

**CHALLENGES IN IMPLEMENTATION OF ASSET MANAGEMENT STRATEGY IN THE
LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE**

by

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DEDICATION

This work is dedicated to my husband, Gugulethu Emmanuel Sicelo Myeni. I could not have completed this research without your prayers and support.

DECLARATION

I declare that the mini-dissertation hereby submitted to the University of Limpopo, for the degree of Masters in Public Administration and Management has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

Myeni,MB(Mrs)

Date

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ACRONYMS AND ABBREVIATIONS

AGSA - Auditor General South Africa

AM - Asset Management

AFS - Annual Financial Statement

APP - Annual Performance Plan

LDPWR&I - Limpopo Department of Public Works, Roads, and Infrastructure

GITO - Government Information Technology Officer

GIAMA - Government Wide Immovable Asset Management

IA - Immovable Asset

IAM - Immovable Asset Management

IAMP - Immovable Asset Management Plan

IAR - Immovable Asset Register

ICT- Information Communication Technology

IIMM - International Infrastructure Management Manual

NDPW - National Department of Public Works

NPM - New Public Management Theory

REC - Research Ethics Committee

RICS - Royal Institute of Chartered Surveyors

UAMP - User Immovable Asset Management Plan

ABSTRACT

The study aims to investigate challenges in implementation of asset management strategy in the Limpopo Department of Public Works, Roads and Infrastructure, in order to recommend possible alternatives to improve asset management in the department. The Department achieved qualified audit opinions on asset management from the regularity audit conducted by the Auditor General for the financial years 2013/14 to 2015/16, which indicate that there is a lack of compliance, ineffectiveness and inappropriateness of asset management systems within the Department. This study examines the effectiveness of asset management practices in the LDPWRI and to determine the challenges faced by the LDPWRI in the implementation of asset management strategy and also to recommend strategic interventions that should be undertaken to improve asset management in the department.

The information obtained from the literature identified the procedure which is used to manage assets in South Africa, the implementation process of asset management, and policies applied in the LDPWRI. The research process in this study includes methods such as a qualitative and quantitative approach necessary to collect the data. Furthermore, interviews and questionnaires were used in assessing the attitude of the participants. The primary data from the participants was obtained by the researcher to understand behaviour, working conditions, and the asset management process by the employees. The data revealed various challenges that are prevalent in how the inventory, record keeping, and the implementation of the strategies are implemented. The results showed that there are major challenges in managing inventory, and the information of the inventory is not recorded. There is also poor record keeping of the inventory. Furthermore, while the employees indicated that there is asset management strategy, a few indicated that there is no asset management strategy.

The recommendations include that Asset Management strategies should be communicated to all employees and easily accessible on the Intra-Net of the Department for ease of reference and consultation. Urgent drastic steps should be taken to ensure that vacancies in the Asset Management and Logistics Directorate are filled without fail and within the acceptable service standards as stipulated by DPSA.

Chapter 1: Overview of the study

1.1 Introduction

In the public sector, good asset management is critical partly due to the costly nature of public sector projects and the large economic value of the assets portfolio under its management. Also, most of the assets are important for economic activities and have long lifespans. However, the historical background of asset management in the public sector resulted in many assets losing their value, thus reducing their optimal life expectancy. This was a direct result of how assets were treated in the public sector, importance was placed on acquisition whilst ignoring additional costs associated with running the assets such as protection and maintenance. (RSA, 2004a).

Wilson (1999) observed that a properly managed asset register was important for any organisation. The register should contain all the relevant information needed for managing the assets such as inspection periods. The Limpopo Department of Public Works, Roads, and Infrastructure (LDPWR&I), as the custodian for government assets in the Province, is responsible for providing and managing accommodation, housing, land, and infrastructure needs for all Provincial Government Departments. In line with the Government-wide Immovable Asset Management Act, Act No.9 of 2007, the Limpopo Provincial Treasury developed a Provincial Asset Management strategy to ensure a transparent, effective, efficient, and economic asset management system within the Limpopo provincial government.

However, the absence of a fixed asset management plan resulted in the national Department of Public Works (NDPW) being ineffective. Hence, the urgent need for competent personnel with adequate skills to verify, capture, and correct property data in an effective asset register (Buys & Mavasa, 2007).

In this context, this study will investigate the challenges in the implementation of an asset management strategy within the Limpopo Department of Public Works, Roads, and Infrastructure.

1.2 Problem statement

A Provincial Department of Public Works is mandated to provide and manage accommodation, housing, land and necessities for all provincial departments (Buys & Mavasa, 2007). However, there is a misconception that by completing annual inventories and labelling of assets will afford the LDPWR&I the assurance that there is accurate tracking of the departments' assets. The challenge faced by the department includes among others, low morale, budget constrictions, lengthy processes in supply chain management and shortage of skilled personnel (Kaseke, 2011).

The Department achieved qualified audit opinions on asset management from the regularity audit conducted by the Auditor General for the financial years 2013/14 to 2015/16, which indicate that there is a lack of compliance, ineffectiveness and inappropriateness of asset management systems within the Department. According to the report by the Auditor General (RSA, 2015), it is suggested that regarding asset management there is a growing frequency of non-compliance with the Public Finance Management Act, Act No. 29 of 1999. It is important to conduct the study to determine the challenges in the implementation of the asset management strategy within the LDPWR&I.

1.3 The motivation for the study

The researcher works in the LDPWRI and is concerned about the audit performance of the asset management directorate in the Department. For the financial years 2013/14 up to 2015/16, the Department achieved qualified audit opinions on asset management from the regularity audit conducted by the AGSA. This study aims to come up with recommendations to resolve the challenges faced by the Department regarding assets management.

1.4 Significance of the study

This study is essential to help the LDPWR&I to improve its asset management practices for the Province to create more transparency for taxpayer's money as well as improving the government's accountability to the citizens of the province.

Furthermore, this research will add new public asset management insights from the LDPWR&I to the existing body of knowledge.

1.5 Aim of the study

The study aims to investigate challenges in the implementation of the asset management strategy in the Limpopo Department of Public Works, Roads, and Infrastructure, to recommend possible alternatives to improve asset management in the department.

1.6 Objectives

The following objectives will be the focus of the study: -

1. To examine the effectiveness of asset management practices in the LDPWR&I.
2. To determine the challenges faced by the LDPWR&I in the implementation of asset management strategy.
3. To recommend strategic interventions that should be undertaken to improve asset management in the department

1.7 Research Questions/Hypotheses

The study focuses on the following research questions, based on the background provided:

1. What is the extent of effectiveness of the LDPWR&I asset management practices?
2. What are the challenges facing LDPWR&I in implementation of asset management strategies?
3. What should be done to improve asset management in the department?

1.8 Outline of the dissertation

The study is outlined as follows:

Chapter 1

Overview of the study: this chapter will include the introduction to the study/research, the problem statement, aim, questions, objectives, motivation, and significance of the study.

Chapter 2

This chapter will consist of the literature review. The researcher reflects on information from studies that have been carried out addressing the stated problem, and the importance of conducting the study.

Chapter 3

This chapter will develop and present the research designs and methodologies to be used in the study. Justifications of the usage of various methodologies will be presented, in addition to various procedures for data collection and analysis.

