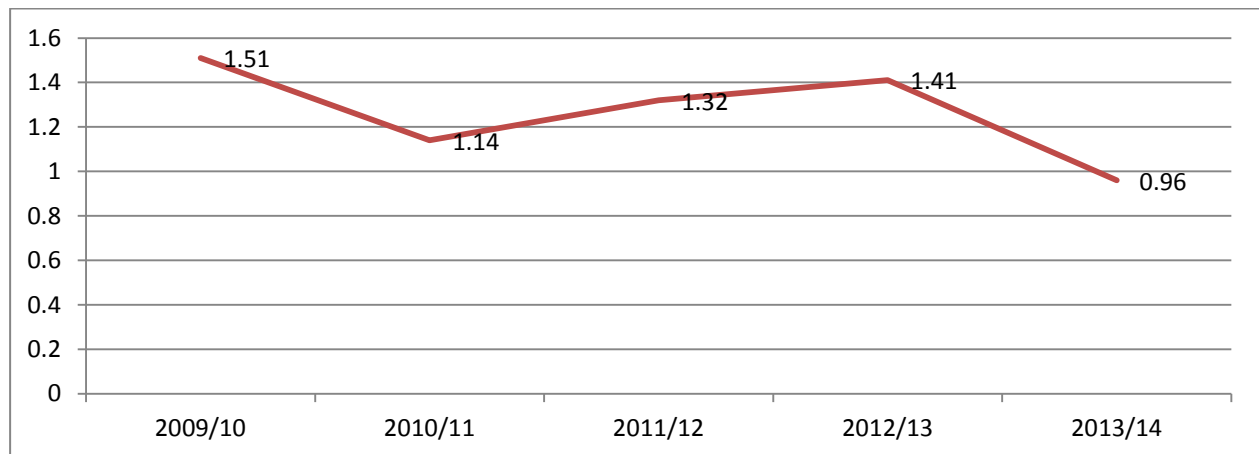
In 2011/12 the debt to equity ratio decreased to 0.33 in the Rustenburg Local Municipality with creditors providing 33 cents of assets for each R1 of assets provided by stockholders. A ratio of less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a ratio greater than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

In 2012/13 the debt to equity ratio decreased to 0.01 in the Rustenburg Local Municipality with creditors providing 1 cent of assets for each R1 of assets provided by stockholders.

A ratio of less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a ratio greater than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

In 2013/14 the debt to equity ratio increased from 0.01 to 0.04. Rustenburg Local Municipality's creditors provide 4 cents of assets for each R1 of assets provided by stockholders. A ratio of less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a ratio greater than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

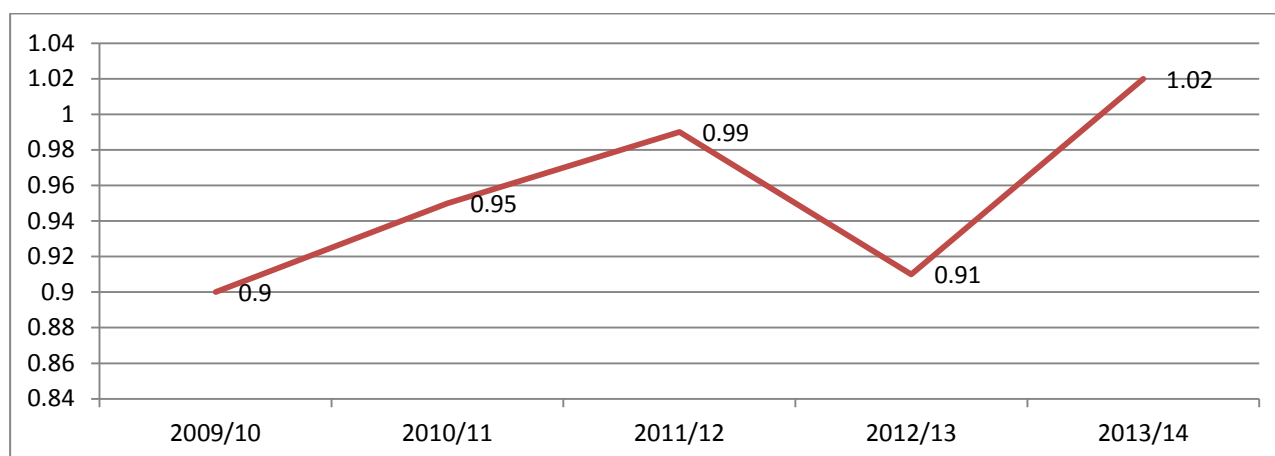
Liquidity Management – Current Ratio



Graph 6-19 Current Ratio for Rustenburg Local Municipality (2009/10 to 2013/14)

In 2009/10 current assets were 1.51 times the value of current liabilities. In 2010/11 the ratio was less, at 1.14 times at the end of 2011, suggesting a slight decrease in the current ratio. In 2011/2012 the ratio increased to 1.32, and in 2012/2013 the ratio increased to 1.41. In 2013/2014 it decreased to 0.96. A current ratio of around 1.5-2.0 is considered encouraging for a business. It suggests the business has enough cash to be able to pay its debts, but not too much finance tied up in current assets that could be reinvested or distributed to shareholders. A low current ratio (say less than 1.0-1.5) might suggest that the business is not well placed to pay its debts. It might be required to raise extra finance or extend the time it takes to pay creditors.

Expenditure management – Operating expenses/ Revenue



Graph 6-20 Operating expense/revenue for Rustenburg Local Municipality (2009/10 to 2013/14)

In 2009/10 operating expense/revenue was 0.90; in 2010/11 the ratio increased to 0.95. In 2011/12 the ratio increased to 0.99, while in 2012/2013 it decreased to 0.91. In 2013/2014 it increased to 1.02. This ratio is used to measure the operational efficiency of management. It shows whether the cost component in the sales figure is within normal range. A low operating ratio means a high net profit ratio, i.e. more operating profit.

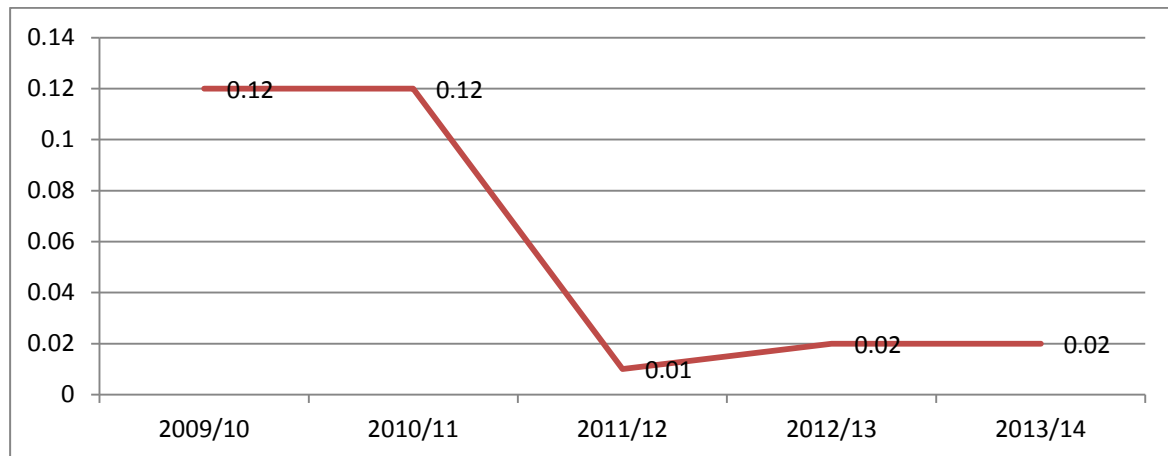
6.7.2 NW 402 Tlokwe Financial Ratios

Tlokwe local municipality has the biggest population with 1.2 percent growth. It has at least 50 percent of its households enjoying an income of more than R1, 500 per month (Chuene, 2012). Government is the biggest employer in the municipal area and the growing retail sector. The municipality's close proximity to metros such as Johannesburg and Ekurhuleni provides economic activities and growth.

Table 6-24: Tlokwe Local Municipality Financial Ratios

TLOKWE LOCAL MUNICIPALITY					
	2009/10	2010/11	2011/12	2012/13	2013/14
Liability management					
Gearing	0.12	0.12	0.01	0.02	0.02
Liquidity Management					
Current ratio	3.36	9.52	6.91	6.43	5.55
Expenditure management					
Operating expenses/ Revenue	0.92	0.89	0.94	1.23	1.02

Liability management – Gearing Ratio (debt to equity ratio)



Graph 6-21 Operating expense/revenue for Rustenburg Local Municipality (2009/10 to 2013/14)

The debt to equity ratio of Tlokwe Local Municipality for 2009/10 is 0.12 or 0.12:1. This means the creditors of Tlokwe Local Municipality provide 12 cents of assets for each R1 of assets provided by stockholders. A ratio of less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a ratio greater than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

For 2010/11 the debt to equity ratio of Tlokwe Local Municipality was 0.12 or 0.12:1. This means the creditors of Tlokwe Local Municipality provided R0.12 for each R1 of assets provided by stockholders; a ratio of more than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

In 2011/12 the debt to equity ratio decreased to 0.01 in the Tlokwe Local Municipality with creditors providing 1 cent of assets for each R1 of assets provided by stockholders. A ratio less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a ratio greater than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

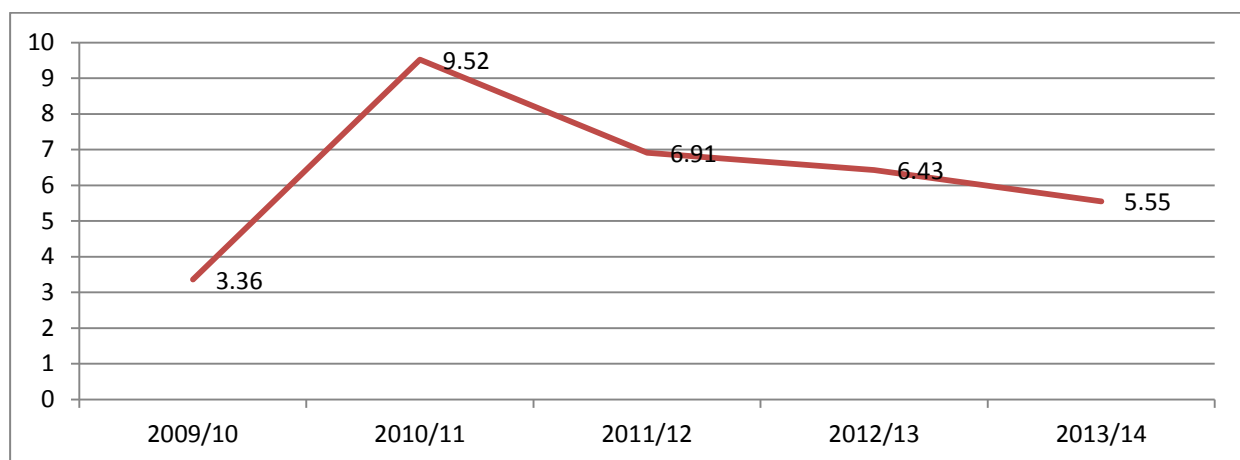
In 2012/13 the debt to equity ratio increased to 0.02 in the Tlokwe Local Municipality with creditors providing 2 cents of assets for each R1 of assets provided by stockholders.

A ratio of less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a ratio greater than 1 indicates that the

portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

In 2013/14 debt to equity ratio was 0.02 in Tlokwe Local Municipality with creditors providing 2 cents of assets for each R1 of assets provided by stockholders. A less than 1 ratio indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

Liquidity Management - Current ratio

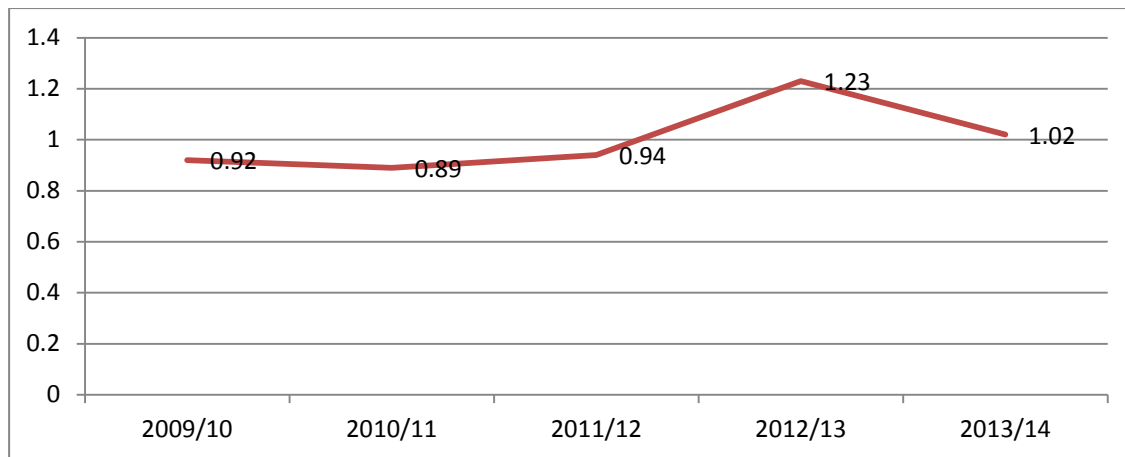


Graph 6-22 Current Ratio for Tlokwe Local Municipality (2009/10 to 2013/14)

In 2009/10 current assets were 3.36 times the value of current liabilities. In 2010/11 the ratio increased by 9.95 times at the end of 2011, suggesting a slight increase in the current ratio. In 2011/2012 the ratio decreased to 6.91; and in 2012/2013 the ratio decreased to 6.43. In 2013/2014 it decreased to 5.55.

A current ratio of around 1.5-2.0 is considered encouraging for a business. It suggests the business has enough cash to be able to pay its debts, but not too much finance tied up in current assets that could be reinvested or distributed to shareholders. A low current ratio (say less than 1.0-1.5) might suggest that the business is not well placed to pay its debts. It might be required to raise extra finance or extend the time it takes to pay creditors.

Expenditure management – Operating expenses/Revenue



Graph 6-23 Operating expense/revenue for Tlokwe Local Municipality (2009/10 to 2013/14)

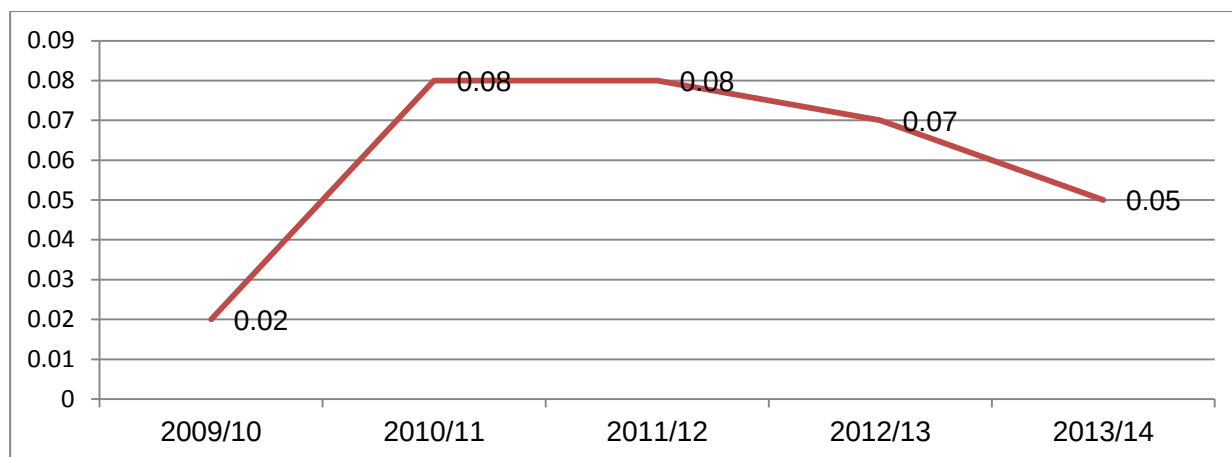
In 2009/10 operating expense/revenue was 0.92; in 2010/11 the ratio decreased to 0.89. In 2011/12 the ratio increased to 0.94; in 2012/2013 it increased to 1.23. In 2013/2014 it decreased to 1.02. This ratio is used to measure the operational efficiency of management. It shows whether the cost component in the sales figure is within normal range. A low operating ratio means high net profit ratio, i.e. more operating profit.