Chapter 4

In this chapter data collected using instruments developed in chapter 3 is analysed and results are interpreted. The findings are then compared with previous studies.

Chapter 5

In this chapter, the researcher will present the recommendations and conclusion emanating from the report.

1.9 Conclusion

Illustration of the conception stages necessary to start the research project was shown in this chapter. However, asset management in the public sector in South Africa is still in development, thus several challenges are being experienced by the practitioners. In this chapter, the research problems, aims, and objectives and the outline of the research were presented. Further, the researcher seeks to investigate the challenges associated with the implementation of asset management in the LDPWR&I. The focus of the research will be limited to LDPWR&I. The next chapter will synthesis literature on asset management.

Chapter 2: Literature review

2.1 Introduction

This chapter will be on the literature review. The researcher reflects on information from studies that have been carried out addressing the stated problem, and the importance of conducting the study. This chapter reviews the literature on asset management in the Limpopo Department of Public Works, Roads, and Infrastructure (LDPWR&I) by focusing on the concept of asset management, to highlight the implementation of asset management and the challenges of asset management faced by other government departments. The asset management issues from various countries are reviewed by examining their origins, factors, developments, and trends.

2.2 Conceptualising Public Asset Management

Audit New Zealand (2010) suggests that assets management must be recognised as an integral part of the organisation, especially those that depend on assets in the provision of services like the public sector. A further reason is that asset management provides a linkage between the organisational service delivery targets and the corresponding financial requirements.

Woodhouse (2001) defines assets management as “The set of disciplines, methods, procedures & tools to optimise the Whole Life Business Impact of costs, performance and risk exposures (associated with the availability, efficiency, quality, longevity and regulatory/ safety/environmental compliance) of the company’s physical assets.” While Ness and Lambie (2004) define it as being concerned with obtaining and using the knowledge needed to optimize trade-offs between financial performance, and operational performance. Whereas the Royal Institute of Chartered Surveyors (RICS) (2008) defines it as a process that is structured and pursues to ensure the best value for money from property assets in serving the strategic needs of public sector institutions.

According to the above definitions, asset management refers to the decision-making processes involved in the management of three stages an asset goes through in an organisation namely acquisition, usage, and disposal. Where asset acquisition is the planning to acquire an asset and usage involves benefiting from the asset while managing risks and costs.

According to Visser & Erasmus, (2002) define public asset management as the management of public assets, cost replated to replacement asset, measures to safeguard the asset, optimal asset usage, and maintenance of the asset. According to the definition given, a wide-ranging process needs to be undertaken that includes measures to safeguard the asset, and proper maintenance and usage of assets, and not only concentrate on financial matters. Accountability and responsibility within a policy or legal framework should be the foundation of the Asset management in the LDPWRI.

The National Treasury (RSA, 2004b) defines assets management as procedures guiding how assets are acquired until they are finally disposed of and managing risks and costs associated with running the asset.

2.2.1 Policy and Legislative Frameworks for Public Asset Management

The policy and legislative frameworks together with good practice models are developed to ensure that principles of governance are strengthened. Governance is of the highest importance to regulate and standardise programmes and activities of various stakeholders in an institution. The Constitution of South Africa, Act 108 of 1996 (1996a), requires the national government to pass legislation for all levels of government. The resolution to form and determine standard norms to ensure consistency across the different areas of government, that is, national, provincial, and local government and chapter 9 institutions. These mandates are obligated on government departments and agencies by the constitution, immovable assets management is in this category.

Pre 1994, the South African government adopted a range of policies and legislative sections on immovable state assets across the different areas and levels of government. The intention was founded on apartheid laws and values of exclusion of many of the citizens of South Africa from having access to and benefiting from the government or state assets. After 1994, democratic South Africa was challenged to bring together and manage its immovable assets to aid previously disadvantaged people. They came to realise that an incorporated and coordinated asset management system needs to be developed and implemented to have the optimum usage of all obtainable and accessible state assets and resources to benefit all South Africans (RSA, 2005b).

There are numerous Acts, standards, guidelines, and regulations all impacting the management of government assets. The Accounting Officer of an institution is positioned by the Public Finance Management Act, 1999 (No. 29 of 1999 Section 38) for financial and risk management of the institution as well as the effective and efficient use of the resources thereof (RSA, 1999). Section 38, further exclusively places the responsibility on the accounting officer with the management, inclusive asset protection, and the management of liabilities.

The NDPW, Strategic Plan 2012-2016 (RSA, 2012) indicates:

“The President; in terms of the powers granted to him by the Constitution of the Republic of South Africa, 1996; has assigned powers and functions relating to Public Works at national level to the Minister of Public Works. In addition, hereto DPW’s mandate is the custodianship and management of a significant portfolio of the national government’s immovable assets. This includes the provision of accommodation, rendering of expert-built environment services to user departments at national government level and the planning, acquisition, management and disposal of immovable assets under the custodianship of DPW”.

The Constitution of South Africa mandates the government as the guardian and custodian, to manage all State immovable assets. The State has voted and adopted documents on numerous legislation frameworks to implement the mandate. With Government Immovable Asset Management, the legislation makes conditions for

asset management plans and identifies accounting officers' responsibilities for the plans. Significantly, it also differentiates the functions and responsibilities of the "custodian" and "user" of State assets.

The following legislation documents form part of the framework:

- Constitutional mandate - The South African Constitution 108 of 1996
- The Public Finance Management Act 1 of 1999 (PFMA)
- Government Immovable Management Act 2007 (GIAMA)

The South African Constitution 108 of 1996 - Constitutional mandate

The primary law in South Africa is the constitution, and obligations of all levels of government outlined. Below are the Sections of the Constitution on public assets

1) According to Schedule 4 of the constitution, "DPW is to observe the principles of good corporate governance and intergovernmental relations as provided for in Section 41, Chapter 3 of the Constitution."

2) The executive council of the province are the custodians of provincial property as per Section 133(1) and 131(2) of the constitution

3) Section 133(2) of the constitution, the "Premier assigns the MEC of Transport, Public Works and Property Management the responsibility to act as Executive for the management of the provincial property. "

4) The Constitution of South Africa 108 of 1996, Section 195 mandates that the principles of Public Administration should endeavour to promote efficient use of state resources and they are liable. They have a responsibility to be transparent by providing timely, accessible, and accurate information

DPW is responsible for the maintenance and oversight of immovable state assets in the South African Public Service context. DPW as demonstrated above is obliged by

the constitution to protect State assets through either national or provincial departments.

5) The Public Finance Management Act, (PFMA) no.1 of 1999 (Act 1 of 1999 as amended by Act 29 of 1999)

The PFMA and the Treasury Regulations published in terms of Section 76 of the Act give meaning to Sections 213 and 215 to 219 of the Constitution (RSA, 1996a) and prevail over all other legislation or law except for the Constitution. The PFMA acts to legalise, control, and standardise financial management in the National and Provincial Governments; to guarantee that all revenue, expenditure, assets, and liabilities are managed efficiently and effectively; and to give provision for the obligations of persons assigned or delegated with financial management and matters connected therewith. The PFMA also provides for a national and provincial asset management framework including property belonging to Provinces. It specifies that effective, efficient, economical, and transparent use of the resources of the Department or organisation, safeguarding, and maintenance of the assets, is the responsibility of the accounting officer.