6.7.3 NW 403 City Of Matlosana Financial Ratios

Table 6-25: City of Matlosana Financial Ratios

CITY OF MATLOSANA					
	2009/10	2010/11	2011/12	2012/13	2013/14
<i>Liability management</i>					
Gearing	0.05	0.07	0.08	0.08	0.02
<i>Liquidity Management</i>					
Current ratio	1.92	1.73	0.29	0.61	0.49
<i>Expenditure management</i>					
Operating expenses/ Revenue	0.95	1.01	1.14	1.26	1.24

Liability management – Gearing Ratio (debt to equity ratio)



Graph 6-24 City of Matlosana Gearing Ratio Analysis (2009/10 to 2013/14)

The debt to equity ratio of the City of Matlosana Municipality for 2009/10 is 0.05 or 0.05:1. This means creditors of the City of Matlosana Municipality provide 5 cents of assets for each R1 of assets provided by stockholders. A ratio less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

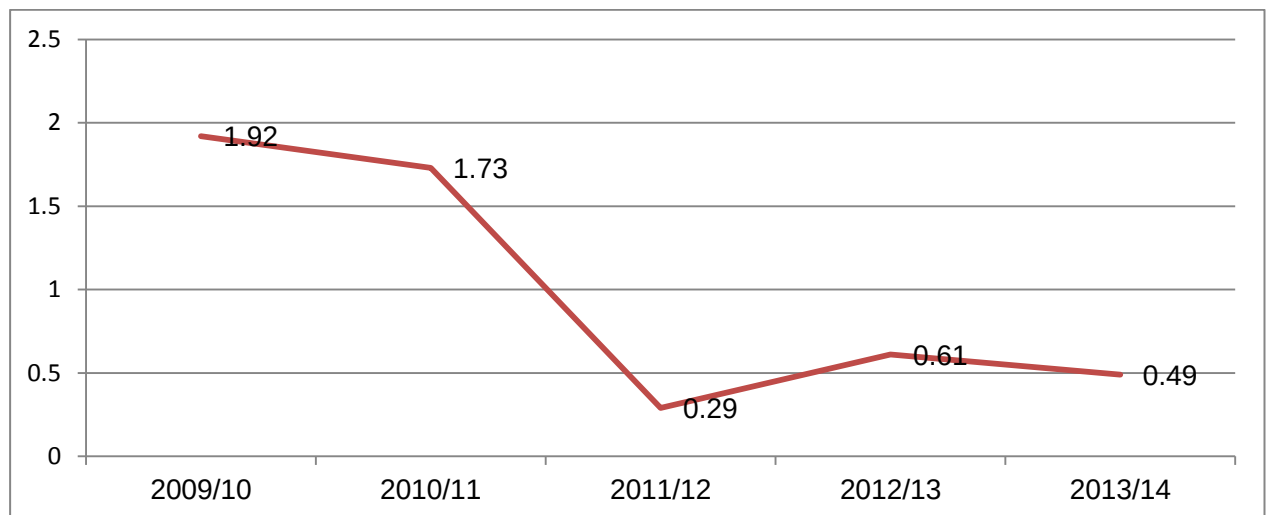
For 2010/11 the debt to equity ratio of the City of Matlosana Municipality was 0.07 or 0.07:1. This means the creditors of the City of Matlosana Municipality provide R0.07 for each R1 of assets provided by stockholders; a ratio of more than 1 indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

In 2011/12 the debt to equity ratio decreased to 0.08 in the City of Matlosana Municipality with creditors providing 8 cents of assets for each R1 of assets provided by stockholders. A ratio less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

In 2012/13 the debt to equity ratio increased to 0.08 in the City of Matlosana Municipality with creditors providing 8 cents of assets for each R1 of assets provided by stockholders. A ratio of less than 1 indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

In 2013/14 debt to equity ratio is 0.02 City of Matlosana Municipality provides 2 cents of assets for each R1 of assets provided by stockholders; A less than 1 ratio indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders. A ratio of 1:1 is normally considered satisfactory for most organisations.

Liquidity Management – Current ratio



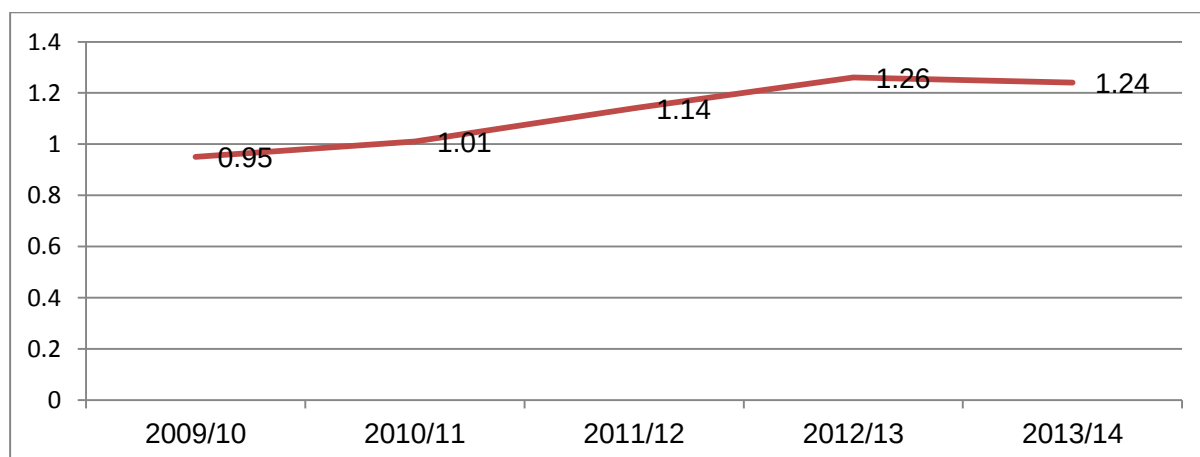
Graph 6-25 Current ratio for City of Matlosana (2009/10 to 2013/14)

In 2009/10 current assets were 1.92 times the value of current liabilities. In 2010/11 the ratio increased at 1.73 times at the end of 2011, suggesting a slight increase in the current ratio. In 2011/2012 the ratio decreased to 0.29; and in 2012/2013 the ratio increased to 0.61. In 2013/2014 it decreased to 0.49.

A current ratio of around 1.5 - 2.0 is considered as encouraging for a business. It suggests that the business has enough cash to be able to pay its debts, but does not have too much finance tied up in current assets that could be reinvested or distributed to shareholders. A low current

ratio (say less than 1.0 - 1.5) might suggest the business is not well placed to pay its debts. It might be required to raise extra finance or extend the time it takes to pay creditors.

Expenditure management – Operating expenses/ Revenue



Graph 6-26 Operating expense/revenue City of Matlosana (2009/10 to 2013/14)

In 2009/10 operating expense/revenue was 0.95; in 2010/11 the ratio increased to 1.01. In 2011/12 the ratio increased to 1.14; in 2012/2013 it increased to 1.26. In 2013/2014 it decreased to 1.24. This ratio is used to measure the operational efficiency of management. It shows whether the cost component in the sales figure is within the normal range. A low operating ratio means a high net profit ratio i.e., more operating profit.

6.8 QUALITATIVE CONTENT ANALYSIS

Qualitative content analysis is based on audited annual reports from the Provincial Auditor-General's Office. The list of pre-determined phrases and/or words is attached as Appendix H. This list was defined in Chapter 4 under the heading Documentary analysis, item 4.14.4, attached as Appendix K.1. The discussion of content analysis is summarised and detailed analysis is found in Appendix K.2

6.8.1 Rustenburg Local Municipality

The following is a summary of the AG's findings using pre-defined terms and phrases. In RLM, the AG found that 96 percent of the report indicators were not consistent with IDP as per approved annual performance and the indicators were not well defined and verifiable. Secondly there was no effective system of expenditure control. There was an irreconcilable difference of R6,285,222 between the amount received from the North West Department of Human

Settlement and an unallocated grant of R18,114,715 included in unspent grants of R244,204,714.

The municipality did not register its master plans for bulk infrastructure with the Integrated National Electrification Programme (INEP) as required by the Division of Revenue Grant Framework, Gazette No. 34280. Other findings are that job descriptions were not established for all posts in which appointments were made during the current year.

Sufficient appropriate audit evidence could not be obtained to establish that senior managers dismissed for financial misconduct in the previous position had not been re-appointed before the expiry of 10 years, this being in contravention of section 57A of the MFMA. Numerous findings under procurement and contract management covered issues such as different tender committees, a bid-specific point system, declarations for both service providers and municipal employees, advertising duration, contractor performance and appointing contractors that were CIDB-registered.

6.8.2 Tlokwe Local Municipality

The following is a summary of the AG's findings using pre-defined terms and phrases.

Government grants and subsidies were reported incorrectly and the AG argued that conditional grant is revenue once the conditions are met. However, the municipality recognised this as revenue and overstated the actual conditional grant expenditure of R46,062,122. The municipality failed to submit project registration forms to the Department of Local Government and the relevant national department (CoGTA) for the conditional grant project it intended implementing in the financial year 2013/14.

In one instance SCM regulations were not followed, resulting in expenditure of R6,841,156 being incurred. Other findings of the AG included management and staff not being assigned at appropriate levels to exercise authority and responsibility over financial reporting; absence of effective human resource recruitment and training policy; and the accounting officer did not exercise oversight responsibility over financial reporting and internal control.

The AG made a finding in regard to human resource management that four senior managers lacked higher qualifications as required by regulations 6 and 7 of Municipal Regulations on Minimum Competency Level; some finance official at middle level management did not have the requisite higher education qualification as required by regulations 8 and 9 of Municipal Regulations on Minimum Competency Level; and bonuses were awarded to municipal managers and senior managers directly accountable to the municipal manager without any performance evaluation. This is in contravention of Section 57(4) (b) of the MSA.

Concerning the expenditure management, the accounting officer did not take effective steps to prevent unauthorised expenditure, irregular expenditure, or fruitless and wasteful expenditure as required by Section 62(1) (d) of the MFMA.

There were numerous findings under procurement and contract management that covered issues such as: different tender committee; bid-specific; point system; declaration for both service providers and municipal employees; advertising duration; contractor performance; and appointing contractors that are CIDB-registered.

6.8.3 City of Matlosana Local Municipality

The following is a summary of the AG's findings using pre-defined terms and phrases. There was an unspent conditional grant of R76,044,287 (2011: R15,220,774). The Auditor-General also made findings about irregular expenditure being due to the municipality making payments in contravention of Section 125 of the MFMA, amounting to R25,306,656. One of the things the AG looked at was expenditure management. However, there was no management, accounting and information system to recognise expenditure when incurred. An effective system of expenditure control, including procedures for approval, authorisation, withdrawal and payment of funds, was not in place. The accounting officer did not take effective steps to prevent unauthorised expenditure, irregular expenditure and fruitless and wasteful expenditure.

There were numerous findings relating to procurement and contract management that covered issues such as: different tender committee; bid-specific; point system; declaration for both service providers and municipal employees; advertising duration; contractor performance; and appointing contractors that were Construction Industry Development Board (CIDB)-registered.

6.9 DISCUSSION ON FINANCIAL RATIOS AND UNDER-EXPENDITURE

There is a relationship between financial ratio and under-expenditure.

The expenditure management graph for Rustenburg Local Municipality and its MIG allocation show that when there was high ratio of 0.95 there was also under-expenditure of 30 percent (R836,753) in the same financial year (2011/12). The second peak was of 1,02 and still under-expenditure of 14 percent (R718,728) in 2013/14 was reflected by the MIG Allocation graph. This shows that the municipality is operating well within budgetary constraints.

The highest expenditure ratios for Tlokwe Local Municipality were in the financial years 2012/13 and 2013/14 at 1.23 and 1.02 respectively. The MIG allocation reflected underspending of 14 percent (R146,204) and 12 percent (R154,874) respectively.

The City of Matlosana has its ratio above 1, with the highest being 1.26 and 1.24 in the financial years 201/13 and 2013/14 respectively. The corresponding underspending was 12 percent (R242,215) and 2 percent (R38,945).

There is a relationship between the two parameters; however the ratios are based on municipal budgets for the year while the allocations are based on the MIG, the one conditional grant available for the municipality.

Several conclusions can be drawn from the chapter relating to MIG allocations for the local municipalities and district municipalities. There are some district municipalities that receive MIGs since these are Water Services Authorities (WSAs).

Numerous reasons contribute to underspending that is project-related, municipality-related or even community-related. A project can be halted due to cash flow problems or due to technical cliques. The municipality may take too long to appoint a contractor for a project. This might result in the contractor/consultant starting halfway through the project, affecting spending on the project. The appointment of a non-CIDB registered contractor has opened a door to using those contractors that “cut corners”.

The study has revealed that respondents are aware of what is happening within the PMU and the importance of the MIG project being supported. MIG allocations are done according to regulations and DoRA requirements. The performance of contractors is supposed to be closely monitored by the PMU. The AG’s report reflects that this is not happening. Community needs are taken care of by all three spheres of government. This is further entrenched by the introduction and utilisation of community development workers and establishment of the Municipal Infrastructure Support Agent (MISA). The MISA has been mandated to ensure that managers are well trained in order to ensure that there is no underspending. Lastly, more participants must be put through change management training. This will assist in meeting project outcomes through proper change control systems.

6.10 STUDY LIMITATION

The study offers important findings in relation to the literature but also has limitations. One such was that only a sample of the municipal workforces filled in questionnaires. There was an insufficiently valid case to perform the Chi-square test for question 45.

6.11 SUMMARY

The MIG is a conditional grant allocated to municipalities to construct or upgrade infrastructure for poor and marginalised communities. These allocations are transferred to districts, local municipalities and metros. This chapter focused on these allocations, spending and underspending patterns and the reasons behind them.

Comparisons were carried out with provinces that received comparable allocations during the financial years 2009/10 to 2013/14, with similar populations and yet divergent density and complexity between rural and urban. These provinces, Limpopo, Free State and Mpumalanga, were compared against North West Province.

The researcher then focused on three metropolitans, namely Tshwane, Ekurhuleni and eThekweni. More emphasis was placed on Tshwane. Financial ratios were calculated for the City of Matlosana, Rustenburg and Tlokwe Local Municipalities.

6.12 CONCLUSION

There was generally low spending of the MIG allocation before the 2010 FIFA World Cup with this steadily increasing after the world cup. The sustainability of spending after the event was due to a turnaround strategy from the DPLG, numerous service protests, and changes in the political landscape. The DPLG (2014) put more impetus into spending as more measures came to be in place.

6.13 LINK TO THE NEXT CHAPTER

The next chapter presents a summary of the study, gives findings that specially address the research objectives, makes recommendations that would sort out problems identified and then presents conclusions.

CHAPTER SEVEN – FINDINGS AND DISCUSSION

7.1 CHAPTER LAYOUT

The chapter is introduced and then the discussion of findings is expanded, together with the formulation of a framework to find answers to the problems identified.

7.2 INTRODUCTION

This chapter discusses the findings from local municipalities in North West Province; first analysing them and presenting them in graphical form, in the context of the relevant literature. The statistical programme SPSS was used to compute the information and generate graphs. The particular technique used for analysis and interpretation of data may affect the results.

7.3 DISCUSSIONS OF FINDINGS

7.3.1 Primary reasons for under-expenditure in MIG

The results showed that under-expenditure was due to lack of capacity in different municipalities. During inception of the MIG projects, some of the district municipalities such as Kenneth Kaunda and Dr Ruth Mompati were responsible for executing work on behalf of their local municipalities. The ability of a local municipality is restricted by its resource base, including institutional capacity. A local government must assess its capacity and plan, then implement and operate municipal infrastructure projects accordingly. The literature review revealed that the reasons for underspending included under-staffing and issues with the management of construction contractors (Singo, 2012).

The late appointment of service providers has led to underspending. A provider who was supposed to finish a project within a certain year might be appointed in the middle of that financial year.

Supply chain management (SCM) and procurement processes can lead to delays with contractors and consultants. This invariably resulted in underspending (CoT during financial 2008/09). This showed that the project procurement process could be one of the project constraints even though it is actually a functional process. Content analysis results reflect—from case studies of local municipalities—how procurement and contract management was flawed.

It was found that some local municipalities had financially inefficient systems, including inefficient revenue collection. The Department of Finance suggested capacity building with a view to improving financial and managerial systems (Singo, 2012).

Communication failures regarding project status have resulted in local communities protesting about not knowing what is happening with the project... whether the project has been temporarily halted, or abandoned, and even when it would be commissioned. In some cases communities protest because their projects have not been implemented.

7.3.2 Roles of stakeholders in MIG projects including PMU

The MSA demands that local municipalities be involved in community participation. One of the RDP requirements is that projects be people-driven. This holds for planning infrastructure as well as delivery, operating and maintenance of municipal infrastructure services. One must recognise and appreciate the political and institutional dynamics. The findings from the Presidential Local Government summit in 2014 revealed that some municipalities do not have structured community engagement (CoGTA, 2014a). Singo (2012) agrees that participatory processes take time and need the services of experienced intermediaries who interact both with formal agencies and informal structures to address and solve problems.

7.3.3 Issues faced within the procurement division

The procurement division is tasked with tendering processes and the appointment of service providers, meaning consultants and contractors. Delays in appointing contractors have led to numerous projects not being completed on time. This has invariably resulted in under-expenditure. During the financial years 2004/05, 2005/06 and 2006/07 the amounts that were not spent were automatically rolled over to the next financial year. This practice was stopped in 2007 and local municipalities had to apply for the funds to be rolled over. This came into effect after Section 20 of the DoRA was implemented (Muthotho, 2007).

Delays in the adjudication and tendering process affect the appointment of contractors, also leading to underspending. This was stated in the Auditor-General's reports relating to a lack of audit evidence about the following:

- Bids advertised for a minimum number of days;
- Whether bid specifications were drafted by a bid specification committee;
- Bid evaluated by bid evaluation committee;
- Final awards and recommendations for awards made by adjudication committee to the accounting officer;
- Service providers failed to declare their service to the state;

- Municipal employees failed to declare their interests;
- Awards made to a supplier based on preference points;
- Awards made to the supplier that scored the highest;
- Performance of the contractor was not monitored on a monthly basis;
- Unclear whether councillors participated in committees to evaluate and approve tenders/quotations or attended meetings of evaluating committees;
- Accounting officer failed to implement measures to combat the abuse of the SCM system; and
- Contracts extended or modified to an extent that competitive bidding processes were circumvented.

The municipalities concerned should focus on the Government's 12 Priority Outcomes list, item 5 (refer to Appendix E), which focuses on linking procurement to skills initiatives.

7.3.4 Quantifying the extent to which under-expenditure directly contributes to inefficient service delivery.

Under-expenditure may imply that a project was not completed or even started. This problem is aggravated by the fact that some municipalities depend on equitable sharing as opposed to generating their own financial reserves. This means there were no tangible outputs with which beneficiaries could identify. Reference is made to the tables in Chapter 6 (table 6.1 to 6.11) where the researcher shows the amounts that were left unspent by local municipalities, district municipalities, metros and different provincial governments.

- Under-expenditure means that for instance, a road was not constructed. It means that poor households were denied access to trade, local economic development and essential services, and a community has been put at risk due to unsafe roads.
- Local communities have been denied employment through EPWP. Poverty alleviation has failed the community and unemployment rates have increased.
- Communities have been denied water and sanitation in spite of that access being enshrined in the Constitution. This means that the local community cannot work on projects since these have not been started, or have been delayed or even halted due to MIG allocation complications.
- The quality of IDP will ensure that community needs are taken care of and are included in the final document.
- Efficient, effective and well-co-ordinated intergovernmental relations.
- Backlog figures would be decreasing slowly.
- Increased service delivery protests, which have invariably resulted in delays to projects.