To optimise service delivery through effective and efficient use of the limited resources, the PFMA was created, to promote good financial management principles within the three spheres of government. It promoted transformation by increasing flexibility and liability of public managers ensuring timely delivery of quality information; thus, promoting anti-corruption practices in the use of public assets; the further initiated mission to eliminate fruitless and wasteful expenditure (Southall, 2005). Therefore, the act is a guide on the usage of public funds in a way that promoted transparency and controlled expenditure. It also set out procedures on how the money should be used, borrowed, etc.

6) Treasury Regulation 10.1 (issued in terms of Section 76) specified the guidelines regarding the disposal of assets in addition to the safekeeping and proper usage of such assets. This was achieved by clearly specifying the role of the accounting officer, who has the responsibility of the control system to protect the asset and ensuring optimal benefit.

7) Government Immovable Asset Management Act No.19 of 2007 (GIAMA)

According to the Strategic Plan, 2012-2016 (RSA, 2012) of the NDPW, the obligation of the DPW is mainly regulated by the Government Immovable Asset Management Act, 2007 (GIAMA). GIAMA Act intends to guarantee that there is efficient and effective IAM throughout the Government to improve service delivery. GIAMA was founded to standardise the management of immovable assets that used or are in the custody of national or provincial department(s); service delivery objectives of a national or provincial department are coordinated; provision for issuing of guidelines and minimum standards in respect of immovable asset management by a national or provincial department; and to provide for matters related thereto.

GIAMA determines the duties of the “user” and the “custodian”. The Act stipulates that immovable asset management plans (IAMP) are to be formulated and submitted to the responsible Treasury department by the “user” and “custodian”. The custodian’s immovable asset management plan must form part of the strategic plan of that custodian. Included in the legislation is the compulsory and particular information required for “user” and “custodian” to include in their user and custodian immovable asset management plans. Furthermore, the PFMA and various Treasury regulations and guidelines hold the Accounting Officers responsible for efficient and effective asset management principles and practices.

Accounting for, and correct management of assets has been established as an important duty of the accounting officer. Therefore, the requirement of an institution to identify and classify all assets, through location to original documents and physical verifications/counts and development of a system to ensure continuous accounting and monitoring of assets

According to the asset management framework (RSA, 2004b), it is crucial to indicate that the compilation of complete asset register and effective asset management is independent of change to “Accrual Accounting” “but as a result of legislation endorsed as far back as 1999, and based on good financial management practices. It must be understood that there is no interdependence between the need for keeping asset

registers and good asset management practices and the change in accounting basis when decided”.

2.2.2 Department of Public Works

The public sector or government institutions procure assets mainly for administrative and economic functions. Some are procured to fulfill their obligations to the public and for environmental needs. (Abdullah, Razak, Hanafi & Salleh, 2011). In terms of size and value, the South Africa government owns the largest asset portfolio in the country. However, the returns are not comparable to the size mainly due to mismanagement. (RSA, 2009). The principle of cost versus benefit was not emphasised much in the South African public sector historically. Unlike in the private sector which annually accounts for their assets in their financials, the government financials focus mainly on the movement of cash, thus placing less emphasis on already procured as they are considered cost-free.

The 243 000 properties owned by the South African government are mostly managed by NDPW and municipalities (RSA, 2004a). NDPW controls national and provincial immovable assets (RSA, 2009). The portfolio has a combined value of more than R120 billion. Managing such a vast portfolio requires an annual operating budget of more than R4 billion. Sigcau, (2000). The NDPW as the asset manager is responsible for their protection and maintenance. (Erol, 2008).

2.3 Implementation of asset management

According to Campbell (1999), system analysis should be done when considering improvement, considering its strength and weaknesses. The AGSA report to the Limpopo Provincial Legislature on Vote 9: LDPWR&I for the 2015/16 financial year (RSA, 2016), indicates that the financials of the department lacked information on movable assets owned by the department. This was due to an inadequate system to record them. The findings of the AG on the moveable assets have been recurring for

three consecutive financial years and have resulted in a qualified audit opinion for asset management (RSA, 2016).

It is indicated in the Asset Management framework that the function of assets is to provide support in the delivery of a government services to the public. State assets should only be in existence to support programme delivery. Creating a linkage between programme delivery and assets is the first objective. An organisation's goals and objectives are interpreted into programme objectives, delivery strategies, outputs, and outcomes. One of the inputs utilised to enable programme outputs are Assets within a programme. Assets that do not contribute effectively to such a service should not be held or used and must be disposed of. Key asset management principles are (RSA, 2004b): Asset management should

- Guide service delivery requirements
- Be integrated into organisational plans
- Compared to alternative strategies that consider life cycle costs
- Communicated e.g. ownership, control, and liability
- Implemented within the management policy framework

Kaganova, (2011) observed that optimally managing immovable public assets was a challenge, while Brackertz & Kenley, (2002) proclaim that public confidence in the community, equate changes in asset management to the inadequacy of services provision.

2.4 Challenges facing government departments (articles/reports)

Government has a responsibility to its citizens to properly manage immovable assets. Among its assets are noxious facilities such as schools and hospitals and obnoxious facilities such as dump sites and sewage treatment plants. The governments' infrastructure plans include such immovable assets and are key for service delivery. Therefore, asset management is critical for efficient and effective service delivery.

IAM has been a struggle in governments around the world. Woodhouse (2003), suggest that the changes observed in the IAM sector have their roots in the private sector changing requirements. The private sector by nature investigates ways to improve their operations, as a result, improved methods for AM were developed. As a result, a number of institutions have been created to regulate the discipline and the

procedures. Therefore, theories and procedures of government IAM have their roots in the private sector.

Andersson & Soderberg, (2011), argues that procurement, disposal, and strategic property surplus, are some of the challenges that local governments or municipalities encounter in managing their asset and strategic management programmes. Hanis, Trigunarsyah & Susilawati, (2010). They also face challenges in finance, regulation, accountability, and external stakeholder management. (Avis, Gibson & Watts, 1989). Problems also emanate from lack of planning for immovable properties, shortage of information coupled with conflicting interests. (Gibson, 1994; Zailan, 2001).

On one hand, the lack of clear asset management strategies, challenges in executing planned strategies, and the absence of motivations within the organisation has caused the situation to deteriorate. (Abdullah et al., 2011). The inconsistent public service asset management results in unclear roles and responsibilities. Although audits are sometimes performed, they lack material effect (Male, 2006). Brackertz & Kenley, (2002), noted that there is a critical shortage of qualified personnel in the asset management departments. This is worsened by blurred job descriptions resulting in the repetition of tasks (Boyne, 2002a). It is necessary, therefore, to develop benchmarking standards (Ball, et al. 2000). Kaganova & McKellar (2016) agree with Abdullah et. al (2011) and added that another challenge is departments are not working together to manage assets resulting in a lack of ownership.

The major problems in public sector property management according to White (2011) are, diminished interest by management in senior positions, political meddling, shortage of qualified personnel, lack of data, and financial knowledge. Immovable assets are how the government delivers effective and effective services. (Vermiglio, 2011). However, Byrne, (1997) argues that there might be a possibility of disagreement between the government and the public, this mostly happens as a result of the government's failure to meet the expectations of the public (Bond & Dent, 1998). Sharir, (2007) argues that disagreement may be due to the inability of the public to comprehend the requirements and procedures as outlined by government owner departments.