Municipalities should streamline their Integrated Development Planning (IDP) through local infrastructure. This infrastructure needs to be aligned with national and provincial objectives. Infrastructure provision needs to be integrated through all associated activities, projects, programmes and portfolios (Singo, 2012).

Service delivery and infrastructure must demonstrate a developmental impact and how they directly contribute in an effective and efficient way to social and economic development. The current policy framework and policy provide a conducive environment for service delivery provision within local government.

7.3.5 Consolidating findings of underspending.

Municipal council approval and organisational structures are outdated and inadequate, maintains the National Treasury. Local and district municipalities have 32 percent of their staff complement dedicated to service delivery. This is one reason for underspending and ineffective service delivery output.

Other reasons for underspending are lack of project management qualifications within the PMUs and inadequate resources of the PMUs. Legoabe and Ngozwana (2012) showed that some municipalities have absorbed inexperienced YPs as both technical managers and PMU managers. This invariably reduces the spending pattern of the host municipality due to such YPs' lack of experience and professional registration.

Project monitoring must be done on a regular basis by project team leaders. This can be achieved by adhering to procurement plans. Procurement must be linked to the IDP. Underspending is caused by not adhering to procurement plans. The project must be linked with IDP objectives (procurement plan must be budgeted for). No project will ever run from start to finish without changes. When these changes are not properly managed, underspending can result. Project management involves managing changes and informing stakeholders about project status while linking service delivery to expenditure.

According to Josie, Khumalo and Ajam (2006) the following reasons contribute to MIG under-expenditure:

- Municipalities continued spending MIG funds rolled over from previous years;
- Lack of proper project planning;
- Ineffective project management;
- Lack of capacity for managing MIG funds; and
- Late approval of projects and budgets by council officials.

CoGTA (2014b) lists the following as causes for underspending of MIG funding:

- Collapsed intergovernmental processes intended to facilitate the discharge of roles and responsibilities;
- Lack of alignment between national, provincial and municipal priorities;
- The need to find other sources of revenue is limiting to funding enhancement;
- Limited legislative/regulatory provisions to prevent municipalities from changing commitments, especially in the year of implementation;
- Lack of capacity in some sectors to guide infrastructure investment requirements (sector norms and standards are ambiguous) through sector planning; and
- Lack of capacity to engage on monitoring and reporting.

7.3.6 Framework Formulation

All research objectives have been addressed by the findings and backed up by the literature. The framework is based on the findings that have been statistically developed and tested. The findings have highlighted that municipal employees considered the following elements as key to the under-utilisation of municipal funding that had been provided:

- a) Project management qualification;
- b) Enough human resources;
- c) Project team leaders being sufficiently monitored to ensure they were fulfilling their functions;
- d) Projects implemented within municipalities are linked and aligned to Integrated Development Programme (IDP) implementation;
- e) Sufficient change management performed throughout the phases of the Municipal Infrastructure Grant (MIG);
- f) Communities informed about project status and allowed to participate actively in determining the way forward; and
- g) Service delivery and expenditure are linked.

This highlights the need for municipalities to function effectively and efficiently in order to facilitate adequate and better service provision to their communities. It is imperative that employees be trained in the above key elements so as to address the backlog of service provision by the respective municipalities and to ensure that the funds allocated are utilised prudently and sparingly. It has been highlighted from the MIG allocations and financial reports from the various municipalities consulted that there are serious concerns around under-utilisation of municipal funds allocated for service delivery in North West Province, due to a lack of proper staffing, lack of project management qualifications and skills, lack of monitoring and

evaluation of activities of municipal officials in projects, and failure to ensure they fulfil their functions within the prescripts of local government laws and regulations.

Consequently, this develops into a Framework as follows:

Equation 8.1: Proposed Framework

$$Y_t = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \beta_5 \chi_5 + \beta_6 \chi_6 + \beta_7 \chi_7 + \dots + \xi_t$$

Where,

Y_t is under-utilisation/overspending;

β_0 is (Allocation - Expenditure);

$\beta_1 \chi_1$ is project management qualification?

$\beta_2 \chi_2$ is enough human resources;

$\beta_3 \chi_3$ is project team leaders being sufficiently monitored and evaluated to ensure they execute their functions;

$\beta_4 \chi_4$ is projects implemented within municipalities are linked to Integrated Development Programme (IDP) implementation;

$\beta_5 \chi_5$ is sufficient change management being performed throughout the phases of the MIG;

$\beta_6 \chi_6$ is communication/information transmitted to communities regarding the status and the performance of municipal projects and programmes; and

$\beta_7 \chi_7$ integration and co-ordination links between service delivery and expenditure.

Where β_1 to β_7 are the bottlenecks.

The Framework is based on the Republic of South Africa Constitution and sections of the following Acts form a legislative framework: (i) Municipal Structures; (ii) Municipal Systems, Act 117 of 1998 and Municipal System Act 32 of 2000, Section 55(1)(a) the municipal manager is responsible for managing the provision of services to the local community in a sustainable manner; (iii) Public Finance Management, Act 1 of 1999; (iv) Municipal Finance Management Act (Act 117 of 1998); (v) Division of Revenue Act (DoRA), reflecting the variances in the monthly DoRA report; and (vi) Public Audit Act, 2004 (Act 25 of 2004).

Project identification and prioritisation process are carried out by the PMU to ensure proper integration with the Infrastructure Investment Framework (IIF) and the IDP to ensure synchronised service delivery. Appointment of service providers must be fast-tracked to ensure that project plan timelines are adhered to.

Project spending is managed through a PMU with monitoring of the consolidated cash flow and performance reports for each project. Monthly, quarterly, bi-annual and annual reports to MIG managers are just some of the oversights that should keep projects on track.

MIG projects are aligned with MIG vision:

“The municipal infrastructure grant programme is aimed at providing all South Africans with at least a basic level of service by the year 2013 through the provision of grant finance aimed at covering the capital cost of basic infrastructure for the poor. The MIG programme is a key part of government's overall drive to alleviate poverty in the country and, therefore, infrastructure is to be provided in such a way that employment is maximised and opportunities are created for enterprises to flourish” (DPLG, 2004:2).

Councils adopt an IDP, as mandated by section 25(1) of the Municipal Systems Act (32 of 2000). A council, through the IDP review process, determines strategic objectives for service delivery and development for the next three years (DPLG, 2006:28).

Once the bottlenecks are sorted out an ideal framework would be provided. Project management qualification of the personnel involved with MIG projects means they must be trained or have some formal project management qualification. This will assist in managing triple constraint with more emphasis on cost. Secondly, people must be well-resourced to carry out their duties. These resources can include equipment, material and incentives to make project monitoring easier. This includes project team leaders.

The linkage of projects implemented within municipalities to the Integrated Development Programme (IDP) is a fundamental cornerstone that must be understood by everybody involved

in MIG and IDP projects. Resources can then be streamlined and co-ordinated in order to give maximum output.

Change must be properly managed throughout the project phases of the MIG. Systems should be in place to detect any variances earlier on in the project life cycles. This will avoid under-expenditure or over expenditure. More importantly, communities will be informed about project status and the project deliverables will remain relevant to the beneficiaries. Communication is crucial and a strategic element of service delivery. There is an obvious link between service delivery and expenditure. The more of an allocated grant is actually spent on a project, the more services are rendered to the communities.

7.4 CONCLUSIONS

The research questions have been fully addressed. Some of the questions, investigations and findings have led to further areas of research. This will be discussed fully in Chapter 9. The framework formulated in item 7.3.6 above is subjected to focus group interview integration as previously discussed in Chapter 4. Focus group members are from the Integrated Municipal Infrastructure (IMI) in North West Province.

7.5 LINK TO THE NEXT CHAPTER

Chapter 8 is based on input and interaction with the focus group members. Their inputs are used to refine the framework.

CHAPTER EIGHT – FOCUS GROUP AND REFINED FRAMEWORK

8.1 CHAPTER LAYOUT

This chapter is introduced and then the inputs from the focus group are recorded, transcribed and incorporated. This resultant input is used to refine the framework formulated in the previous chapter. The chapter concludes by setting the scene for the last chapter of the study.

8.2 INTRODUCTION

The focus group is based on purposeful sampling as alluded to and discussed in Chapter 4. This chapter focuses on the input from the focus group. Members' contributions are noted, recorded and immediately transcribed. These form the basis for a refined framework.

8.3 FOCUS GROUP

8.3.1 Focus group meeting

The meeting took place on 6th October 2015 in the director's office, Mmabatho, from 09h00 until 12h00. The attendance register is attached as part of the proceedings. There were four members in the group, coming from the IMI, together with the moderator (researcher), this constituting the focus group (Sekaran, 2003; Remenyi *et al.*, 2010; Dilshad & Latif, 2013). The moderator thanked all present, explained why they had been selected for a group interview, noted the rules of confidentiality and asked if they had any questions (Dilshad & Latif, 2013). The moderator introduced the subject and the reasons for the interview. This presentation is attached in Appendix N.

The group opted for confidentiality and agreed that the report would only reflect P1 to P4, as participants 1 to 4 respectively. Tape recording was not used due to the limited time given for the meeting. The group members had come from a meeting and were preparing themselves for another one outside the office.

Control of the group was sorted out by using a homogenous group. The moderator took notes and transcribed them immediately.

8.3.2 Input from focus group

The following is a summary of the input from the focus group. The focus group believes the main issues for underspending are the independence of a PMU; meeting strict time frames; functioning intergovernmental relations (IGR); SCM/procurement plans should be adhered to; appointment of a competent service provider; involvement of communities through the project life cycle; clear-cut policies for MIGs; and limitations on change management. Staff turnover needed to be reduced. The appointment of a PMU should be on a permanent basis.

Other issues needing to be addressed were MIG policies and processes; SALGA training of councillors; and prioritisation of projects by councillors. The priority list must not be changed. Proper and fruitful negotiation was needed with the local tribal authority during project conceptual phase. This would avoid any project delay since the authority would have bought into the project.

Appointment of service providers must be streamlined and free from political interference. Appointment should be based on credentials such as professional registration, skills and competence, financial viability and proven track record of past performance. The detailed contribution is attached as Appendix N.

8.3.3 Discussion and conclusion

The focus group shared much knowledge relating to policies, regulations and on-the-ground experience. This assisted the researcher to gain more knowledge of the subject (Bryman & Bell, 2007). The group alluded to the fact that there was deviation from MIG policies and local government legislation. One member suggested extension of the research to interview local government PMUs, including both rural and urban municipalities.

Members' suggestions, though outside the scope of the study, were critical to MIG, IDP, service delivery and infrastructure backlog.

The input of the focus group is well summarised by the strategy unveiled in 2009 by CoGTA in order to transform local government. Members identified the following factors as developmental risks underpinning optimal efficiency and service delivery capacity. These were: policy and legislative factors; political factors; weakness in accountability systems; capacity and skills constraints; weak intergovernmental support and oversight; and issues associated with inter-governmental fiscal systems (LGSETA, 2012; Legoabe & Ngozwana, 2012:58).

8.3.4 Limitation of focus group

Potential bias was reduced by the researcher acting as moderator. The moderator observed and took notes, interrupting only for the sake of clarity. Tape recording was not used since confirmation in regard to the focus group was only received at 21h00 on the previous night.

8.4 REFINED FRAMEWORK

The following is the list of priorities, according to the focus group input, that the framework must address:

- a) Independent PMU
- b) Meeting strict time frames
- c) Functioning intergovernmental relation (IGR)
- d) SCM / procurement plans should be adhered to
- e) Appointment of competent service provider
- f) Involvement of communities through the project life cycle
- g) Clear cut policies of MIG
- h) Limitation on change management. Reduce high staff turnover. Appointment of PMU on a permanent basis

Consequently, this derives into a Framework which is as follows:

Equation 9.1: Refined Proposed Framework

$$Y_t = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \beta_5 \chi_5 + \beta_6 \chi_6 + \beta_7 \chi_7 \dots \dots \dots \xi_t$$

Where,

Y_t is under-utilisation/overspending;

β_0 is (Allocation - Expenditure);

$\beta_1 \chi_1$ is independence of PMU;

$\beta_2 \chi_2$ is meeting strict time frame;

$\beta_3 \chi_3$ is a functioning intergovernmental relation (IGR);

$\beta_4 \chi_4$ is procurement plans should be adhered to;

$\beta_5 \chi_5$ is limitation on change management;

$\beta_6 \chi_6$ is involvement of communities through the project life cycle;

$\beta_7 \chi_7$ is there being a link between service delivery and expenditure;

$\beta_8 \chi_8$ is a clear cut policy of MIG;

$\beta_9 \chi_9$ is appointment of competent service provider;

$\beta_{10} \chi_{10}$ is appointment of PMU on a permanent basis .

The PMU members are not involved in the appointment of the service provider. Often the project manager is told what to do, instead of him/her carrying out his/her duties to the best of his/her abilities. Time frames must be adhered to. Independence of the PMUs would ensure that they have a say in the appointment of a service provider. The appointment would be integrated through all MIG projects within the product and project life cycles. This independence would ensure continuity, as staff members would be permanent and not employed on a contract basis.

The IDP process leads to a priority list that is approved by the relevant councillor. The procurement plan should be embraced for the five-year period and progress accordingly. The SCM/procurement division will draw from the following bases, namely: vendor databases, organisational processes and lessons learned. The vendor database assists in terms of assessing vendors according to their eligibility, financial viability, past project performance and legal status. Organisation processes include policies, Quality Management Systems (QMS) and Standard Operating Procedures (SOP).

Lessons learned assist the organisation to avoid repeating mistakes, whether operational, procedural or even legal.

Changes in project management are inevitable but can be properly managed. However, local government must learn how to handle these changes. This is done through change control systems. Standard operating procedures can be developed for any project changes. Changes must not adversely affect triple constraint. Changes must be documented, agreed to with well-explained consequences, and finally approved before implementation. One appropriate change would involve turning the contracts of PMU staff into permanent appointments. This would ensure continuity, and maintain higher spending capacity and performance.

The roles of Community Liaison Officer (CLO), Ward Councillor and Member of Mayoral Committee (MMC) should be clarified when they assume their respective offices. Among their other functions is keeping the community informed about project status.

Municipalities must take charge of advertising their achievements to the community. Sod turning and commissioning are among the events about which they can inform their communities. They can also utilise local radio stations to reach a wider audience, and be visible in social media.

Communication with civil society and developing an effective and responsive service delivery plans are critical for every municipality. Such operational guidance would provide the framework for municipal capacity (Boex *et al.*, 2011). Promotion of good governance in local government and improved service delivery will require education and training on the ethics of good governance for both councillors and municipal officials on a continuous basis; and an in-depth communication strategy on professional ethics, and public services values driven by top management and leaders.

Dlalisa (2009:107-8) suggests that service delivery is about meeting the needs of the community. Though this study has limited itself to MIG funds, other funds are available that address infrastructural and community needs. The spending capacity of the local government is directly proportional to its technical, project management, financial and administrative capacities. Once funds are spent on a project, service delivery is generally enhanced.

MIG policies are not always clear, or shielded from political influence and pressure. MIG projects are aimed at households that earn R2,400/month or less and are poor. This excludes townships, the CDB and upmarket dwellings. Neglecting infrastructure projects has led to MIGs being used to repair dilapidated and run-down structures. Secondly, trying to fast-track political projects impacts the initial objectives of an MIG. The existence of standards and norms assists in the choice of projects and their implementation methods.

The competence of the service provider is crucial for the success of the project. This competence is inclusive of performance track record, financial viability, professional registration and code of conduct. It ensures that standard and norms are consistent throughout a project.

However, according to the Demarcation Board, municipal performance is affected by well-coordinated intergovernmental relations (LGSETA, 2012:33). It is important to note that differences between municipalities have increased over time and the level of intergovernmental grants has changed (Johansson, 2003).

The independence of a PMU will ensure that projects are executed according to the standards and norms of the PMBOK and Project Management South Africa (PMSA). The project manager and consultants should manage according to triple constraint. Contractors would be managed strictly and timelines would be adhered to. Penalties would be invoked without fear or favour. This will inevitably increase the spending capacity of municipalities.

Intergovernmental relations would assist where changes in local boundaries have strategic significance in relation to the construction of new roads, utility lines, schools and other public institutions. These have been used to gain advantages in awarding intergovernmental aid, in extracting political benefits and even in regulating social behaviour through controls over vice (Fleischman, 1986; Vogel *et al.*, 2010:12).

The focus group believed that once a procurement plan is accepted and adopted, it must be carried out as planned. Inadequate procurement planning has contributed to non-spending on projects (Amathole, 2010).

Change must be managed properly with particular reference to the appointment of PMU staff. Members must be appointed on a full-time basis. Secondly, the reporting structure must be clear as PMU staff are paid by national departments and stationed at the local government level.

The community must be kept abreast of what is happening throughout the project life cycle. A project business plan will vary depending on the sector departments. Sector department requirements are attached in Appendix F.

Dlalisa (2009:107-8) suggests that in order to promote good governance in the local government and thus improve service delivery, there needs to be education and training in the ethics of good governance for both councillors and municipal officials on a continuous basis; and an in-depth communication strategy on professional ethics, together with public service values driven by top management and leaders.

Policies in regard to MIG must be clear to all stakeholders. This would assist in reducing expectations that would not be met through MIG funding. Secondly, it would reduce service delivery protests.

The DPLG (2006:9) is supposed to appoint a service provider to develop an evaluation framework to ensure proper project implementation. The contractors and service providers are appointed during the design phase. Procurement documentation must state the criteria being used to evaluate proposals and tenders. Project tender advertisement timelines must be adhered to, according to the majority of the respondents.

8.5 CONCLUSION

The input of the focus group has improved and refined the Framework applicable to South Africa local government settings. Different factors were taken into account such as the current status of local government, procurement strategies, socio-economic dynamics of the community, and the political landscape, with all of these operating within the legislative framework.