Historically, in the public sector established boards of inquiries investigating abuses of public assets (Modell, 2004). The reports emanating from the inquiries and investigations, are seldom tracked and often deferred or disregarded, often used as a reference point in other reports for superficial purposes (Yiu, Wong & Yau, 2006). This practice accentuates that the value obtained through advancements in public service asset management cannot be added through analysis without follow up and performance measurement. (White, 2011).

South Africa GIAM

The government established the IAM Framework to provide guidelines in terms of IAM, aligned with broader objectives and priorities of government like the National Development Plan. IA ought to be used predominantly for optimum support delivery of government services. Service delivery involves the fulfillment of government objectives, particularly in situations where IA is used for land reform, BEE, job creation, and redistribution of wealth. (RSA, 2004c)

The government once it was satisfied with the integrated vision for GIAM management, proceeded by framing the Government-Wide Immovable Asset Management Policy in 2005 (RSA, 2005b), which paved the way for the Government Immovable Asset Management Act (GIAMA) of 2007.

Public Works Department Minister Thulas Nxesi (South African government), has revealed the following at a media briefing dated 08 August 2014:

“Cabinet approved the establishment of the Property Management Trading Entity (PMTE) to improve management of state properties. The objective of operationalizing PMTE as a government component is to ring-fence and professionalise the management of state property. This will be done to manage the state property portfolio to save money. It would improve the quality of government services to the public by improving access to, and the quality of, buildings. It hopes to use the property portfolio to empower emerging black business and create jobs. The PMTE was established in response to negative audits in the past eight years, irregular leases, sub-standard

government facilities, no planned maintenance of government properties, and the under-utilisation”.

The minister's statement shows that the government intends to improve the management of public assets and service delivery. Also, the establishment of a special unit and the recruitment of black estate agents. “The latest approach by government in utilising more private sector business values and procedures within the public sector has its origins within the New Public Management Theory (NPM)” (World Bank (1997).

Some of the challenges that the LDPWR&I face are, among others, the absence of inventories in the Districts, inadequate basic accounting skills, PFMA compliance challenges, and the lack of asset management skills. Annual reporting of a department is affected by incomplete asset registers (both for immovable and movable assets). For instance, failure to show complete information on assets and liabilities in the annual financial statements (AFS) defeats fiscal accountability and good governance.

Abdullah et al. (2011), indicate that some of the challenges faced by the public sector regarding asset management are amongst other, absence of clear asset management strategies, challenges in executing planned strategies, managerial challenges: lack of encouragements and procedures

Non-uniformity of management approaches used in the management of public sector assets and lack of liability and vague audits (Male, 2006). The LDPWR&I has an approved asset management strategy on asset management but faces difficulties in the implementation of such a strategy.

The LDPWR&I has a shortage of staff or officials in asset management. According to Brackertz and Kenley (2002), the shortage of skills and competencies within the asset management staff, replication of work due to unclear roles (Boyne, 2002 b) are among the challenges faced by the public sector.

Asset Management Plans

The GIAMA Framework pursues to certify a code of best practice and good governance supported by the PFMA and King II and similar guidelines. Asset

management plans must be compiled and submitted to National Treasury by April each year as a requirement of the PFMA.

The Cabinet approved the Government-wide Immovable Asset Management Policy and the draft Government Immovable Asset Management (GIAMA) Bill for submission to Parliament in August 2005. The policy puts emphasis for more efficient and effective use of immovable assets by national, provincial, and local government and places a responsibility on accounting officers to prepare Immovable Asset Management Plans to ensure that practical management of such assets takes place. The policy and draft bill distinguish between users and custodians of immovable assets. Users of immovable assets utilise the space or accommodation to give best effect to their functions and therefore must produce a User Immovable Asset Management Plan (UAMP) to ensure the following:

- Accountable, fair, and transparent management of immovable assets
- Effective, efficient, and economic use of immovable assets
- Reduced overall cost of service delivery
- Reduced demand for new immovable assets.

Asset Register

PricewaterhouseCoopers, (2008) indicates that the cornerstone of a correct, functional municipal financial system is the inclusion of identified and registered movable and immovable assets that are owned, controlled, or managed in an orderly asset management system. According to the Chartered Institute of Public Finance and Accountancy (2005), “Asset registers’ function is to provide the information about assets needed for their financial management, operational management, and servicing; and to support fixed assets as shown in the balance sheets”.

For “best practice” it is important for organisations to keep updated asset registers, public sector is crippled by a lack of data on their asset portfolio actual size and worth. (White, 2011).

French (1994), argues asset registers have to include places used or owned by the government agencies. However, Brackertz & Kenley (2002) contends that municipal assets should be differentiated based on basic business operations. Some assets are needed for basic business operations and others are owned but not required for basic operations (Simons, 1992). The respective valuation of these assets in municipal asset registers is different in several facets (Brown, K., Laue, M., Keast, R., Montgomery-Hribar, J., 2012).

The criteria of valuating operational property depend on the nature of the asset, the specialised assets with no open market value are valued using depreciated replacement cost. (Young, 1994), else open market value should be used (Young, 1994; French, 1994).

Asset Utilisation and Capacity

The proper utilisation of public assets will result in efficient service delivery to the benefit of the citizens (Abdullah et al., 2011). Kaganova & Nayyar-Stone, (2000) indicate that the public sector or government is inefficient in terms of managing land and assets.

Organisations should own assets necessary for their operations since there are costs associated with holding excess assets. There are also opportunity costs as capital will be locked up in unnecessary assets. (French, 1994). Garba, (1997), states that in developing countries, public asset management inadequacies result in loss of revenue for the government due to a lack of utilisation of excess property. Illegal structures are common and the overfilling of already developed sites while other prime land remains undeveloped. (Kaganova, 2011). Bond & Dent, (1998) declare that it was due to organisational failure to properly plan for the assets.

Public asset usage can be optimised by the adoption of private sector attributes, they can be summarised as management, functional, and financial. Management covers the overall goals of objectives of the business intended to achieve by acquiring the asset. These are evaluated during the lifespan of the asset. Functional deals with actual running the asset. Financial deals with revenue or expenses associated with the asset. (Kaganova & Nayyar-Stone, 2000).

2.5 Conclusion

The literature reviewed in this chapter aided in the development of the study questionnaire. The South Africa government asset portfolio is the largest in Southern Africa, however, due to poor asset management controls, they are underutilised. Lack of accountability worsens the situation. Further, the researches differentiated between private and public sector asset management portfolios. Andersson & Soderberg (2011), rightly indicated public assets can be classified into two categories i.e., general, and special-purpose assets.

The literature reviewed showed the need to consider financial and non-financial components of asset management in the public sector. The application of the principles of immovable asset management and legislation have distinct benefits. Accountability, efficiency, risk management, and service delivery are some of the benefits. In the South African context, the government has a vision for “a better life for all”, thus GIAM is an enabler to the improvement of service delivery embracing the Batho Pele principles. (RSA, 1997”).