8.6 LINK TO THE NEXT CHAPTER

The next chapter, Chapter 9, presents the conclusion, summary and recommendations ensuing from the findings of this research.

CHAPTER NINE – SUMMARY, RECOMMENDATIONS AND CONTRIBUTION TO BODY OF KNOWLEDGE

9.1 CHAPTER LAYOUT

The chapter deals with the summary of the study, suggests areas for future research, details limitations to the study, and provides recommendations and conclusions.

9.2 INTRODUCTION

This chapter focuses on the summary of the research study and findings as well as providing an overall review of the study, while paying attention to the appropriateness and applicability of the findings. It further provides recommendations based on the findings, with a view to improving expenditure of municipal funds within the local municipalities in North West Province.

9.3 SUMMARY OF THE STUDY

A summary of the investigation is presented and the main findings will be critically discussed. This will be based on the results of the previous two chapters—chapters 5 and 6—as the study sought to elicit reasons for underspending in MIG projects by the local municipalities in North West Province. An MIG is allocated as a conditional grant to local government to redress service backlogs caused by the apartheid regime. The main reasons were discussed thoroughly in Chapter 7, items 7.3.1 and 7.3.5.

The study also looked into the role of stakeholders in MIG projects. These included the members of a PMU. Such members are appointed on a contract basis except in Madibeng Local Municipality (Focus Group Meeting, 2015). It is recommended that each PMU office within a local municipality be appointed on a permanent contract.

The procurement division is vital in any organisation, whether when implementing projects or not. However, the impact of procurement is felt in project implementation since it involves the appointment of a service provider and subsequent contract administration. As a sector department, the Department of Public Works requires that contracts for projects be issued only to consulting engineers and contractors who are qualified (either through appropriate training or through gaining recognition of prior learning) in managing labour-intensive projects. With the amount of poor workmanship on construction projects, there is a clear need to implement SCM performance and contract management activities (Amathole, 2010). The focus group suggested it was important that procurement plans be adhered to.

MIG under-expenditure directly contributes to inefficient service delivery and hampers the reduction of existing backlogs. Under-expenditure denies the poor and marginalised access to economic enhancement. This includes development of road infrastructure to poor households that would create access to trade, local economic development and essential services while promoting road safety. This function comes under the Department of Transport as the relevant sector department.

9.4 RECOMMENDATIONS

The following recommendations are based on the refined Framework developed from focus group interviews.

$$Y_t = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \beta_5 \chi_5 + \beta_6 \chi_6 + \beta_7 \chi_7 + \dots + \xi_t$$

Where,

Y_t is under-utilisation/overspending;

β_0 is (Allocation – Expenditure);

$\beta_1 \chi_1$ is independence of PMU;

$\beta_2 \chi_2$ is meeting strict time frame;

$\beta_3 \chi_3$ is a functioning intergovernmental relation (IGR);

$\beta_4 \chi_4$ is procurement plans should be adhered to;

$\beta_5 \chi_5$ is limitation on change management;

$\beta_6 \chi_6$ is involvement of communities through the project life cycle;

$\beta_7 \chi_7$ is link between service delivery and expenditure;

$\beta_8 \chi_8$ is a clear cut policy of MIG;

$\beta_9 \chi_9$ is appointment of competent service provider; and

$\beta_{10} \chi_{10}$ is appointment of PMU on permanent basis.

- **Independence of PMU;**

Independence of a PMU implies that the unit is allowed to execute the projects according to acceptable project methodology and processes. The first Framework showed that most respondents believe that qualification in project management is relevant to the issues of under-expenditure. Qualification in a PMU office should not only include project management but also financial management, contractor management and research. Financial management would help in terms of project finance while contractor management would assist with managing contractors in mega-projects.

The second recommendation is around empowerment and the resourcing of PMUs and PMOs. The researcher recommends the independence of PMUs, free from political influence and pressure. With this, PMU members would be able to execute their tasks to the best of their ability within the norms and standards of their profession. This should result in proper planning and implementation of infrastructure projects. The emphasis should be on the DPLG function of monitoring, evaluation and accountability. This turnaround strategy will better meet the needs of local communities and consequently improve service delivery.

Linked to the independence of the office are the issues of appointing or resourcing qualified personnel. Singo (2012:100) maintains that the SALGA and CoGTA believe filling vacant positions in municipalities will improve MIG spending and suggests that funding be made available for those positions. Financial management capacity will assist local municipalities to perform basic treasury functions such as billing ratepayers and maintaining a proper credit control system. This will further assist in meeting the Auditor-General's deadlines for submission of financial statements.

- **Meeting strict time frame;**

MIG projects and IDP processes operate within strict time frames, constrained by the municipal financial year, for both spending and implementation. The focus of the study is on underspending, which has resulted in funds in some cases being returned to the National Treasury or rolled over for use in the following financial year. It was clear from both the focus group and the relevant literature that delays in the appointment of contractors lead to underspending. The researcher recommends that IDP processes, municipal budgets and project prioritisation be aligned.

This will ensure that once an IDP has been reviewed, a priority list is established by the end of May, with the contractor being appointed before the end of June: then the projects can commence at the beginning of the financial year. By sticking to this time framework, together with project scheduling and proper project spending, the spending pattern would be drastically improved. Secondly, a municipality would be able to claim the second tranche of the fund. (The National Treasury's payment systems come in three tranches: the second is only paid after the municipality has spent more than 69 percent of the initial tranche.)

- **Functioning intergovernmental relations (IGR);**

The researcher recommends revival of national municipal infrastructure forums to facilitate effectiveness in discharging the roles and responsibilities of different role-players according to the Intergovernmental Relation Framework (Act No. 13 of 2005).

Weak intergovernmental support and issues associated with inter-governmental fiscal systems were identified as factors affecting optimal efficiency and service delivery capacity (LGSETA, 2012; Legoabe & Ngozwana, 2012:58). This lack of coordinated intergovernmental relations is one factor affecting municipal performance, despite the presence of financial reserves. The researcher recommends the involvement of the Office of the Premier to strengthen intergovernmental relations. This will ensure that all public institutions with a role to play are adequately capacitated. Alignment of this important relationship would ensure there is: (i) coherent government; (ii) effective provision of services; (iii) monitoring of policy implementation and legislation; and (iv) realisation of national priorities as per the Intergovernmental Relations Framework Act enacted in 2005 (Act No. 13 of 2005).

Commitment to the programme and the creation of sustainable infrastructure would improve spending patterns and ensure effective provision of services. Proper relationships between different levels of government would also promote national priorities.

- **Procurement plans should be adhered to;**

Procurement planning is one of the conditions of business planning, according to the DoRA (DoRA, 2011) and such a plan must be linked to the IDP and the municipal budget. This starts with the mechanism for improving planning within the local municipality. It includes updating the sector and master planning that informs projects. The researcher recommends that efficiency be improved through the development of staffing norms and standards, as a lack of procurement planning was identified as one reason for non-spending on projects. Another critical aspect of procurement plans is that they must be monitored regularly to ensure ongoing project spending (Amathole, 2010:105).

- **Limitation on change management;**

Any change in a project has an impact on the triple constraints of time, cost and quality. From this study the researcher has established procurement as being one of the constraints that can result in project delay. Change must be managed through change control systems. Change processes and procedures must be established early in the project by all major stakeholders. Strengthening of the existing legislative provisions would prevent municipalities from constantly reprioritising.

- **Involvement of communities through the project life cycle;**

Communities should be involved in, and updated about, different phases of the project. This is only possible if there is an agreement within the municipal sphere that involvement of sectors involved in the project life cycle can be improved. Stakeholder management is a critical aspect of any project. A stakeholder can hold the project to ransom and affect the completion date and, invariably, the spending.

This can be averted by drafting a stakeholder management plan that addresses stakeholder identification; their needs analyses and expectations; and provides alignment with project objectives. The project can establish a training centre to develop the local labour pool. Hiring and training labourers from the community is less expensive. The risk of them leaving in mid-project is tremendously reduced, thus helping to ensure project completion.

The communication plan must involve all stakeholders, particularly the communities. They must form part of any distribution list, even if they are merely informed. The City of Matlosana, for instance, spent R250,000 on a communication programme, R200,000 on publicity, and purchased branding material for R198,073 in its communication plan (Annual Report, 2013/14). Marketing and communication planning was part of the Five-Year Key Performance Indicator (KPI), Strategic objective 7.1 for the SALGA Annual Report, with implementation of prioritised communication areas (SALGA Annual Report, 2013/14:197).

- **Link between service delivery and expenditure.**

Expenditure of MIG funds includes construction of rural roads to make it possible for the rural communities to access the local economy and employment opportunities. This brings services to the people. Secondly, spending funds on construction of pipelines, trenches and sidewalks involves labour-intensive work that creates employment for the local community. A proportion of such projects must be done by hand, increasing employment of the local population and directly reducing unemployment and poverty.

This in line with the Government's 12 priorities, item 4 (Appendix F), which encourages decent employment through inclusive economic growth. The following are some of objectives of item 4: (i) ensure proper implementation of the expanded public works programme (EPWP) at municipal level, and (ii) design service delivery processes to be labour-intensive.

The Department of Water and Sanitation (formerly Water Affairs) is one of the sector departments within MIG projects. Such projects must be viable, feasible, acceptable and sustainable in terms of operation and maintenance of the proposed infrastructure. High expenditure in these projects ensures implementation and invariably improves service to the local communities.

The Department of Transport is responsible for development of road infrastructure to poor households, creating access to trade, while boosting local economic development and essential services. This further improves and promotes road safety while delivering service to the communities.

- **Clear MIG policy**

MIG policy was discussed during the focus group interviews. The clearer the policy is, the easier it would be for PMU and PPMU staff to implement. MIG policy that is clear to every stakeholder would enhance implementation and lead to total eradication of backlogs with minimal service delivery protests.

- **Appointment of competent service provider**

The service provider includes both consultants and contractors. It is critical that both consultants and contractors carry the project to completion and meet project outcomes. One reason that incompetent service providers are appointed is because contractors sometimes abandon sites due to delays in payment, the bid specification not being clear to service providers, and also, resolving not to tender.

- **Appointment of PMU on permanent basis**

It became clear from the focus group discussion that the three-year contracts for staff members of a PMU drastically affect MIG spending. There is always a remarkable increase in MIG spending during the first year, dropping however during the third year of a contract. Permanent appointments would increase spending and improve project continuity.

9.5 CONCLUSION

The total spending of MIG funds does not mean that the backlog has been eradicated. This is evident from the different graphs presented in Chapter 6 that reflect increases in allocations. This was also confirmed by research carried out in the CoT in 2012. It has become evident that North West Province municipalities have not paid attention to the role of PMUs and their independence, alignment of IDP with MIG projects, or the efficiency and effectiveness of procurement divisions in meeting mandates. The implementation of a proper Framework will assist in the spending of MIG funds. Secondly, it will eradicate the service backlog and minimise service delivery protest. It will result in provision of essential services to the communities that so desperately need these. This will result in minimising the amounts returned to the National Treasury.

9.6 MAJOR CONTRIBUTIONS TO BODY OF KNOWLEDGE

The following major contributions to the body of knowledge have not been made before. They are based on both primary and secondary data collected in the local municipalities of North West Province.

9.6.1 Theoretical contribution

The researcher has developed a Framework using both quantitative and qualitative data in a mixed method research approach and using simple linear regression. The outcome was the equation below:

$$Y_t = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \beta_5 \chi_5 + \beta_6 \chi_6 + \beta_7 \chi_7 \dots \dots \dots \xi_t$$

Where

Y_t is under-utilisation/overspending;

β_0 is (Allocation - Expenditure);

$\beta_1 \chi_1$ is project management qualification;

$\beta_2 \chi_2$ is sufficient human resources;

$\beta_3 \chi_3$ is project team leaders being monitored and evaluated to ensure that they are executing their functions;

$\beta_4 \chi_4$ is projects implemented within municipalities being linked to IDP;

$\beta_5 \chi_5$ is change management throughout the phases of the MIG;

$\beta_6 \chi_6$ is communicating project status, municipal projects and programme performance;
and

$\beta_7 \chi_7$ is integration and co-ordination, link between service delivery and expenditure.

The variables, $\beta_1 \chi_1$ to $\beta_7 \chi_7$ are derived from the questions from the questionnaire. There may have been other variables that could result in high spending of MIG funding but that were not identified through the questionnaire. This Framework was tested through a focus group interview and resulted in a refined Framework.

$$Y_t = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \beta_5 \chi_5 + \beta_6 \chi_6 + \beta_7 \chi_7 + \beta_8 \chi_8 + \beta_9 \chi_9$$

Where,

Y_t is under-utilisation/overspending;

β_0 is (Allocation - Expenditure);

$\beta_1 \chi_1$ is independence of PMU;

$\beta_2 \chi_2$ is meeting strict time frame;

$\beta_3 \chi_3$ is functioning intergovernmental relations (IGR);

$\beta_4 \chi_4$ is procurement plans should be adhered to;

$\beta_5 \chi_5$ is limitation on change management;

$\beta_6 \chi_6$ is involvement of communities through the project life cycle;

$\beta_5 \chi_5$ is limitation on change management;

$\beta_6 \chi_6$ is involvement of communities through the project life cycle;

$\beta_7 \chi_7$ is link between service delivery and expenditure;

$\beta_8 \chi_8$ is a clear cut policy of MIG;

$\beta_9 \chi_9$ is appointment of competent service provider; and

$\beta_{10} \chi_{10}$ is appointment of PMU on permanent basis.

The focus group members and the researcher believe that once the above variables are sorted out, necessary expenditure would increase.

$$Y_t = \beta_0$$

Where, Y_t is under-utilisation/overspending;

β_0 is (Allocation - Expenditure);

With the expenditure high, and close to equal to the allocation, the underspending percentage or total amount would be reduced.

9.6.2 Practical contribution

The practicality of the Framework is thoroughly discussed under recommendations in item 9.4. These include independence of PMUs, appointing staff members on a permanent basis, reviving intergovernmental relations (IGR), and adhering to procurement plans and strict timelines. The application of the Framework leads to improvements in spending. The focus group members and the researcher believe that once the above variables are sorted out, expenditure would increase.

$$Y_t = \beta_0$$

where

Y_t is under-utilisation/overspending;

β_0 is (Allocation - Expenditure); with the expenditure high, being close or equal to the allocation, underspending would go down.

9.6.3 Contextual contribution

The Framework that has been developed and tested through the focus group can be used by municipalities in other provinces, using the same research approach. This Framework can be used to increase MIG spending, while reducing backlogs and service delivery. This, therefore, is the contextual contribution of this study.

9.6.4 Cost-benefit analysis

The researcher recommended the appointment of Project Management Unit staff on a permanent basis. Such appointments would increase the spending capacity of MIG funds. The cost implication of such a move is outweighed by the benefits. Madibeng has its own PMU staff already employed on a permanent basis and their spending has improved, while their allocation has been increased. However, this can also serve as an area for future research.

9.7 AREAS FOR FURTHER RESEARCH

Future research areas are identified as follows:-

- Analyse the impact of funding in infrastructure development and improved socio-economic situations of local communities.
- Traditional leadership and governance: Projects are being delayed due to the tribal/traditional leader requesting that MIG should buy gravel for road construction or even lease the land to be used for a community's benefit.
- Assess the effectiveness of MIG in redressing infrastructure backlog. MIG projects were initiated in 2004/05 up to the present. The researcher must investigate whether initial objectives were met or not. Carry out a review study of MIG in the past ten years of implementation.
- Exploratory investigation into the potential infrastructure opportunities offered to emerging engineering contractors. This is in line with contractor development programmes within the CIDB context.
- Develop project management methodology for curbing under-expenditure. MIG projects are implemented within the PMUs and the whole project management environment. This relates

to the findings and development of the initial Framework reflecting how project management qualifications are an issue that has resulted in under-expenditure of MIG funds.

- Contractor developments that are involved with MIG projects. Contractors are extensively used in MIG projects and the question that must be answered is: Are they being developed? This applies to one of the sector departments, the Department of Public Works.
- Another area of research would pertain to how procurement management processes could be streamlined by utilising reporting systems in the DoRA.
- The empowerment of PMUs with a view of increasing their monitoring and evaluations skills. This will also ensure that any deviations are spotted in time and corrective action taken. The projects would be completed on time, within budget and to the agreed specifications.
- Comparative study of MIG spending as between urban and rural municipalities.
- The impact of tribal land ownership on service delivery backlogs.
- Integrated MIG project implementation among diverse stakeholders: case study – Rustenburg Local Municipality (RLM). RLM has the largest informal settlement in North West Province, being a mining town with a rich tribal authority.
- The more significant areas are aligning procurement with DoRA reports. Expediting appointment of contractors can lead to projects being completed on schedule.
- Resourcing PMUs in Category C local municipalities to enable them meet their constitutional obligations.
- Investigating the benefits of integrating MIG project implementation with overall municipal projects.
- How best practices can improve the implementation of MIG projects. Infrastructure development as economic growth stimuli.
- The impact of employing PMU staff on a permanent basis.

9.8 LIMITATION OF RESEARCH

The research focused only on local municipalities in North West Province but its applicability to other provinces could be tested by applying this research methodology. The research was carried out on urban local municipalities, however outcomes may differ in rural local municipalities. The focus group composition was from Integrated Municipal Infrastructure as opposed to the PPMUs operating in other provinces.

The limitation of the study in many cases arises in the sampling. Potential participants sometimes ignore, or refuse to answer questions relating to, one piece of research as other research is better funded. However, content analyses are only as good as the document being studied and the underlying meanings can be very difficult to capture. Lastly, there needs to be standardised research work with a large number of cases and a clearly structured basis

(Flick, 2011). This limitation was not evident in the study as the whole division partook in the study.

Flick (2011) looks at the limitations of both qualitative and quantitative research while Archibald *et al.* (2015:7) investigate the limitations of MMR holistically. Challenges that have not been addressed relate to procedures and methodology. The questions of how mixing occurs within the studies might trigger methodological and procedural concerns for certain practitioners. The findings of Archibald *et al.* (2015:19) reflect that there is no formulaic path to integration in MMR. The extent of integration is influenced by the sequence of data collection, the overall MMR design, and the type of data collected and the study followed exploratory sequencing.