Chapter 3: Research design and methodology

3.1 Introduction

In the previous chapter, various theories and literature relevant to the study from an asset management perspective, public asset management, policy and legislative framework for public asset management, implementation of public asset management strategies and challenges facing public sectors in managing assets in South Africa were discussed.

In this chapter, the research design and the methodology of the study are developed and explained. Creswell (2013) describes a research design as the path and direction that is used by a researcher in the mission to assemble and collect information or data about a problem or phenomenon. Couper (2017) describes a research design as a plan that describes how, when, and where data is going to be collected and analysed.

3.2 Choice and rationale of the design

Martin (2000) defines research designs as plans that are employed as guides during the data collection process. While Bhattacharjee (2012) defines it as a combination of plans and methodologies of conducting research guided by the research philosophy or mental models (belief system) that is used to organise reasoning and observations. The mental models are called paradigms. The most popular research paradigms are positivist, anti-positivist, and critical theory.

The author argues that positivism is based on the belief that science or knowledge creation should be limited to what can be observed and measured whereas anti-positivism views the world as a subjective construction of our subjective minds rather than as an objective reality. The critical theory believes that there is an external reality that is independent of a person's thinking, but we can never know such reality with any degree of certainty. In this study, the researcher adopted both positivist and anti-

positivist paradigms to examine and understand the challenges in public asset management using both objective and subjectivist techniques.

Generally, positivist research uses a predominantly quantitative approach, while anti-positivist research relies heavily on a qualitative approach. Due to the nature of the research study, there was no single paradigm that could sufficiently deal with all the required methodological aspects. Therefore, combined quantitative/positivist paradigm with the qualitative/interpretive paradigm to provide the researcher with the ability to statistically analyse the data.

This study used a convergent mixed design to achieve its purpose of examining the challenges in the implementation of asset management by the LDPWR&I. Convergent mixed research design involves concurrent use of both quantitative and qualitative research approaches to collect data. The reason for adopting convergent mixed research is to generalise the findings to the study population and to obtain detailed information on the topic under investigation.

The convergent mixed research requires that the researcher simultaneously conduct the quantitative and qualitative elements in the same stage of the research process, weigh the methods equally, analyse the two components independently, and interpret the results together (Creswell & Clark, 2011).

According to Denzin and Lincoln (2003), qualitative research includes an interpretive, naturalistic approach to its subject; it attempts to make sense of, or to interpret, phenomena in terms of the meaning people bring to them. On the other hand, researchers measure variables on a sample of subjects and express the relationship between variables using effect statistics such as correlations, relative frequencies, or differences between means; their focus is to a large extent on the testing of theory. Kaplan & Duchan (1988) argue that combining both methods in the same study is more desirable in that it makes a study to be better balanced, strengthened, reliable, and valid.

3.3 Population

The area of the study is the Department of Public Works, Roads and Infrastructure: Limpopo Provincial Government located in the city of Polokwane, 260 kilometres away from Pretoria. The Department is mandated “to provide and manage provincial land, roads, and buildings through the building of new infrastructure and maintenance of the existing ones”. It is mainly concerned with provision of infrastructure, management, and maintenance of public assets.

The population of the study refers to the total target groups of people to be studied from whose information generalisations are to be made (Martin, 2000). The target population for this study includes all the officials and employees who are working under Asset Management and Properties and Facilities Management at head office and district levels of hierarchy. The researcher chose these categories of people because of their knowledge about the subject matter and that they are directly involved in implementing asset management processes and procedures in the department.

3.4 Sampling

Bhattacharjee, (2012) describes sampling as the statistical process of selection of a population of interest for purposes of making observations and statistical inferences about that population. Techniques for sampling can be convened into two broad categories which are probability (random) and non-probability sampling. A sample is a finite part of a statistical population whose properties are studied to gain information about the whole (Webster, 1985). Non-probability purposive sampling was used to select respondents for the purpose of this study. The method falls in the category of non-probability sampling techniques, participants were selected based on their knowledge and expertise regarding the research subject (Freedman et al., 2007). Purposive sampling allowed the researcher to choose respondents who have adequate knowledge about asset management practices in the department. A total number of 30 officials and employees working under Asset Management and Properties and Facilities Management at head office and district levels were involved in the study.

The study also employed the interview technique in gathering information. Unlike the questionnaire, interviews allow for a deeper insight into the responses of the research participants and for probing and elaboration which cannot hardly be achieved with a questionnaire. Interviews also allow a lot of flexibility especially in semi-structure interviews as used in this study. They were semi-structured and drew heavily from the literature review. Interviews were conducted with employees of the department distributed as follows: 4 men and 2 women; 3 in asset management and logistics at Head Office.

3.5 Data collection method

This study used a semi-structured questionnaire, one-on-one interviews and existing document analysis to collect data. The semi-structured questionnaire included both closed and open-ended questions. A questionnaire is made up of questions grouped so that they can record the responses of participants in a consistent manner. (Bhattacharjee, 2012). Two types of questions can be used in questionnaires namely structured and unstructured. In the prior, the respondents choose answers from options and in the latter, the participants use their own words. (Ibid, 2012). The questionnaires were self-managed by the respondents. A total of 30 questionnaires were sent out and the response rate was 67%, which was deemed to be good. The researcher merely distributed the questionnaire and followed up to collect completed questionnaires.

One of the main advantages of one-on-one interviews has a component of personal and direct contact which might not be achieved with other methods of data collection. However, the success of interviews depends largely on the skill of the interviewer. It eliminates the non-response rates. (Fisher, 2005, Wilson, 2003). Furthermore, interviews bring a lot of flexibility in terms of data collection and questioning thus getting more feedback that can lead to new conclusions.

flexibility in terms of the flow of the interview, thereby leaving room for the generation of conclusions that were not initially meant to be derived regarding a research subject. In this study, interviews were conducted with employees of the department distributed as follows: 4 men and 2 women; 3 in asset management and logistics at Head Office

(1 above 50 years and another less than 40 years and the last one less than 30 years), 1 in Finance (Male... above 50 years), 1 in Risk at Head Office (Male, less than 50 years), and 1 in Asset Management at Capricorn District (Man above 40 years).

This study also employed analysis of the existing documents which include departmental strategic documents, annual reports, Scopa reports and AG reports. Additionally, the researcher used the direct observation method to observe the asset register and asset maintenance practices in the department through attending meetings. According to Savage, (2000), observation is a systematic data collection approach where researchers use all their senses to examine people in natural settings or naturally occurring situations. Observation involved meetings within the asset management section.

According to Bryman & Bell (2007), pilot studies are used to test questionnaires and adjust ambiguities that may exist. The purpose of the pilot is to ensure that when the final questionnaire is distributed, thus, it should cover all important topics. Completion instructions must be clear and easy to follow. The presentation should be attractive and clear. The pilot study was not conducted in this study, however, the effectiveness of each question designed was achieved by providing the necessary information and data required through the questionnaire. The questionnaire was designed and drafted based on the literature review conducted.

3.6 Data analysis

Due to the nature of this study, the researcher used both quantitative and qualitative data analysis methods. The quantitative data and the findings are presented in the form of tables and graphs. The qualitative data from the open-ended questions and existing documents are analysed using the qualitative content analysis method which involves transcribing, classification or themes and interpretation of data.

Qualitative content analysis involves the systematic assessment of the content of a text through coding and identifying themes and sub-themes from the written data. Whereas Moore and McCabe (2005) noted that in this research data is collected, then themed so that it can be compared. The advantage of this method is that it gives the

ability to researchers to structure the qualitative data collected in a way that satisfies the accomplishment of research objectives.

3.7 Ethical considerations

It is the responsibility of a researcher to inform the potential research participants of benefits and risk associated by participating in the study. It should be clear as to allow the participants to make independent decision. (Babbie, 2007).

According to Graham and Fitzgerald (2010), the “notion of ‘ethics’ is a complex construct, imbued with particular values and beliefs that influence how we approach research”. Gallagher (2009) explains research ethics as, “principles of right and wrong conduct”. ‘Ethics can be regarded to be “a set of moral principles and rules of conduct” (Morrow & Richards, 1996), encompassing a variety of ethical questions “woven through every aspect of research, shaping the methods and the findings” (Alderson & Morrow, 2011).’

King and Churchill (2000) indicate that the key philosophies guiding ethics in research include: independence, welfare, and no harm, and impartiality. In researches, ethical conduct pre-requisite should inform the potential participants about the nature of the research, and possible risk to them as a consequence of the research. The participants must also be informed of the benefits of participation. The participants are also expected to be independent, thus eliminating the influence of other participants. Welfare means the research should make a positive contribution towards the welfare of people while no harm means the researcher has the responsibility of protecting the participants from harm. Impartiality requires all participants to be treated fairly

Respect for independence gives potential research participants the freedom to choose and act without being constrained by others, including informed choice about participation in research.

Beneficence means, research should make a positive contribution towards the welfare of people while non-maleficence means that researchers have a responsibility to assess the potential harms from research and work diligently to minimise or eliminate them. Justice requires that all research participants be treated fairly.

Key issues to address:

The following are the main ethical issues considered in the research study:

a) Ethical Clearance

For this research study, the researcher has applied and obtained approval to conduct the research from the Faculty of Management and Law and has obtained clearance from the University's Research Ethics Committee (REC) as the study involved human participants.

b) Informed consent and voluntary participation

Officials working within the Asset Management unit in the LDPWR&I were involved in the study, and as a result they were given informed consent letters addressed to them to sign, in order to confirm their willingness to partake in the study. The informed consent letters were prepared and translated where necessary.

The consent letter stated that all the participants had the right to withdraw from the study should their rights be violated. The researcher also requested consent from the Head of Department to conduct the research within the unit in the Department. The aims of the research were clearly indicated in the consent letter. The researcher did not proceed to include any official who did not sign the informed consent letter. The officials who participated in the research study received their consent letters to sign before agreeing to be part of the study. The participants were provided with all the information about the research through a consent letter, which informed them that they can discontinue anytime from the study.

The research study was conducted in a work environment and as such, there was no captive audience involved in the research. No incentives were used in this study, to circumvent bias, and to encourage and ensure voluntary participation. The participants were offered an opportunity to study the interview questions and get clarity or rephrase

them to be clearer, the participants were provided a platform to make comments and/or contributions.

c) Privacy, confidentiality, and no harm

The researcher respected the confidentiality of the participants and their responses. Their responses were kept secret from other participants. The researcher used codes to record the data to encrypt personal information.

The researcher also informed and reassured participants of confidentiality while writing the report. There were no video recordings and photos of participants in this study, for semi-structured interviews to ensure confidentiality and/anonymity audio recordings were used.

Before data was collected the researcher showed participants the consent and permission letters obtained from the department of public works which proved the legitimacy of the study. The participants were further assured that their participation was voluntary and the information shared during interviews were confidential and no information shared in the research will be used for any other purposes or to harm them.

They were assured that the study was ethical and their participation was both confidential and anonymous. Participants were assured of the confidentiality of research publications and that no personal information was disclosed.

To ensure that there was no harm to participants, the researcher ensured anonymity and confidentiality of the participants. The practical steps the researcher took to ensure confidentiality and/or anonymity in the initial phase of the study were that the names of the Districts and the Head Office involved in the research are not to be mentioned in the research report as they will be referred to as, e.g., District A, B or C, etc. No video recordings were made except audio recordings. The voice recorded data will also not be used in any presentation of any sort that may reveal the voices of the participants. The researcher used a language that participants could comprehend and avoided harm by carefully designing questions to avoid any offence.

The researcher as outline in the previous discussions assured the participants that all data collected was for this study and any information that can be used to identify an

individual was confidential. The participants' options were responding in person, using pseudonyms, or anonymously. The researcher was constantly aware that the research may prejudice the position of research participants if measures were not taken to prevent such prejudice.

d) Fair selection of participants

In this study, the researcher selected participants from the Asset Management unit in the Department using purposive sampling which allowed the researcher to choose respondents who have adequate knowledge about assets management practices in the Department.

e) Permission to conduct research

Permission to conduct research was sought from the Head of Department responsible for the Department of Public Works, Roads and Infrastructure to conduct the research. A letter to request permission to conduct the research has been approved.

f) Data integrity and safe storage

There was no risk of damage and/or tampering with the data that was collected. The data collected is safely stored by the researcher and not divulged to others. In this research study, all the data collected was carefully stored, honestly reported and credit was given to all those who contributed. To ensure privacy and confidentiality strict measures were implemented, and also disclosed financial or personal interests that directly/indirectly affect the study.

g) Other ethical issues

A copy of the research report will be given to the Department and a summary of the findings and recommendations will be discussed with the Head of Department and Management. The report will also be accessible at the library of the University of Limpopo.

3.8 Validity and Reliability

The validity of the research instrument measures the ability of the instrument to measure what it is intended to measure (Robson, 2011). Thus, it should be able to

differentiate between accurate outcomes from those which are not, for instance, if the instrument is a questionnaire for it to be valid it should correctly measure what is required as per the research question, failure of which is it becomes invalid. For scientific experiments, the experimental procedures must adhere to the requirements of the field. In ensuring validity in this study, the researcher chose appropriate methods of measurement in terms of population, sampling, methods of data collection, and data analysis. A standardised questionnaire was developed from previous studies and was distributed to the targeted population, a sample size was representative of the population targeted.

The concept of reliability depends on the nature of the study; in quantitative studies, it refers to the ability to repeat research under comparable situations but different conditions and obtaining consistent results. In qualitative researches, a method should be consistent across different researchers and projects (Twycross & Shields, 2004). To ensure the reliability of the study, the researcher used a standardised technique for data collection to ensuring repeatability of results. External factors which have created variations in the responses were kept as consistent as possible.

This chapter outlines the choice and rationale of the design, study area, targeted population, sample, sampling methods and sample size, methods of data collection and the type of data analysis needed to achieve the research objectives:

- To examine the effectiveness of asset management practices in the LDPWR&I.
- To determine the challenges faced by the LDPWR&I in the implementation of asset management strategy.
- To recommend strategic interventions that should be undertaken to improve asset management in the department.

3.9 Conclusion

From this section, the information obtained provides an overview of the methods of collecting information that can be used in research. The methods can be qualitative and quantitative depending on the nature of the study. The researcher followed the steps used in the research design to collect the information. In this study, the

researcher applied the qualitative method to interview the participants through structured interviews with the participants. The procedure of ethical considerations was also applied to ensure that the process of collecting data is effective. Data collected is discussed and interpreted in chapter four.