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APPENDICES

Appendix A: Project Registration Form

Evaluation of a project registration form	
1.	Check MS on a daily basis in order to see whether there are any new Project registration forms, additional funding requests or changes
2.	Print out Project registration form from MIS
3.	Create Project file and place registration form on file
4.	• Check status of project on MIS Check if project is signed off and authorised at PMU level on MIS Check if project name and number on file correlate with information on MIS Check if all necessary fields on Project registration form are completed Check if project description and motivation correlate and if project qualifies for funding in terms of MIG requirements Check following fields in particular • Breakdown of funds • Labour intensive project (EPWP) Yes/No • Average project wage rate • Beneficiaries • Funding (MIG, public and/or private sector) • Employment generation ○ Women ○ Youth ○ Disabled • Number of persons employed • Person days of employment generation • Planned training activities per module of training • Operation and maintenance budget

Evaluation of a project registration form	
	• Outputs and other targets • Budget control • Declaration on standard condition
5.	See if the following documentation has been provided by the PMU. ○ Council Resolution ○ DWAF Technical Report (only for Water, Sanitation and Waste Disposal project)
6.	If above has not been provided, contact PMU or Province requesting this information. Proceed with project registration once all of the documentation has been provided.
7.	Project Manager signs off on MIS
8.	Submit project file to Secretary for information control and tracking
9.	Secretary submits files to SMM for sign-off purposes on MIS

Appendix B: Municipalities (category B) collecting more than 15%

No	Municipality	% Revenue / GVA	POPULATION
1.	Kungwini	0.588	94,047
2.	Greater Kokstad	0.584	40,407
3.	Overstrand	0.314	45,220
4.	Senqu	0.282	145,647
5.	Moshaweng	0.278	108,010
6.	Maluti-a-Phofung	0.276	407,124
7.	Mossel Bay	0.268	67,452
8.	Umtshezi	0.265	57,848
9.	Plettenberg Bay	0.264	26,608
10.	Kouga	0.252	70,362
11.	Polokwane	0.246	517,398
12.	KwaDukuza	0.233	169,164
13.	Blue Crane Route	0.231	37,621
14.	Maquassi Hills	0.213	66,440
15.	uMngeni	0.209	71,997
16.	Langeberg	0.208	41,641
17.	George	0.206	125,563
18.	Laingsburg	0.202	6,302
19.	Ndlambe	0.197	53,735
20.	Endumeni	0.196 ²³⁹	51,064

21.	Elundini	0.191	130,777
22.	Sakhisizwe	0.185	68,936
23.	Mpofana	0.183	32,045
24.	Saldanha Bay	0.182	60,960
25.	Ngwathe	0.180	138,178
26.	Msunduzi	0.179	631,121
27.	uMuziwabantu	0.178	89,030
28.	Abaqulusi	0.175	200,493
29.	Musina	0.173	42,145
30.	Mthonjaneni	0.173	43,114
31.	Dannhauser	0.171	110,846
32.	uPhongolo	0.171	115,550
33.	Mogalakwena	0.171	318,506
34.	Potchefstroom	0.161	128,735
35.	Buffalo City	0.156	803,448
36.	Khara Hais	0.156	83,164
37.	Dihlabeng	0.154	123,212
38.	Emfuleni	0.153	830,416
39.	Mogale City	0.152	244,013
40.	Umsobomvu	0.152	27,680
41.	Mutale	0.152	93,815
42.	Knysna	0.151	45,460

43.	Breede River	0.151	74,632

Appendix C: North West Province Local Municipality Staff Complements

No.	District Municipalities	Local Municipalities	No. of employees
1	Dr. Kenneth Kaunda	Tlokwe	845
		Ventersdrop	138
		City of Matlosana	1172
		Maquassi Hills	284
2	Bojanala Platinum	Moses Kotane	431
		Rustenburg	871
		Madibeng	464
		Moretele	233
		Kgetlengriver	228
3	Dr. Ruth Segomotsi Mompati	Naledi	453
		Mamusa	188
		Greater Taung	314
		Kagisano-Molopo	134
		Lekwa-Teemane	239
4	Ngaka Modiri Molema	Mahikeng	776
		Ditsobotla	304
		Ramotshere Moiloa	324
		Tswaing	311
		Ratlou	152
Total number of employees			8,164

Appendix D: Schedule 6A (Division of Revenue Act)

Schedule 6A

VOTE	Name of grant	Purpose	Type of allocation	Column A	Column B	
					MTEF over years	
					2005/06	2006/07
Provincial And Local Government (Vote 5)	Municipal Infrastructure Grant (MIG)	To support municipal capital budgets to fund municipal infrastructure and to upgrade existing infrastructure primarily benefiting poor households	Conditional grant			

SCHEDULE 4

ALLOCATIONS TO MUNICIPALITIES TO SUPPLEMENT THE FINDING OF FUNCTIONALITIES FUNDED FROM MUNICIPAL BUDGETS

Vote	Name of allocation	Purpose	Column A	Column B	
			2007/08 Allocation	Forward estimation	
				2008/09	2009/10
Provisional and Local Government (Vote 5)	Municipal Infrastructure Grant (MIG)	To supplement capital finance for basic municipal infrastructure for poor household, micro enterprise and social institution	7 548 564	8 053 090	9 130 230
		Total	7 548 564	8 053 090	9 130 230

Appendix E: Literature Matrix

Fiscal responsibility	Impact of revenue	Change Management and local government funding	Implementation level	Problem with revenue	Efficiency and resourcing	Process re-engineering	Revenue	Definitions of terms	Financial management	Role of municipality

Literature matrix was done on more than 200 articles

Article No.	Names of articles											
1	Intergovernmental Fiscal Transfers: International Lessons for developing countries	•		•	•	•	•		•	•		•
2	An application of input-output analysis to a city's municipal government	•	•	•	•	•			•			•
3	Centralisation and decentralisation in strategic municipality	•		•	•		•					•
4	An empirical analysis of auditor report timing in large municipalities	•			•	•					•	•
5	Fiscal management in Dangila municipality	•	•	•	•	•	•	•	•	•	•	•
6	Intergovernmental grants as a tactical instrument	•	•			•	•		•			•
17	Do merging local government's free ride on their counterparts when facing boundary reform?					•	•		•			
18	New directions in fiscal federalism	•	•			•	•					

Article No.	Names of articles												
19	The glorified municipality												
20	The influence of fiscal information preferences for city services												
21	The role of property tax in fiscal decentralisation in Indonesia												
22	The effect of fiscal performance on local government election results in Israel: 1989-1998												
26	Auditors and fiscal policy: Empirical evidence on a little/big institution												
27	Fiscal decentralization and centralization under majority rule: A normative analysis												
28	The Problems of Current Fiscal Distribution and the Countermeasures												
98	Citizen Perceptions of Local Government Responsiveness in Sub-Saharan Africa												
99	The case for modernization of local planning authority frameworks												
100	Information and communication technology and local governance												
101	Budget Deficits and Re-election Prospects: Voters as Fiscal Conservatives												
102	Fiscal federalism in Rentier regions: Evidence from Russia												
103	Fiscal competition over taxes and public inputs												
104	Fiscal competition and regional differentiation												
105	Fiscal policies in open cities with firms and households												
106	Do fiscal transfers alleviate business tax competition? Evidence from Germany												
129	6TH INTERNATIONAL CONFERENCE - COPENHAGEN, SEPTEMBER 1-3, 2010												
130	Municipal Infrastructure Investment Planning (MIIP) MIIP Report												

Article No.	Names of articles											
131	Local self-government in Ukraine: Strategic priorities and problems of realization	•	•		•	•	•	•	•	•	•	
132	Provincial Government Western Cape Provincial Treasury		•	•	•	•	•		•		•	•
141	Urban sprawl and municipal budgets in Spain	•	•	•	•	•	•	•	•	•	•	•
142	OECD Journal on Budgeting	•	•	•	•	•	•	•			•	
194	An evaluation of the coordination of selected decentralised service				•			•				•
195	Budgeting in Latvia	•	•	•	•	•	•	•	•		•	
196	Programmes of non-government organisations in the informal economy					•	•			•	•	
197	The role of ward committees in facilitating public participation, South Africa		•	•	•		•	•			•	
198	Beyond Compliance: (IDP) in Gauteng			•	•		•				•	
199	An assessment of the role of public participation in IDP - The Thulamela Municipality		•	•	•	•	•	•			•	•
200	Participatory budgeting in the South African local government context			•	•	•	•	•				

Appendix F: Government's 12 Priority Outcomes and the Role of Local Government

No.	Cabinet outcome	Role of local government
	High-quality basic education	Facilitate the building of new schools through participating in needs assessments done by provinces, identifying appropriate land and facilitating zoning and planning processes. Facilitate the eradication of municipal service backlog in schools by extending appropriate bulk infrastructure and building connections.
	Improved health and life expectancy	Many municipalities perform health functions on behalf of provinces. Strengthen effectiveness of health services managed by municipalities by specially enhancing TB treatments and expanding HIV and AIDS prevention and treatment. Municipalities must continue to improve Community Health Service infrastructure by providing clean water, sanitation and waste removal services.
	All people in South Africa protected and feel safe.	Facilitate the development of safer communities through better planning and enforcement of municipal by-laws. Direct the traffic control function towards policing high risk violations – rather than revenue collection. Metro police services should contribute by increasing police personnel, improve collaboration with South African Police Service (SAPS) and ensuring rapid response to reported crimes.
	Decent employment through inclusive economic	Create an enabling investment environment by

No.	Cabinet outcome	Role of local government
	growth	streamlining planning application processes. Ensure proper maintenance and rehabilitation of essential services infrastructure. Ensure proper implementation of the expanded public works programme (EPWP) at municipal level. Design service delivery processes to be labour-intensive. Improve procurement systems to eliminate corruption and ensure value for money. Utilise community structure to provide services.
	A skilled workforce to support inclusive growth	Develop and extend intern and work experience programme in municipalities. Link municipality procurement to skills development initiatives.
	An efficient, competitive and responsive economic infrastructure network.	Ring-fence water, electricity and sanitation functions so as to facilitate cost-reflective pricing of these services. Ensure urban spatial plans provide for commuter rail corridor, as well as other public modes of public transport. Maintain and expand water purification works and wastewater treatment works in line with growing demand. Assign the public transport function to cities. Improve maintenance of municipal road networks.
	Vibrant, equitable and sustainable rural communities and food	Facilitate the development of local markets for agriculture produce. Improve transport links with urban centres so as to

No.	Cabinet outcome	Role of local government
	security	ensure better economic integration. Work with provinces to promote home production to enhance food security. Ensure effective spending of grants for funding extension of access to basic services.
	Sustainable human settlements and improved quality of household life.	Cities to work towards fulfilling the requirements to be accredited for housing function. Develop spatial plans to ensure new developments are in line with national policy on integrated human settlement. Participate in the identification of suitable land for social housing. Ensure capital budgets priorities maintaining existing services and extending services.
	A responsive and accountable, effective and efficient local government system.	Adopt IDP processes appropriate to the capacity and sophistication of the municipality. Implement the community work programme. Ensure ward committee are representative and fully involved in community consultation processes around the IDP, budget and other strategic service delivery issues.
	Protection and enhancement of environmental assets and natural resources	Develop and implement water management plans to prevent water losses. Ensure effective maintenance and rehabilitation of infrastructure. Run water and electricity saving awareness campaigns. Ensure proper management of municipal commonage

No.	Cabinet outcome	Role of local government
		and urban open spaces. Ensure development does not take place on wetlands and other sensitive areas.
	A better South Africa, a better and safer Africa and world.	Role of local government is fairly limited in this area. It must concentrate on: Ensuring basic infrastructure is in place and properly maintained. Creating an enabling environment for investment.
	A development-oriented public service and inclusive citizenship	Continue to develop performance monitoring and management systems. Comply with legal financial reporting requirement. Review municipal expenditure to eliminate wastage. Continue to implement the municipal turn-around strategies. Ensure councils behave in ways to restore community trust in local government.

Appendix G: MIG Sector Conditions

MIG SECTOR SPECIFIC CONDITIONS

(Section 8.3 of the MIG policy framework document)

Each sector department (DWAF, DME, DoT, SRSA and DPW) may establish further conditions specific to their sectors. Such conditions will be included at the discretion of the Municipal Infrastructure Task Team.

1. Department of Public Works

- (a) A minimum of 10% of all projects related to rural roads, low volume municipal roads (less than 500 vehicles per day), pipelines, trenches and sidewalks have to be conducted in a labour-intensive manner in terms of the Expanded Public Works Programme (EPWP) guidelines issued by the Department of Public Works. The proportion of these types of projects to be done by hand will increase to 80% by 2008/09.
- (b) To issue contracts for projects of the above type only to consulting engineers and contractors who are qualified (either through undergoing training to be qualified or through gaining recognition of prior learning) in managing labour-intensive projects.

2. Department of Water Affairs and Forestry

- (a) The funding is only to be used for the Basic Water Services component of the projects. Basic water services in this case means Basic Water Supply Facilities and/or Basic Sanitation Facilities as defined in the Strategic Framework for Water Services, approved by Cabinet September 2003.
- (b) Projects to be funded must be within the Water Services Development Plan (WSDP) as the Sector Component of the Integrated Development Plan (IDP).
- (c) Projects to be funded must be proven to be viable, feasible, acceptable and sustainable based on a proper feasibility study.
- (d) To ensure sustainable operation and maintenance of the proposed infrastructure the operating, finance and management arrangements must be in place and

committed. (If acceptable to the other sectors this could be a cross-cutting condition.)

- (e) Projects must be implemented in line with the policies as set by the Strategic Framework for Water Services and the legal requirements of the Water Services Act (Act 108 of 1997) as well as the National Water Act (Act 36 of 1998).

3. Department of Transport

- (a) The development of road infrastructure to poor households that would create access to trade, local economic development and essential services and to promote road safety.

Appendix H: Ethical Clearance

Appendix H1: NWU Ethical Committee



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: (018) 299-4900
Faks: (018) 299-4910
Web: <http://www.nwu.ac.za>

ETHICS APPROVAL OF PROJECT

Ethics Committee

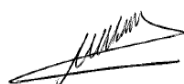
Tel +27 18 299 4850
Fax +27 18 293 5329
Email Ethics@nwu.ac.za
2013/08/08

This is to certify that the next project was approved by the NWU Ethics Committee:

Project title: Investigation into an approach to utilisation of municipal funds																
Project Leader: Prof S Lubbe																
Student on project: Seboka Kopung																
Ethics number:	<table border="1"><tr><td>N</td><td>W</td><td>U</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>6</td><td>9</td><td>1</td><td>3</td><td>-</td><td>A</td><td>9</td></tr></table>	N	W	U	-	0	0	0	0	6	9	1	3	-	A	9
N	W	U	-	0	0	0	0	6	9	1	3	-	A	9		
Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation																
Approval date: 2013/07/30							Expiry date: 2018/07/29									

The Ethics Committee would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the Ethics Committee for any further enquiries or requests for assistance.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Marietjie Halgryn'.

Me. Marietjie Halgryn
NWU Ethics Secretariate

Appendix H2: Letter of permission to conduct research - Department of Local Government and Traditional Affairs



the dlgtla

Department:
Local Government & Traditional Affairs
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

HUMAN RESOURCE MANAGEMENT

Enquiries: L Mabusela
Reference: Research
Telephone: 018 388 2326

Mr S Kopung
P O Box 15161
Littleton
0140

Dear Mr S Kopung

**SUBJECT: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN THE
DEPARTMENT OF LOCAL GOVERNMENT AND TRADITIONAL AFFAIRS**

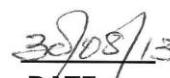
The receipt of your letter dated 13 August 2013 is hereby acknowledged.

Kindly be informed that your request for research in "Investigation into an approach to utilization of municipal funds" has been granted. However relevant officials to be interviewed will have to be consulted well in advance to negotiate the interview dates/times as well as information to be required.

This approval is granted on provision that you submit a copy of your final thesis after completion of research to the head of Department.

Regards,


MR. M P MOTLOGELWA
HEAD OF DEPARTMENT


DATE

Appendix I: Questionnaire Development Matrix

Questionnaire Development Matrix

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
Section 1	Demographic Questions	1.1.	Please tick age group in the appropriate block	21-30, 31-40, 41-50, 51-60, 60+	Discrete	Ordinal	Basic descriptive statistics, single group t test, the z proportions test the X^2 test (Use demographic data to characterise your respondents)
		1.2	What is your gender	Male-Female	dichotomous	Nominal	
		1.3	How long have been working at _____?	1-2, 3-4, 5-6, 7-8, 9-10, 01+	Discrete	Ordinal	
		1.4	Was your involvement in MIG from project or a Business perspective?	Project - Business	Dichotomous	Nominal	
		1.5	How many times were you involved with MIG?	1,2,3,4, 5+	Discrete	Ordinal	
		1.6	Do you have any project management qualification?	Yes No	Dichotomous	Nominal	
		1.7	What type of post is in a work?	Managerial – Non-managerial			

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
Section 2	What are the primary reasons for under-expenditure in MIG?	2.1	Are you familiar with MIG booklet	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	Any member of the X^2 family or correlation tests, e.g., Phi co-efficient, the contingency coefficient and Cramer's V, the lambda co-efficient or the uncertainty coefficient (U) or the Pearson significance test. (Continuum)
		2.2	Are you familiar with conditions for applying for MIG funding	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.3	MIG projects are aligned with MIG allocations	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
	What was the role of all stakeholders in MIG?	2.4	Your functional area of MIG was implemented within the timelines originally stipulated by the project plan.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
	What is the role of project management unit in MIG project implementation?	2.5	The budget assigned to the project was appropriate	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.6	Are you involved in analysis phase where needs and priorities of communities discussed?	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.7	MIG had enough human resources assigned to it in your functional area.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
		2.8	Your functional area received sufficient and timely training.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.9	There is adequate management support and commitment throughout MIG.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.10	Roles and responsibilities of various stakeholders for MIG are well explained.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.11	Qualified manager head PMU	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.12	The link between municipality intervention and national government funded project is explicit	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.13	Was the management buy-in to MIG suitable?	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
		2.14	Satisfactory accountability was placed on the MIG team for their function in the project.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.15	Satisfactory accountability was placed on the business for their function in MIG.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		2.16	Project implemented in municipality are linked to Integrated Development Programme (IDP) implementation.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
Section 3	What are the	3.1	Sufficient change management was performed throughout the phases of MIG	Strongly Agree - Agree- Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	Any member of the X^2 family or correlation tests ...
		3.2	Did you participate in any change	Yes - No ⁷	Dichotomous	Nominal	

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
	issues faced within the procurement division and which that impact municipal spending ?		management event?				
		3.3	Were you part of a change management team during MIG?	Yes - No	Dichotomous	Nominal	Basic descriptive statistics, single group t test, the z proportions test the X^2 test.
		3.4	Have you seen list of project funded by MIG?				
		3.5	How long does it take to appoint contractor after advertising?				
		3.6	Non-performance of contractors and consultant are dealt proactively				
		3.7	Project tender advertisement timelines are adhered to				
Section 4	To what extent does	4.1	Do you know the Municipal's Business processes	Yes – No	Dichotomous	Ordinal	Any member of the X^2 Any member of the X^2 family or

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
under-expenditure directly contribute to inefficient service delivery?		4.2	The MIG strategy was aligned to the business strategy for the current financial year, i.e. the MIG implementation was appropriate to the _____ - business strategy.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	correlation tests, e.g., Phi co-efficient, the contingency coefficient and Cramer's V, the lambda co-efficient or the un-certainty coefficient (U) or the Pearson significance test.
		4.3	The concurrent restructuring and centralisation process at your municipality had a negative effect on the MIG.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		4.4	Basic services and other development needs of the communities are addressed proactively.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		4.5	The municipality ensures that they make ends meet?	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	Any member of the X^2 Any member of the X^2 family or correlation tests, e.g., Phi co-efficient, the contingency coefficient and Cramer's V, the lambda co-efficient or the un-certainty

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
		4.6	Unauthorised expenditure is prevented. Expenditure is according to condition of the Division of Revenue Act (DoRA) and MIG policy.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	coefficient (U) or the Pearson significance test.
		4.7	The municipality liaise with the government to ensure they operate within the legal and political parameters.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		4.8	The level of service that is provided by the infrastructure is clearly detailed.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		4.9	MIG provides support to municipality to supply basic infrastructure development and improve service delivery.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		4.10	There is a link between service and expenditure.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	

Questionnaire section	Types of research questions	Question No.	DEVELOPMENT MATRIX				
			Survey Question /Statement	Response Options	Data Type	Appropriate Data Measure	Appropriate Statistical Test
		4.11	Communities are informed about project status	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		4.12	Municipalities embark on participatory budget approach.	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	
		4.13	Expenditure can improve service delivery by reducing infrastructure backlog	Strongly Agree - Agree-Disagree-Strongly Disagree	Continuum	Scalar (Likert Scale)	

Appendix J: Final Questionnaire

FOR OFFICE USE ONLY: Respondent Code: _____

VOLUNTARY QUESTIONNAIRE FOR INVESTIGATION INTO AN APPROACH TO UTILISATION OF MUNICIPAL FUNDS

Graduate School

North-West University

Researcher S Kopung

Supervisor: Prof S Lubbe, Prof R Klopper and Prof J Meyer

Note to the respondent

- We need your help to understand why there is under-expenditure in municipal infrastructure grants
- Although we would like you to help us, you do not have to take part in this survey.
- If you do not want to take part, just hand in the blank questionnaire at the end of the survey session.
- What you say in this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you as a person.

The questionnaire has three parts:

Part 1 asks permission to use your responses for academic research.

Part 2 asks general personal particulars like your age, gender etc.

Part 3 asks questions relating to under-expenditure in local municipality.

How to complete the questionnaire

1. Please answer the questions as truthfully as you can. Also, please be sure to read and follow the directions for each part. If you do not follow the directions, it will make it harder for us to do our project.

2. We are only asking you about things that you and your fellow colleagues should feel comfortable telling us about. If you don't feel comfortable answering a question, you can indicate that you do not want to answer it. For those questions that you do answer, your responses will be kept confidential.
3. You can mark each response by making a tick or a cross, or encircling each appropriate response with a PEN (not a pencil), or by filling in the required words or numbers.

Thank you very much for filling in this questionnaire.

Part 1: Permission to use my responses for academic research

I hereby give permission that my responses may be used for research purposes provided that my identity is not revealed in the published records of the research.

Initials and surname _____ Postal address:

_____ Postal code: _____

Contact numbers: Home: _____ Cell: _____

No	PART 2: GENERAL PERSONAL PARTICULARS		
	Please tell us a little about yourself	8.	The budget assigned to the project was appropriate
	Please mark only ONE option per question below.		☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
1.	Please tick your age group in the appropriate box	9.	MIG had enough human resources assigned to it in your functional area.
	☐ 21 – 30 years ☐ 31 – 40 years		☐ Strongly agree ☐ Agree

	☐ 41 – 50 years ☐ 51 -60 ☐ 60 +		☐ Disagree ☐ Strongly disagree
2.	What is your gender? ☐ Male ☐ Female	10.	Your functional area received sufficient and timely training. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
3.	How long have you been working at _____? ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10 ☐ 10+	11.	Was the management buy-in to MIG suitable? ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
4.	Was your involvement in MIG from project or a Business perspective? ☐ Project ☐ Business	12.	Satisfactory accountability was placed on the MIG team for their function in the project. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
5.	How many times were you involved with MIG?	13.	Satisfactory accountability was placed on the business for their function in MIG.

	☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10 ☐ 10+		☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
6.	What type of post are you in at work? ☐ Managerial - ☐ Non-Managerial	14.	Project team members are empowered to fulfil their functions. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
7.	Do you have any project management qualification? ☐ Yes ☐ No	15	Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
	PART 3: under-expenditure of municipal funds Please mark only ONE option per question below.	23.	An appropriate planning measure was implemented for MIG. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree

16	Are you familiar with MIG booklet ☐ Yes ☐ No	24	There is adequate management support and commitment through MIG roll out projects ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
17	MIG policies and procedures are available to everyone involved ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	25	Projects implemented within municipalities are linked to Integrated Development Programme (IDP) implementation. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
18	Project management unit (PMU) well resourced. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	26.	The link between municipal intervention and national government funded project is explicit ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
19	Qualified manager head PMU ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	27.	Project processes are developed to ensure the project is delivered effectively ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
20	Conditions for applying for MIG funding are	28.	A mechanism exists where community members are consulted about their

	well explained to all project team members ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree		preferences for services ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
21	Your functional area of MIG was implemented within the timelines originally stipulated by the project plan. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	29.	The original business case adhered to for MIG. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
22	MIG projects are aligned with MIG allocation ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	30.	Priorities of communities are discussed during planning phase ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree

No	PART 3: under-expenditure of municipal funds Please mark only ONE option per question below.	40..	The MIG strategy was aligned to the business strategy for the current financial year that is the MIG implementation was appropriate to the _____ - business strategy. ☐ Strongly agree ☐ Agree

			☐ Disagree ☐ Strongly disagree
30..	Did you participate in any change management event? ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	41.	The concurrent restructuring and centralisation process at your municipality had a negative effect on the MIG. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
31.	Were you part of a change management team during MIG? ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	42.	The municipality ensures that they make ends meet? ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
32.	Sufficient change management was performed throughout the phase of MIG ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	43.	Basic services and other development needs of the communities are addressed proactively ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
33.	The list of MIG funded project is transparent ☐ Strongly agree ☐ Agree ☐ Disagree	44.	Unauthorised expenditure is avoided as per Division Of Revenue Act (DoRA) and MIG policy ☐ Strongly agree ☐ Agree

	☐ Strongly disagree		☐ Disagree ☐ Strongly disagree
34.	How long does it take to appoint contractor? _____ months ☐ < 5 ☐ 6 - 8 ☐ 9 -10 ☐ 11 -12 ☐ 13+	45.	The level of service that is provided by the infrastructure is clearly detailed ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
35.	Non-performance of contractor and consultant are dealt proactively ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	46.	MIG provides support to municipality to supply basic infrastructure development and improve service delivery ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
36.	Project tender advertisement timelines are adhered to ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	47.	There is a link between service and expenditure ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
37.	Do you know the Municipality's Business processes ☐ Strongly agree ☐ Agree	48.	The municipality liaise with the government to ensure they operate within the legal and political parameters. ☐ Strongly agree

	☐ Disagree ☐ Strongly disagree		☐ Agree ☐ Disagree ☐ Strongly disagree
38.	Communities are informed about project status ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	49	Municipalities embark on participatory budget approach ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree
39.	Service delivery reduces infrastructure backlog ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree	50.	Project closure reports are available to every project team member. ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree

Appendix K: Letters requesting information

Appendix L: Content Analysis

Appendix L.1: Definition of Terms and phrases for content analysis

No.	Term or phrases
1.	Supply Chain Management
2.	Procurement and contract management
3.	Expenditure management
4.	Revenue management
5.	Performance indicator
6.	Reliability of information
7.	Tendering processes
8.	Government grant and subsidies
9.	Conditional grant
10.	Performance of contractor
11.	Performance of service provider

Appendix L.2: Content Analysis Results

Rustenburg Local Municipal

2010/11

The report is rated with “unable to obtain sufficient appropriate audit evidence”.

Audit General Report shows that expenditure and VAT payables were overstated by R14,829,111 during 2010/11. Conditional grant of R4,916,536 received was not accounted as revenue, consequently grant and subsidies of R444,485,449 is understated and unspent conditional grants are overstated by R4,916,536. Relating to irregular expenditure, the auditor was not able to obtain sufficient appropriate evidence for awards to suppliers of R237,701,975 made in terms of the municipality SCM policy.

Unauthorised, fruitless and wasteful expenditure of R83,808,982 and R1,928,894 respectively were not resolved

Other findings of the AG reflect that 96% of report indicators are not consistent with IDP as per approved annual performance and the indicators were not well defined and verifiable with SMART targets. Reliability of information was questionable as National Treasury FMPPi requires indicators be accurate enough for its intended use. A total of 76% of the actual reported indicator relevant to basic service delivery, municipal institutional development and transformation, LED, municipal financial viability and good governance.

The following finding were made relating to procurement and contract management

Procurement and contract management, sufficient evidence could not be obtained	
Section No.	Items
49	Bids advertised for minimum days
50.	Bid specification drafted by bid specification committee
51.	Bid were evaluated by bid evaluation committee
52.	Final awards and recommendation of awards made by adjudication committee to the accounting officer
53.	Service provider failed to declare their service to the state
54.	Municipal employees failed to declare their interest

Procurement and contract management, sufficient evidence could not be obtained	
Section No.	Items
55.	Awards made to supplier based on preference points
56.	Awards made to the supplier that scored the highest
57.	Performance of the contractor was not monitored on a monthly basis
58.	Not clear that councillors participated in committee that evaluates, approves tenders/quotations to attended meetings of evaluating committee
59.	Accounting officer failed to implement measures to combat the abuse of SCM system
60.	Contracts extended or modified to an extend that competitive bidding processes were circumvented

Expenditure and revenue management	
Section No.	Item
61.	Municipality did recover unauthorised irregular or fruitless and wasteful expenditure
62.	No steps taken to prevent unauthorised irregular or fruitless and wasteful expenditure
63.	No effective system of expenditure control
64.	No management, accounting and information system which recognises expenditure when it is incurred
	Money owed by the municipality not paid within 30 days of receiving the invoice.
68.	No management, accounting and information system which recognises expenditure when revenue it is earned, accounted for debtor / accounted for receipt of revenue

2011/12

The municipality did not have adequate system in place to maintain accurate billing of several of revenue and did not apply correct interest rate as per credit control.

Procurement

There was an irregular expenditure of R73,466,505 made to supplier in terms of municipality's supply chain management.

Contracted service expenditure of R79,402,212

Unspent conditional grant, there was an un-reconcilable difference of R6,285,222 between amount received from North West Department of Human Settlement and unallocated grant of R18,114,715 included in unspent grants of R244,204,714

Unauthorised, irregular and fruitless and wasteful expenditure

- Irregular expenditure of R73,466,505 and unauthorised expenditure of R449,811,217 were incurred during the financial

Usefulness of information

- Annual performance report of 74% of the planned target not achieved were not disclosed according to Section 46 of Municipal System Act, 2000 (Act No 32 of 2000)
- It was found that total of 100% of the reported indicators were not consistent with the indicators as per approved annual performance.

Reliability of information

- The information was not verifiable, report performance relevant to service delivery. This was due limitation of information system

Procurement and contract management	
Section No.	Item
40.	There was no evidence why services and goods value above R200,000 were procured and approved by accounting officer.
41.	Bid specifications were drafted in a biased manner disadvantaging potential service providers.
42.	No evidence that bid committee drafted bid specification
43.	Bid advertised for required minimum period of days
44.	Bid was evaluated by bid committee officials
45.	Contracts were awarded based on the pointed received.

Procurement and contract management	
Section No.	Item
46.	Bid adjudication always done by the committee composed through SCM regulation 29(5)(b)
47.	Awards given to bidders that were recommended by the bid evaluation committee without ratification by the accounting officer.
48.	Councillor of the municipality did not participate in committee evaluating or approving tendering or quotation.
49.	Preference point system was applied in all procurement of goods and services above R30,000 as required Section 2(a) of Preferential Procurement Policy Framework and SCM regulation 28(1)(a)
50.	Contracts and quotation were awarded to bidders with the highest points
51.	The contract performance and monitoring measures and methods were insufficient to ensure effective contract management.
52.	Contracts were only modified or extended only after tabling the reasons for the amendments
53.	Construction contracts awarded to CIDB registered contractors
54.	Contracts and quotations were awarded to providers who are tax compliant.
55.	Contracts and quotations were awarded to providers who submitted a declaration on where they are employed by the state or connected to any person employed by the state
56.	Awards were made to providers who are persons in the service of the municipality and whose directors are in service of the municipality.
57.	Awards were made to providers who are persons in the service of the state institution or whose directors are in service of other state institution.
58.	SCM officials/ other SCM role players who close family member had a private or business interest in contracts awarded
59.	Declaration of interest by municipal employees
60.	Accounting officer implemented measures to combat abuse of SCM system.
61.	A list of accredited prospecting providers was not in place for procuring goods and services

- Expenditure management - money owing by the municipality was not always paid within 30 days.

- Conditional grants - the municipality did not register its master plans for bulk infrastructure with Integrated National Electrification Programme (INEP) as required by Division of Revenue Grant Framework, Gazette No. 34280
- Revenue management – sufficient audit evidence could not be obtained that revenue that had been reconciled on a weekly basis as required by Section 64(2) (h) of MFMA.

2012/13

Unspent conditional grant – there was an un-reconcilable difference of R6,285,222 between R18,114,715 grant received from Department of Human Settlement

Unauthorised and irregular expenditure

- There was unauthorised expenditure of R614,124,964
- There was an irregular expenditure of R70,492,824

Report on other legal and regulatory requirements

- The FMPPi requires the performance indicators be well defined and verifiable and the targets be SMART
 - A total of 100% of the targets relevant to service delivery were not specific in clearly identifying the nature and the required level of performance;
 - A total of 100% of targets could not be measured
 - A total of 100% of target were not well defined
 - A total of 100% of the targets were not verifiable

Budget – expenditure was incurred in excess of limits of the amounts provided for. Quarterly statements were not submitted to the council within 30 days after each quarter.

Procurement and contract management (rattled with sufficient audit evidence could not be obtained)	
Section No.	Item
51.	Bid specification drafted by bid committee
52.	Competitive bidding not advertised for minimum period of days
53.	Bid were evaluated by bid committee

Procurement and contract management (rattled with sufficient audit evidence could not be obtained)	
Section No.	Item
54.	Contracts were awarded to bidder based on points given
55.	Bid adjudication was always done by bid composed in accordance with SCM Regulation 27
56.	Awards were not made to bidder other than those recommended by bid evaluation committee without ratification by the accounting officer.
57.	Councillors of the municipality did not participate in committee evaluating or approving tender/quotation in contravention of Section 117 of the MFMA
58.	There was no evidence that preference point system was applied in all procurement good and service.
59.	There was no evidence that the contracts were awarded to suppliers based on preference points that were allocated and calculated
60.	Contract that scored the highest points
61.	Contracts were only extended or modified after tabling the reason for proposed amendments.
62.	Not all extension or modification on the contract were approved
63.	The performance of the contractors was not monitored on a monthly basis.
64.	The contract performance and monitoring measures and methods were insufficient to ensure effective contract management
65.	Some contracts were awarded with bidder complying with SARS.
66.	Contracts were awarded to bidders who did not submit declaration on whether they are employed by the state or connected to any person employed by that state.
67.	There was no evidence that the accounting officer applied any effective measures to combat abuse of SCM
68.	A list of accredited service provider was not in place for procuring services and goods
69.	The list of prospective contractor was not updated quarterly to include new supplier that qualify

Revenue management – interest was not charged on all accounts in arrears as required by Section 64(2) (g) of MFMA

2013/14

Predetermined objectives

- A total of 24% of reported objectives were not consistent with those in strategic plan. This was due to lack of information systems recording and documenting actual achievements against targets.
- A total of 100% of the indicators were not well defined and not verifiable (Basic service delivery)
- reliability of information was questionable

Budget, expenditure was incurred in excess of the limits of the amounts provided in the vote.

Expenditure management – reasonable steps were not taken to prevent unauthorised and irregular expenditure.