Chapter 4: Data analysis and presentation of findings

4.1 Introduction

The previous chapter described the research design and methodology adopted in this study. This study adopted a convergent mixed method using questionnaire and one-on-one interview with senior officials and employees who have adequate knowledge about asset management challenges in the department. The purpose of this study was to examine the effectiveness of asset management practices of the department; to determine challenges faced by the department in managing public asset so as to identify strategic interventions to improve asset management practices; and to recommend strategic interventions that should be taken to improve asset management in the department.

This chapter focuses on data analysis and presentation of findings. It is made up of three main sections informed by the source of data as follows: (a) data from a questionnaire, (b) data from interviews with several research participants and (c) document analysis. The chapter also provides a conclusive remark.

4.2 Analysis and presentation of qualitative findings

Besides the questionnaire that was used to collect data, the study also employed the interview technique in gathering information. Unlike the questionnaire, interviews allow for a deeper insight into the responses of the research participants and for probing and elaboration which cannot hardly be achieved with a questionnaire. Interviews also allow a lot of flexibility especially in semi-structure interviews as used in this study. They were semi-structured and drew heavily from the literature review.

The questions were informed by key issues emanating from the review of the extant literature. Questions were not wholly open ended which may result in research participants missing critical issues identified by the literature. But at the same time the questions were not closed ended and this was to allow some flexibility. Interviews were conducted with employees of the department distributed as follows: 4 men and 2

women; 3 in asset management and logistics at Head Office (*1 above 50 years and another less than 40 years and the last one less than 30 years*)

1 in Finance (*Male... above 50 years*)

1 in Risk at Head Office (*Male, less than 50 years*)

1 in Asset Management at Capricorn District (*Man above 40 years*)

4.2.1 How effective is asset management strategy?

A significant number of research participants (more than half of those who responded) pointed out that asset management strategy is not that effective and provided various reasons that range from unfavourable audit opinions, continuously losing movable assets such as graders, laptops, desk tops, and assets transferred without authorisation. Several respondents said the strategy was not effective by citing findings by the Auditor General for a few years. On this point, it is very important to bring to light that, while the Department of Public Works received an unfavourable audit opinion, such an opinion has not been adverse or a disclaimer as is the case with some provincial departments, notably Health and Education. Public Works received at least a qualified rather than a disclaimer audit opinion and this needs to be commended. The point not to be missed here is that the Department does account comprehensively on its assets although it does not receive a clean audit opinion.

Those who argued that the strategy is effective mentioned the lack of disclaimer audit opinion although this number was negligible compared with those who said the strategy is not effective. This latter group also stated that “from planning to dispose assets, the chain is smooth”. It was further suggested that because those working in the Asset Management Directorate meet their planned targets as per the Departmental Annual Performance Plan (APP), implementation of asset management should be viewed as effective. In addition, if it is coupled with the fact that “there are no adverse findings from the Auditor General” the implementation of the strategy is effective.

4.2.2 Are asset management strategies sufficient and proper?

Abdullah et al. (2011), indicate that some of the challenges faced by the public sector regarding asset management are amongst other, absence of clear asset management strategies, challenges in executing planned strategies, managerial challenges: lack of encouragements and procedures. There was a considerable number of research participants who were of the view that asset management strategies in the department are not sufficient and proper. The participants list several issues to support their assertions, such as lack of clearly defined timeframes to dispose of assets especially movable ones within the Information Technology side. Still others repeat the argument that if asset management strategies were sufficient and proper, the department would not be getting adverse findings by the auditors. One of the research participants had this to say: *“For me, I think the strategy is not sufficient and proper at all”*. Most of the responses on this aspect were one- or two-word answers such as “Not sufficient” and very short sentences.

Other research participants argued that the asset management strategy has not factored in the issue of financial resources in the form of being fully funded and this places constraints on the successful implementation of the strategy. For asset management strategy to succeed, funds should be made available. The opposite is also true: in the absence of financial resources, the asset management strategy remains inadequate.

4.2.3 Difficulty in implementing planned strategy

For “best practice” it is important for organisations to keep updated asset registers, public sector is crippled by a lack of data on their asset portfolio actual size and worth. (White, 2011). Several participants who said there is difficulty in implementing the planned strategy cited “inadequate budget” as a serious impediment. Others stated that some assets have incorrect values and one therefore cannot implement the planned strategy. There was also a mention of vetting taking very long and, in the process, affecting asset management in the department. Still another research participant talked at length about difficulty in implementing the strategy and put it this way:

The main challenge is the movement of asserts from one office to another without authorisation which causes unnecessary audit queries. There should be accountability by management and safeguarding of assets in the area of their responsibilities”

“Uncontrolled movement of assets” is a challenge, argued another research participant. Regarding difficulties in implementing the strategy, some of the respondents were of the view that understaffing is a serious handicap and negatively affects the implementation. The issue of under-staffing resonates with the high vacancy rate rated as a major challenge in the previous section that examined statistical data. There was also talk of not setting in place timelines for disposing of ICT assets. Essentially, research participants in various ways and to varying degrees argued serious difficulty in implementing the planned strategy. In summary, therefore, the implementation of the strategy faces several difficulties.

4.2.4 Departmental response to capacity problems in asset management

It is suggested that the Department is not addressing lack of skilled personnel at district offices and failure in this aspect affects accountability and effectiveness of asset management in the department. One participant suggested that there should be more emphasis on training, and continuous development of those working in asset management. There were also suggestions that District Offices should be given constant support and their practices regularly monitored to improve performance. The situation is further worsened by the unavailability of incentives and effective asset management strategies (Abdullah et al., 2011).

4.2.5 Possible causes of qualified audit opinion

Kaganova & McKellar, (2006) argues that the absence of key policies to support public assets management, lack of information and general disorganisation in the economy contributes to the challenges in asset management in the public sector. White (2011), agrees with the lack of information and indicated that in some cases value and size of the asset portfolio are unknown.

The first part of the interview instrument inquired about what could be the cause of the qualified audit opinion that the department has been getting for the past 4 years. Analysis of the interview data in some cases identified similar issues that came out in the questionnaire research instrument such as under-staffing and lack of appropriate skills and expertise in the Asset Management and Facilities Directorate. They came up with new issues such as the merger of the Roads/Infrastructure Department with Public Works and the history of asset management. The discussion below will start with those issues that were not mentioned at all in the questionnaire data and this will be followed by others highlighted earlier.

“Look, the department was merged with Roads Infrastructure in the financial year 2014/15 which also contributed to the qualified audit opinion from AG [Auditor General]. The Roads Infrastructure Unit had a lot of assets some of which the department was unable to verify but were signed by the Accounting Officer. For me I think that merging played a part in the qualification.... (Interviewee 1, May 2019)

Merging departments is fraught with difficulties and the point research participant 2 is making in the preceding paragraphs should be looked at closely. Roles blurred, assets lost in the movement or merger, and clear guidelines on what is to be done with clear timeframes are of utmost necessity and sorely needed. Employees might be dragging their feet as some would be in excess and their positions no longer required by the new organisational structure.

Besides the issue of the merger as a contributing factor to a qualified audit opinion, one of the research participants on a distinctly different issue argued that asset management in public service in relative terms to private sector was not given enough attention in the past. It is only in recent years that more attention is paid to asset management. The research participant further argued that the asset management was fairly new therefore, not much attention was given to people populating Asset Management Directorates and in some cases employees were placed in asset management because they were problematic in some Units and therefore dumped in asset management. As the research participant argued:

“You know for me, there is history to this, and I am serious about this. You see, for me asset management in the public sector was not given the attention needed like in the private sector. It is only recently that there is attention to it.

For example, in the past in asset directorates some departments were populated by people who were seen to be in excess... or having failed elsewhere. It was like a dumping section. The same applies to records management, where those who failed or were problematic in some other sections are relocated to records management. As a result, it is populated by people who in most cases do not have the relevant qualifications and expertise” (Interview, Research Participant 3, May 2019).

The research participant went on to say:

“The point I am making is that asset was not prioritised while departments spend billions on asset. This has been the problem and I think it is why the department and others in the province have been qualified on assets. Assets is a huge area and with millions involved and my thinking is that we have not paid enough attention to this. The AG has been hard on departments on assets” (Interview, Research Participant 4, May 2019)

While it is true that asset management is relatively new in the public sector in relative terms to the private sector, other departments have been getting clean audit opinions and therefore the Department of Public Works should also do the same. Essentially, all government institutions should be able to account fully for the assets they have and their usage.

There was also an argument that a qualified audit opinion is the result mainly of movable assets rather than immovable asset and here it was suggested that employees of the department are to blame. One cannot apportion blame on the Asset Management Directorate,

Thus, the two issues of the merger and asset management being new in the public sector were not picked at all in the questionnaire data and neither by other interview participants in this research, hence the need to foreground them in the discussion of interview data. What follows in the next section is a discussion of many issues that were also dwelled upon in the discussion of the questionnaire data.

Another research participant argued that the Department, “did not have an electronic system to update the Movable Asset Register. Physical asset verification took longer

because of high vacancy rate in the unit. The asset registers still had assets valued at R1 million which distorted the financials” (*Interview, Research Participant 3, May 2019*).

4.2.6 Under-staffing

Some research participants also suggested that the qualified audit opinion that has and continues to be given by the auditor general for a number of years now is a result of a shortage of staff within the Directorate on Asset Management and Facilities. Things that negatively affect management programmes include skills shortage and lack of competencies of the managers (Brackertz & Kenley, 2002), and undistinguishable roles and responsibilities which results in many people performing the same task. (Boyne, 2002a). One of the research participants put it in the following way:

“At the heart of the qualified audit opinion is under-staffing within the Asset Directorate. I mean you can’t achieve much if you do not have enough of people to run assets and look after them properly. It is not having enough people in assets at Head Office here in Polokwane and in district offices which results in the department not being able to answer the AG’s questions” (Interviewee 3, May 2019)

At this stage it is important to bring issues of under-staffing that were raised by other research participants although not talking directly to qualified audit opinion. For example, another research participant had this to argue about staff shortages within the Directorate of Asset Management and Facilities:

“It is common knowledge that asset management is severely short-staffed for the period under review and beyond. This shows lack of interest from management regarding this” (Interview, Research Participant 2, May 2019).

Still on the issue of what they regard as factors behind the qualified audit opinions for the past few years, one of the research participants located within the Finance Directorate and above 50 years old had this to say:

“I don’t think people in the Directorate (Asset Management and Facilities) are getting the necessary support from all sections of the Department. We must

see asset management as the responsibility of all employees of the department otherwise we will continue to have adverse findings by the AG. And sometimes we change offices without notifying those in asset management and when auditors come, they don't find the assets as per the inventory list. That is one of the problems for me."

Someone working within Asset Management had this to say:

"You find several employees moving assets without letting the Asset Management Unit know at all. Assets are just moved. It's a practice and is there. I don't know whether it is the culture or what, but I tell you assets are moved from one office to the other without notification of the Asset Unit and this is a problem. When the AG comes it's a finding and we are accused of failing to account for the location of all our assets" (Interview, Research Participant 2, May 2019).

"But listen to this, mmmm you will be very surprised and mmmm this is serious [with a stern face and a serious look], in some cases employees change offices without letting the asset management unit know. Just imagine you move an office and you don't even take the inventory list sheet at the back of your door. At the end of the day (year) us in asset management are blamed for not knowing the location and ownership of all the department's assets. Yes, that is the situation in some of our offices" (Interview, Research Participant 2, May 2019).

4.2.7 Asset management strategies

Analysis of the interview data on the aspect of asset management strategies point to different views with some research participants saying they do exist while others argue that is not the case.

"Asset are recorded at correct values, barcoded and located as per asset register. Asset movement is supported by authorised source documents (Asset Movement Form), assets are recorded in the asset register, and Physical Verification of Assets is conducted twice per year" (Interview, Research Participant 3, May 2019).

A detailed explanation of the strategy also building on what research participant 3 articulated could be found in the assertion of research participant 2, as follows:

“We have asset inventories, an asset register, and verification of assets twice a year and therefore the department has asset management strategies, otherwise we were not going to be able to account for our assets. The issue about the AG also is not that we are not able to account, it is just in some few cases, especially if you go to the district, where you are not able to find some of the assets. I mean even the AG does not give us an adverse or disclaimer audit opinion. We get a qualified opinion, and this means we are doing fine although not excellently. I think you will agree with me on this one. Don’t you?”
(Interview, Research Participant 2, May 2019).

Researcher: “Well, given the annual reports for the past 3 years I have to agree with you”

Still another research participant pointed to issues of the BAUD Electronic System and excel sheets that are used to manage asset. As she puts it:

“Thank you for asking the question and, from my own point of view, the Department has introduced the BAUD Electronic System to update the Movable Asset Register that means all assets were migrated from Excel spreadsheets to the BAUD system. Redundant, unserviceable and scrap assets/inventories are disposed of annually as per the disposal practise note. All vacant positions within the Assets and Logistics Management unit have been included in the HR recruitment plan” (Interview, Research Participant 2, May 2019).

The key message from research participant 2 is almost the same as that from participant 3 and 1 and the essentials revolve around adequate asset management strategies within the Department of Public Works. For these three research participants, the department has a strategy in place.

But it is important to note that there were opposite views to the one expressed above in terms of asset management strategy in the Department. Some participants pointedly said there is no asset management strategy in the department, in contrast to the view expressed by research participant 2 above. For example, research participant 5 responded in the following manner:

“Yes, this is a difficult one, asset management strategies in department. I think we do not have one or maybe those in assets directorate know about this but

for me I am not aware. Honestly speaking, I don't think we have because they could have been communicated to all employees" (Interview, Research Participant 5, May 2019)

Another research participant had this to say:

"Look now, my laptop is not functioning well and it's been about 3 months. I went to GITO, they say it must be replaced and I should go to asset. I went to asset; they say I must wait and be put on a list. We need clearly communicated messages that are eased to access on what to do when experiencing challenges and right now it is not the case. My conclusion is that we do not have asset management strategies" Interview, Research Participant 6, May 2019).

Those in asset argue that there are asset management strategies in place and those outside argue otherwise. The issue is that even if asset management strategies are in place, those outside the Asset Management