Human resource management

- Job description was not established for all posts in which appointments were made during the current year
- Sufficient appropriate audit evidence could not be obtained that senior managers dismissed for financial misconduct in the previous position and re-appointed before the expiry of 10 years in contravention of section 57A pf MFMA

Procurement and contract management for 2013/14	
Section No.	Item
53.	Goods and services of transaction value of R200,000 were procured without inviting competitive bids
54.	The performance of contractor or provider was not monitored on a monthly basis
55.	The contract performance and monitoring measures and methods were insufficient to ensure effective contract management
56.	Awards were made to providers who are in service of other state institution
57.	Failure to disclose by municipal employees as persons in the service of the municipality

Strategic planning and performance	
Section	Item

No.	
58.	Municipality did not give effect to its IDP
59.	No mechanism to monitor and review performance management system
60.	Performance management system did not provide for monitoring, measuring and review at least once per year.
61.	Key performances were not set in IDP
62.	Measurable performance indicators for the financial year were not set for the IDP
63.	Performance management system did not provide for steps of improvement where performance targets they were not met
64.	Revisions to the service delivery and budget implementation plan were not approved by the council
65.	Performance management system and related controls were not in place

Tlokwe Local Municipality

2009/10

Government grants and subsidies were reported incorrectly and AG argues that conditional grant is revenue once the conditions are met. However, the municipality recognise this as revenue and overstated the actual conditional grant expenditure of R46,062,122.

Concerning unauthorised, irregular and fruitless and wasteful expenditure, there was undisclosed unauthorised expenditure R6,671,662. Unauthorised expenditure of R8,473,418 resulting in overspending on budgeted amount. Contrary to MFMA Circular No. 29 the bid was awarded to a contractor using predetermined cost estimates, totalling upto R24,428,794 as an irregular expenditure. SCM regulations were not followed resulting an expenditure of R6,841,156 was incurred. The following were found by the AG,

- Management and staff were not assigned at appropriate level to exercise authority and responsibility over financial reporting
- There was no effective human resource recruitment and training policy
- Accounting officer did not exercise oversight responsibility over financial reporting and internal control
- No internal control system to enable internal control responsibilities

2011/2012

Unauthorised, irregular and fruitless and wasteful

- Unauthorised expenditure of R152,515,522 and the unauthorised expenditure of R83,419,225 last year was not dealt with yet
- Irregular expenditure of R142,735,673 was incurred in the current year and R172,810,149 was incurred the previous year.
- Fruitless and wasteful expenditure of R2,823,067 was incurred in the current year and R1,440,792 incurred in the previous year

Usefulness of information

- Annual performance report where planned targets were not achieved.
- A total of 59% of the reported objectives, 65% of the reported indicators and total of 83% of the reported targets are not consistent with the objectives, indicators as per approved IDP. This is due to lack of monitoring and control over the reporting documents by management.

- 45% of indicators relevant to community services, infrastructure and Housing and planning were not well defined
- 60% of indicators relevant to Community services, planning were not verifiable
- 60% of indicators relevant to Community services, planning were not specific in clearly identifying the nature and the required level of performance.
- 64% of indicators relevant to Community services, planning could not be measured

Procurement and contract management (Tlokwe Local Municipality Report 2011/12)	
Section No.	Item
35.	Goods and services below R200,000 were procured without obtaining the required price quotation
36.	Goods and services above R200,000 were procured without obtaining the required price quotation
37.	Invitations for competitive bids were not always advertised for a required minimum days.
38.	Preference point system was not always applied in all procurement goods or services above R30,000
39.	Contracts were awarded to bidders based on preference points that were not allocated and calculated
40.	Contracts were awarded to bidders that were not tax-compliant
41.	Awards were made to providers who are persons in the service of other state institutions or whose directors / principal shareholders are persons in service of other state.
42.	Persons in the service of the municipality failing to disclose interest
43.	Persons in service of municipality who had a private or business interest in contracts awarded by the municipality failed to disclose such interest
44.	Prospective list of providers not updated quarterly to include new suppliers that qualify for listing
45.	Awarding construction contracts to non-CIDB registered contractors
46.	Contractors were awarded to bidders that did not score the highest points

Expenditure management – the accounting officer did not take effective steps to prevent unauthorised expenditure, irregular expenditure, fruitless and wasteful expenditure as required by Section 62(1) (d) of MFMA. Unauthorised expenditure, irregular expenditure, fruitless and wasteful expenditure was not recovered from the liable person.

2012/2013

Unauthorised, irregular and fruitless and wasteful expenditure

- Unauthorised expenditure of R1,221,309 was incurred in the current year and R234,026,726 in the previous year
- Irregular expenditure of R69,386,692 for current year and R295,283,812 from the previous year
- Fruitless and wasteful expenditure from the prior year of R1,440,793

Usefulness of information

The FMPPPI requires that performance indicators be well defined and verifiable and targets be SMART

- A total of 35% of the indicators were relevant to the infrastructure and Housing and planning were not well defined
- A total of 55% indicators were relevant to the infrastructure and Housing and planning were not verifiable
- A total of 65% indicators were relevant to the infrastructure and Housing and planning were not specific.
- A total of 61% indicators were relevant to the infrastructure and Housing and planning were could not be measured

Budget – expenditure was incurred in the excess of the limit of the amount and monthly statements were not timely submitted to the mayor and relevant authorities

Procurement and contract management	
Section No.	Item
35.	Goods and services below R200,000 were procured without obtaining the required price quotation
36.	Goods and services above R200,000 were procured without obtaining the required price quotation
37.	Awards were made to providers who are in the service of the municipality
38.	Person in the service of the municipality who had a private or business interest in contracts awarded
39.	Contracts awarded to a person who is in service of the municipality and whose close family members had private or business

Procurement and contract management	
Section No.	Item
40.	The list of prospective contractor was not updated quarterly to include new supplier that qualify.

Expenditure management – the accounting officer did not take effective steps to prevent unauthorised and irregular expenditure. Payments were made without approval of the accounting officer.

Conditional grant – the municipality did not submit project registration forms for the project it intends implementing in the financial year 2013/14 to department of local government and national department (CoGTA).

Section No.	Human resource management Items
48.	Four senior managers did not have higher qualification as required by Regulation 6 and 7 of Municipal Regulations on Minimum Competency Level.
49.	Some finance official at middle management did not the higher education qualification as required by regulation 8 and 9 of Municipal Regulations on Minimum Competency Level.
50.	Bonuses were awarded to municipal manager and senior manager directly accountable to municipal manager without performance evaluation. This in contravention with Section 57(4)(b) of MSA

2013/14

Predetermined objectives
Strategic performance and management

Procurement and contract management	
Section No.	Item
36.	Contracts were extended or modified without following the correct procedure
37.	No sufficient audit evidence that contract were extended or modified by properly delegated personell from SCM
38.	Performance of contractors and providers was not monitored on a monthly basis
39.	The contract performance and monitoring measures and methods were insufficient to ensure effective contract management
40.	Awards were made to providers whose directors / principal shareholders are in the service of the municipality.
41.	Awards were made to providers who are in the service of other state institutions or whose directors / principal shareholders are in the service of other state institution.
42.	Failure to disclose by municipal employee

Expenditure management

- Reasonable steps were not taken to prevent irregular expenditure
- Money owed to municipality was not paid within 30 days
- Payments were made from the municipality's bank without approval of the accounting officers

City of Matlosana

2011/12

- Unspent conditional grant – there was unspent grant of R76,044,287 (2011: R15,220,774)
- Irregular expenditure was due to the municipality making payment in contravention of Section 125 of MFMA amounting to R25,306,656
- unauthorised fruitless and wasteful expenditure of R9,688,035 for current year and R5,720,251 from prior years had not yet been resolved

Procurement and contract management (City of Matlosana, 2011/12)	
Section No.	Item
57.	Goods and services below R200,000 were procured without obtaining the required price quotation
58.	Goods and services above R200,000 were procured without obtaining the required price quotation
59.	Bid specification were drafted in an unbiased manner
60.	Bid specification were drafted by bid specification
61.	Invitation for competitive bids were not always advertised for a required minimum days.
62.	Bids were evaluated by bid evaluation committee which were composed of officials from municipality requiring goods and services and at least one SCM practioners
63.	Contracts and quotation were awarded to bidders based on points given to criteria
64.	Bid adjudication was always done by committee which were composed in accordance with SCM regulation 29(2)
65.	Preference point system was not always applied in all procurement goods or services above R30,000
66.	Contracts were awarded to bidders based on preference points that were not allocated and calculated
67.	Contracts awarded to bidders that scored the highest point in the evaluation process
68.	Contracts were only modified or extended only after tabling the reasons for the

Procurement and contract management (City of Matlosana, 2011/12)	
Section No.	Item
	amendments
69.	All extension or modification to contract was approved by a properly delegated official.
70.	The performance of the contractor or provider was not monitored on a monthly basis
71.	The contracts performance and monitoring measure and methods were insufficient to ensure effective contract management
72.	Contracts awarded to bidders that are not tax compliant
73.	Contracts given to contractors who did not submit their declaration
74.	SCM officials/ other SCM role players who close family member had a private or business interest in contracts awarded
75.	Allegation of failure to comply with SCM system lay against officials.
76.	Prospective providers were not invited to apply for such listing prospective.
77.	The municipality did not implement a SCM policy as required by section 111 of MFMA
78.	Not all contracts were awarded according legislative requirements that procurement is fair, equitable, transparent and competitive

Expenditure management	
Section No.	Item
79.	Money by owed by the municipality was not always paid within (30) thirty days
80.	No management, accounting and information system which recognises expenditure when it is incurred
81.	An effective system of expenditure control, including procedures for approval, authorisation, withdrawal and payment of funds was not in place
82.	The accounting officer did not take effective steps to prevent unauthorised expenditure, irregular expenditure and fruitless and wasteful expenditure

Appendix M: MIG Allocation for North West Province from 2009/10 to 2013/14 financial years

	2009/10	2010/11	2011/12	2012/13	2013/14
Allocation					
Bojanala Platinum	-	-	-	-	-
Moretele	61 021 000.00	71 266 000.00	85 711 979.86	103 975 000.00	98 713 000.00
Madibeng	116 553 000.00	136 309 000.00	163 939 541.44	198 870 000.00	220 456 000.00
Rustenburg	154 559 473.59	164 402 355.60	138 809 000.00	166 946 649.53	202 518 000.00
Kgetlengriver	8 523 662.94	11 959 000.00	13 802 000.00	16 599 715.46	20 137 000.00
Moses Kotane	81 239 999.00	99 184 457.84	84 855 000.00	102 055 588.34	123 800 000.00
	421 897 135.53	483 120 813.44	487 117 521.30	588 446 953.33	665 624 000.00
Spend					
Bojanala Platinum	-	-			
Moretele	11 440 143.23	57 530 379.56	48 454 302.94	94 073 924.30	98 713 000.00
Madibeng	68 021 267.00	37 351 518.35	163 939 541.44	198 870 000.00	220 456 000.00
Rustenburg	52 302 473.20	59 873 261.86	138 809 000.00	149 590 148.44	202 518 000.00
Kgetlengriver	8 523 662.94	10 451 860.87	11 089 624.30	7 771 682.46	19 662 088.53

	2009/10	2010/11	2011/12	2012/13	2013/14
Moses Kotane	32 829 900.60	43 938 450.29	28 552 168.29	83 189 304.27	62 421 194.55
	173 117 446.97	209 145 470.93	390 844 636.97	533 495 059.47	603 770 283.08
	2009/10	2010/11	2011/12	2012/13	2013/14
Allocation					
Ngaka Modiri Molema	-	-	-	-	-
Ratlou	15 312 234.20	15 027 000.00	18 072 662.69	21 923 000.00	38 796 000.00
Tswaing	11 123 686.86	15 609 779.96	17 434 000.00	20 967 660.80	25 435 000.00
Mahikeng	25 291 000.00	29 417 000.00	35 380 455.97	42 919 000.00	50 039 000.00
Ditsobotla	18 202 000.00	21 113 000.00	25 393 308.74	30 804 000.00	32 029 000.00
Ramotshere Moiloa	16 210 000.00	18 781 000.00	22 588 127.94	27 401 000.00	20 995 000.00
	86 138 921.06	99 947 779.96	118 868 555.34	144 014 660.80	167 294 000.00
Spend					
Ngaka Modiri Molema	-	-			
Ratlou	2 101 471.74	6 396 735.82	14 856 870.26	15 514 866.31	30 255 863.45
Tswaing	10 573 906.90	4 512 935.72	4 134 444.64	11 595 525.59	18 634 941.73
Mahikeng	16 910 996.22	25 122 612.87	17 444 746.19	15 217 764.52	43 838 590.47
Ditsobotla	14 224 509.51	19 759 358.95	10 937 475.36	30 804 000.00	13 614 737.24

	2009/10	2010/11	2011/12	2012/13	2013/14
Ramotshere Moiloa	12 049 841.52	4 339 720.61	17 538 017.36	10 481 604.00	20 995 000.00
	55 860 725.89	60 131 363.97	64 911 553.81	83 613 760.42	127 339 132.89

	2009/10	2010/11	2011/12	2012/13	2013/14
Allocation					
Dr Ruth Segomotsi Mompati	65 189 000.00	76 149 000.00	91 584 388.42	111 098 000.00	97 339 000.00
Kagisano-Molopo	17 291 322.00	13 614 000.00	24 613 000.00	29 856 000.00	28 346 000.00
Naledi	8 700 000.00	9 984 000.00	12 008 069.63	14 567 000.00	22 675 000.00
Mamusa	11 931 539.97	11 473 000.00	13 799 006.86	29 856 000.00	22 496 000.00
Greater Taung	24 283 627.87	22 428 000.00	26 974 856.23	32 722 000.00	38 695 000.00
Lekwa-Teemane	6 487 565.15	9 531 000.00	10 958 000.00	13 179 145.45	15 987 000.00
	133 883 054.99	143 179 000.00	179 937 321.14	231 278 145.45	225 538 000.00
Spend					
Dr Ruth Segomotsi Mompati	65 189 000.00	76 149 000.00	91 584 388.42	83 571 856.04	97 339 000.00
Kagisano-Molopo	4 779 368.95	13 614 000.00	10 320 704.08	26 543 587.00	27 335 223.98
Naledi	6 594 711.62	4 832 919.03	12 008 069.63	14 567 000.00	18 513 471.65

	2009/10	2010/11	2011/12	2012/13	2013/14
Allocation					
Mamusa	9 971 000.00	10 027 055.91	6 479 492.91	26 543 587.00	14 249 315.00
Greater Taung	10 108 147.81	22 428 000.00	16 350 794.03	8 777 405.06	38 695 000.00
Lekwa-Teemane	6 487 565.15	6 570 070.65	8 186 271.76	8 410 506.57	14 521 405.95
	103 129 793.53	133 621 045.59	144 929 720.83	168 413 941.67	210 653 416.58

	2009/10	2010/11	2011/12	2012/13	2013/14
Allocation					
Dr Kenneth Kaunda					
Ventersdorp	14 728 925.65	22 570 303.19	20 046 170.37	24 317 000.00	23 087 000.00
Tlokwe	35 686 309.48	28 428 000.00	34 190 507.08	41 317 000.00	41 475 000.00
City of Matlosana	71 596 000.00	83 652 000.00	100 609 180.22	122 046 000.00	41 475 000.00
Maquassi Hills	20 347 000.00	29 380 636.70	28 415 392.54	34 470 000.00	28 418 392.54
	142 358 235.13	164 030 939.89	183 261 250.21	222 150 000.00	134 455 392.54
Spent					
Dr Kenneth Kaunda					
Ventersdorp	8 503 696.81	12 357 474.21	11 561 831.94	20 680 205.86	16 889 584.78
Tlokwe	24 447 000.00	12 925 518.84	18 580 463.20	14 213 563.05	14 213 563.05
City of Matlosana	71 596 000.00	75 384 883.51	49 961 502.26	56 503 144.07	14 213 563.05
Maquassi Hills	14 592 363.00	21 291 765.57	28 415 392.54	34 470 000.00	28 418 392.54
	119 139 059.81	121 959 642.13	108 519 189.94	125 866 912.98	73 735 103.42

Appendix N: Input from focus group interview

The focus group started with the moderator (researcher) outlining the objectives of the interview. The presentation is attached

The researcher mentioned the study covers North-West (NW) Province's local municipalities MIG underspending. The study then compares NW with Free States (FS), Limpopo (L) and Mpumalanga (MP). Three local municipalities, namely City of Matlosana, Rustenburg and Tlokwe are further studies. The rational of choice was based on staff complement and MIG Allocation. Three metros were also studied.

The study focuses on MIG spending capacity. These unspent funds were transferred back into Treasury.

Table 0-1: Extract from the Framework

The findings have highlighted that municipal employees considered the following elements as key to the under-utilisation of municipal funding allocated:

- a) Project management qualification,
- b) Enough human resources,
- c) Project team leaders being sufficiently monitored to ensure they were fulfilling their functions,
- d) Projects were implemented within municipalities are linked to Integrated Development Programme (IDP) implementation,
- e) Sufficient change management was performed throughout the phases of the MIG,
- f) Communities are informed about project status and,
- g) There being a link between service delivery and expenditure.

The items in table 53 were discussed. The team were randomly named P1 – director; P2 – deputy director, P3 – project manager, P4 – assistant director and moderator (M), being the researcher.

No.	Contribution	By Who
1.	The background of the study is about underspending of MIG grant by local municipalities. The focus area is the North West Province, population and rationale for choice of sample for quantitative and qualitative studies, the Framework to the group as per Chapter 7, item 7.3.6 page. The presentation is attached as Appendix N.1 M also stated that the group interview can be conducted without revealing the members of the group. Or the names can be included in the final report.	M
2.	What do you prefer?	P1
3.	Did you get permission to conduct research from Coagta?	P2
4.	The permission was granted by the provisional department. A copy will be sent the group/	M
5.	If the permission was granted, then we still prefer to use initials for confidentiality	P 2
6.	I decided to perform MIG allocation per district, and then zoom into three local municipalities, namely Rustenburg, Tlokwe and City of Matlosana. The choice was based on staff complement and MIG allocation.	
7.	I want clarity on whether the study was based on official or councils politicians.	P3
8.	The study is based on the officials	M
9.	Project management qualification is not the main issue relating to underspending in MIG grant. We have not appointed any PMU manager that does not have project management qualification. The issue is the capacity	P 4

No.	Contribution	By Who
	and vacancies. All project management duties are performed by PMU and sometimes without support.	
10	Check the composition of PMU office. They have four members, which are PMU manager, technician, data capturer and financial guy. Data capturer needs some level of project management in order for them to capture the project correctly. If they understand it, they end up waiting for PMU Manager.	P 1
11	The capturer must be able to write and release reports that pertain to project implementation and quality. The reports must have Poe's to support what has been done.	P4
12	PMU manager and technicians must be exposed to project management and process. The same goes for the data capturer.	P 1
13	The ideal structure of PMU constituent of PMU Manager, technicians, financial personnel and data capturer. Financial and data capture perform administration. These would depend on size of the municipality and project.	P4
14	PMU Manager and technicians master project management.	P 1
15	Waiting for you to finish	P2
16	I agree with the basis for your choice of local municipality based on the highest allocation. However, your choice is only urban municipality. What about the rural municipalities such as Greater Taung, Molopo-Kagisano. I suggest compare different scenarios since they are totalling different. Rural municipalities have lots of villages. City of Matlosana for instance can spend 100% of their allocation while Greater Taung would spend less. Concentration of your study is official but you must consider politicians. MIG started in 2004/5 and 10 years down the line the biggest problem is politicians and councillors. Before spending, all projects must be approved in order to spend on allocation. The project must be registered on time, the service provider must be appointed; the adverted must be issues and placed; call for tenders. They must have capacity to roll out the project either internal or outsource externally. In a normal situation the project are register on time. Time frames are important. With July being the start of the financial	P 2

No.	Contribution	By Who
	year. The advert must be placed in January (six month before) to ensure that the Service Provider is appointed on time. The officials do not meet the time frame because of poor or lack of planning. January, the project must be registered. Service provider must be appointed, consultants start; during March/April the advertise must be placed. End of June, all the approval and appointments must be done. July is the beginning of financial year and project must start. This is not happening. Why it is not happening? Many things must be addressed. There are two kinds of projects Road and Water and Sanitation projects. Water and Sanitation projects (Sector department is Department of Water and Sanitation, DWS) require technical report submission before it can start. For other projects, investigation and site report must be submitted and approve before project registration. However, municipality do not do them. They delay, service provider delayed, contractor on site. This affects expenditure. If time frames are not adhered the plan falls off. If project is registered, service provider approved and if they do not appoint on time. The role of consultants is to design and prepare tender documents. Delay in appointing a consultant has domino effect of project time frame. The reason why consultants are appointed later. Municipalities use to appoint consultant on rooster to do the job. They were using them on rotation basis. They will wait for the next job, ask for presentation. However, consultants charge Engineering Council of South Africa (ECSA) fee. Some of them give discount to local municipalities and they get appointed because they are the cheapest. To appoint a contractor takes 2-3 months and some cases 5-6 months. 3. The contractor / consultants are appointed on the basis that councillors have vested interest. Though MM appoints, his/her decision is influenced. He/she is told who to appoint. This creates a problem for the Technical staff they will have to change their reports to appoint consultant/constrictor that was rated number 5 instead of number 1 appointee. 4. Appointment of the wrong contractor, the one who does not have	

No.	Contribution	By Who
	experience in road construction nor have plant	
17	They are appointed in the name of BBEE	P1
18	Nodded	P3
19	Nodded	P4
20	They even know the plant? Why appointed? Vested interest. Mayor's cousin / relative / partnership. The contractor that is appointed is incompetent. The following things must be checked first, • Knowledge of plants and whether they have • Manpower • Skills • Bank balance • Past performance How they did they perform in the first project. It is a requirement that contractor should be CIDB-registered. Even when they are not, they still get appointed. Their capabilities are not known. Stopping the project half way and abundant it. The same person leaves one provinces, changes the name of the company and move to another province. Vested interest. After two payments they vanish. Now the project must be terminated, re-advertise and get another contractor on side. All the members of PMU are appointed on a three-year contract. They are qualified and their performance during the first year is good until they are politically influenced. The third year their performance deteriorate. They are not told whether their contract will be renewed or not. They start looking for jobs.	P2
21	The municipality must be capacitated since this creates problems. Good PMU, Supply Chain Management / procurement must stick to procurement plan. This will assist in implementing the project on 1 st July. If this done the project would run smoothly.	P3

No.	Contribution	By Who
22	Councillors still do it. They do not understand MIG process. IDP review/approval process is done during May/June. These are not aligned properly. May/June is IDP review/approve and 1 st July is the beginning of financial year. The project must be register, prioritise before May/June. This process is not followed. The projects are changed while they are being implemented. Councillor re-prioritise project during the financial year.	P4
23	IDP May/June review/approve looks is community's needs. MIG is transfer in July. DWS process must be followed. Communities are not involved in the process.	P 1
24	Some municipalities do not have project management expertise and can't appoint PMU Manager (reference is made about MOLOPO). They are 500km away. Projects go on without anybody checking them. PMU no appointed in the rural municipalities. Some of PMU members are seconded from municipalities, there are problems within the PMU such as working conditions, position and inspite of the having project management qualifications, they are not allowed to do their work. Salary is not good either. They are appointed on a three year contract. 2) Politician influences the decision and the appointee become frustrate. Their performance is good during the first year, going down the second. They become frustrated during the third year as they are not told whether the contract will be extended, his time is spent looking, performance goes down. Second staff from local municipality.	P 2
25	The whole team is on contract	P1
26	Nodded	P3
27	The municipal can spend 100% of their allocation but when the contract of PMU official is not renewed, performance goes down. The working environment. Take one year to master the process, expenditure being 100% and goes less than 50%. There is no job security for performer – technical	P2

No.	Contribution	By Who
	people. The next election 2016 is going affect the performance of PMU. Contract not renewed. Going to affect performance. Prioritisation of IDP/MIG projects. Projects that are implemented should be in IDP. But the new councillor does not prefer priority list of the previous councillor. Prioritisation often list should be finalising by May 2016 and be settled in June 2016 and implementation of priority list by July 2016. Register MIG project process takes 9 months.	
28	There is no induction of councillors. They must be full inducted on MIG work. This will avoid any sabotage of MIG project. The priority list must be adhered to. SALGA should do induction on the oversight function more than focusing on their benefits.	P 1
29	SALGA should better work with MIG and improve spending. MIG is for communities. Since 1994, we are now in 21st new era, why consultants? The municipalities do not have capacity to implement project. Consultant act on their behalf. However, the calibre of the consultants is questionable in terms of knowledge and qualifications. Some municipalities choose consultants that owned by politician or commonly used in North West Province. It puts pressure on professionalism and ethics. Consultants are no primarily motivated by money and not asking the interest of the client. Consultant should visit the project, check implementation of the project. Some of the projects are not visited. For big projects, they must be resident engineer that is responsible for day-to-day. This becomes a problem. 1) Not supervising the work. 2) Appointing incompetent contractor, lacking of plant, stall projects not having digging rock equipment (not equipped to break rock). They have priced it (rock blast). Consultants are not enforcing their authority. Contractors asking for additional time. Project getting delayed and not spending fund. Invoking penalties for not being on time. Conditions for asking for additional time include things like weather (2-3 days) during road construction and not for blustering. If penalties apply.	P2

No.	Contribution	By Who
	Cashflow, do not spend the 5) Penalties are causing delay even if the request was granted. The other problem is high staff turnover. 6) People are not told about PMU responsible. It is the responsibility of Ward Councillor and MMC to tell the communities. Ward Councillor and MMC should be there all the time to inform the communities. There is project steering committee (PSC). It constituent of Technical staff member, consultant, contractor and community member. PSC takes charges and report on the project status. 7) Communities causing protest cause delay. IDP develop priority list. Community come and them not knowing how the priority is done. The needs of the community are not report. The community may want water while the road is under construction. At least they must be told that they will get the water (project) the following year. They end up delay the road project. Water project might be infrastructure and the source not identified	
30	What do you mean by source?	M
31	Water source	
32	MIG is for backlog. IDP – identifying road and when it goes to council meeting then IDP process prioritise the projects. And unfortunately they do not go back to communities to tel them about the priority list.	P2
33	Legally the municipalities must report to communities. Ward Committee are not glued up on MIG process. Cluelessness on issues. Community Liaison Officer (CLO) must monitor the work but instead they report about how many people have been employed 3 disable, 10 women and that people have not received their wages	P 1
34	Way practice. IDP is supposed to be done by the community however in most cases it is cut and paste. Wish list of community needs. This encourages protest since there is conflict between needs and wants of the	P2

No.	Contribution	By Who
	communities. The communities must be told that water project take long. 7 definitely. The province has spent more than R1 billion on service delivery includes amongst others roads, high mass light, VIP all done. Always spending money and these projects are handed over to the community. The councillor must advertise their achievement in terms of service delivery. New project must publicise. The community must be told about the projects, government funded. Instead of community wanting road and then they destroy the school. Later they want the same school to repaired or rebuilt. It is must note that the government cannot satisfy all the needs of the community at one time. Expenditure has improved with increasing budget. The allocation for 2015/16 is R1.6 bn. The municipalities must have the correct information and advertise their achievement. The money going back to treasury. (Clarifying what M has said earlier). It is no longer return but municipalities allowed to spend it within 1 year. If not 100% spend there will be no transfer. Project delayed due to late implementation, three month delay. If not spending by the end of January by 40%, allocation will be withheld. National Treasury makes three transfers, one in July, second in October and last one in March. This allows municipal cashflow projection. If funds are not spent by January, one can determine whether total spending would be done.	
35	If the following transfer is not made, the municipalities would have carry cost to complete project. The municipal must ask for roll over. This can be approve or not depending on the reason for not spending.	P4
36	The greatest problem is that Treasury Department is pushing expenditure at the expense of quality.\R14m rush to spend under time pressure for instead.	P1
37	Nodded	P4
38	Some municipalities are put under administration. Administrator spends six months studying the municipality. One person instead of team. The projects	P2

No.	Contribution	By Who
	are stalled, resulting in protest. MIG fund use for other things including salaries. Legislation must be in place to have MIG funds ring-fenced. Province does not have the power once the transfer has been done.	
39	PMU does not have power They implement what they are told. They implement the project according the way they are told. Qualified people's way is ignored. Example is road, the councillor might it want to paved instead of tarred. Too professionalism may result in one losing their jobs. Quality of project not of acceptable standard. That is one of the reason one finds potholes. They are afraid to tell the truth and resulting in quality being compromised	P 4
40	Not identifying funded outside municipality.	P1
41	Because of delaying SCM /re-prioritising. Delays with projects taking one year to register, escalation cost. This invariable result in municipality reduces the project scope. Instead of constructing 5km road they end constructing 2,5km. This is result on improper planning	P3
42	Officials are messed up AG concepts. Qualified and unqualified audit reports. They end up appointing unqualified people.	P1
43	MIG polices and administration by COGTA. The challenge is that PMU is not independent. PMU is funded by 5% of MIG Allocation. 5% is used for technical appointments, equipment, porta camps and to implement MIG projects Though PMU are not paid by municipalities, they end acting like municipal officials PMU has no say in the award of tenders/ projects. They are told what to do since National Treasury set standard and norms for PMU in terms of qualification and salaries. Shorting comings of MIG PMU must act independently. DWS is responsible for water project and not	P2

No.	Contribution	By Who
	local government. Road is the responsibility of Road department, public works and DME is responsible for electrification. DWS is responsible for identifying the source. However, in road projects, sector department is not involved. The municipal is responsible for execution. They decide on the type of the road, tar, doubled seal or build pave. The municipalities are constructing different types of road yet for the same traffic. Without involving Sector department, there can be no cost varying and cannot attain any cost savings. An example is constructing a community hall for rural community for R10 million for community of 300 members (small community), another community is charged more because the consultants are paid a percent on the project cost. MIG is spending billions of rands in providing infrastructure. Municipality have no maintenance budget for the same projects. MIG project are later supposed to be repaired through the municipal cannot spend their equitable share. They use it for something. City of Matlosana has budget for their maintenance. Sewage operation, all municipality use equitable share for MIG project maintenance. We have suggested many a time to municipalities to use VAT (14%) that they claim from SARS for maintenance of project. This rebate used to be for water projects but now it for the whole allocation. This will increase the life span of the project. For example on R100million allocation, they can claim R14 million. The amount is claimed but not used for maintenance. After five years the road is dilapidated. Now it must be refurbished. Little maintains make the asset go along. When the municipality has not spent 60% of the initial transfer, the second request is withheld. Clever CFO would delay payment by a month and the municipality would earn interest on the money that is supposed to be paid to the service provider. The interest collected is then 'lost' in the systems. MIG should be ring-fenced rather than it being used for something else.'	

No.	Contribution	By Who
	The money collected from MIG VAT rebate and interest is used for maintenance. There is no clear policy on MIG. Initial MIG was to address the backlog, provide basic level for poor household earning combined R1,000/household.	
44	This was later increased to R2400/household based on 2011 Censor, two grannies earning R1200	P4
45	Does it include children grants?	M
46	No, it's based on pensioners	P4
47	Pension	P1
48	MIG is to provide basic services inspite of there are instance where there are two BMW's or MERC parked in the yard. Revenue original policy not followed. MIG is to address backlog, eradication and is not to be used for new development (or Greenfield project)	P2
49	Service delivery v/s expenditure MIG prohibits expenditure in the towns not backlog Danville is not catered in MIG. CDB are not included, not classified as poor household	P1
50	MIG are for capital projects and not for road maintenance. That's why there are potholes. Now the roads need to be re-done (MIG negligence) Township are not classified MIG projects Political pressure on MIG decision.	P2

No.	Contribution	By Who
51	Group decided that we draw table, at the bottom ⁸	
52	Communication is important	P4
53	The community must be informed	P1
54	Road project. The project is supposed to get gravel free of charge. Tribal wants payment for the gravel. This result in the project being stop. The project can be delayed by three months while negotiations are still going for the price that was not catered for. Community protest may also include the appointment of CLO. Arguments being the CLO was from a different Ward	P2
55	For road construction, need to negotiate with tribal chief for soil. Stakeholder management	P1
56	Another issue private land ownership	P4
57	Stakeholder challenges, where farmer refused installation of electricity poles (Mpumalanga Case study)	P1
58	The community may require social responsibility be done before the project is completed. Building sport ground. In spite of them being the project beneficiary	P2
59	Polices are sometime hindering forces. Case in point is Human Settlement. They will not build In the land that municipality has identified unless there are services In the land. The constant MG v/s Backlog. Eskom will not electricity the place unless there are minimum of 100 occupants. Meanwhile the community refuse to occupy houses without electricity. Another delay.	P1
60	Another issue that is causing delay is sub-contracting and local content. The	P4

⁸ Refer to the table below titled 'List of these processes that must be addressed'

No.	Contribution	By Who
	community demands that contractor pay them money if they cannot offer sub-contractor within their local community. There are cases where project of R10 million, they demand R0.5m. case study of Matlosana. The community is stumbling block	
61	The agreement was to list item that must change in the initial Framework, according to the list ⁹	
62	IDP is a 5 year documents and must not change every year. It can be reviewed.	P4
63	MIG allocation has being increasing every year. There was a time where we were at bottom in term of expenditure, at 54%. We are currently at 91% spending. There are 23 municipalities in North West but only 21 get MIG allocation	P2
64	Why 21 get MIG allocation?	M
65	Dr K.K and Bojanala District Municipalities do not get MIG Allocation since they are not Water Service Authority (WSA). WSA are Dr Ruth and Ngaka District. In terms of allocations, KZN and EC receive biggest allocation due to its vast population, NC and WC get the lowest due to their population and infrastructure needs respectively	P2
66	Which provinces do you compare North West with?	M
67	No response	
68	Will I be correct if I compare North West with FS, L, and MP?	
69	Yes	P2

⁹ Refer to “The list of items to be addressed by the Framework”

No.	Contribution	By Who
70	What about benchmarking? Can one use Metros	M
71	No, they do not receive MIG. They are called MIG cities and have different needs	P4
72	To complete your study I suggest you interview well capacitate local municipalities such as Rustenburg, Madibeng, Moretele, and Ngaka Modiri Molema. Also look into rural municipalities such as Ratlou, Kagiso-Molopo and Tswaing	P2
73	Where is Ratlou?	
74	It is on Vryburg road. Setlagole. Look into Rustenburg Local. It has the highest informal settlement in North West Province. Bafokeng nation within Rustenburg Local Municipality has its own programme. Rustenburg has tradition /tribal land. Mining and informal settlement. Rustenburg does not have land it belongs to the tribe. They have different stakeholder pattern	P1
75	I thank you very much for affording me the interview and your valuable time	M

List of these processes that must be addressed

1.	Timing of IDP (legislated date affect MIG project (P2)	
2.	Prioritisation by the councillor	MIG process formulation
3.	SCM processes, including delay on appointments	
4.	Appointment of incompetent service provider (SP include consultants and contractors)	

5.	Tribal authority verses municipal Bafokeng tradition	

The list of items to be addressed by the Framework

- i) Independent PMU
- j) Meeting strict time frames
- k) Functioning intergovernmental relation (IGR)
- l) SCM / procurement plans should be adhered to
- m) Appointment of competent service provider
- n) Involvement of communities through the project life cycle
- o) Clear cut policies of MIG
- p) Limitation on change management. Reduce high staff turnover. Appointment of PMU on a permanent basis

Appendix O: Certificate of editing

Writing... promotional / humour / travel / political / commemuary / research...
Speech Writing... Creative Writing training... Book editing & indexing... Media design



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15 December 2015

TO WHOM IT MAY CONCERN

This is to certify that the Dissertation entitled

“An operational framework to improve municipal infrastructure
grant spending in North West Province”

and submitted in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

at North West University (Mafikeng campus) by

Seboka Kopung

has been professionally edited by the undersigned
JAMES HOWARD MITCHELL.

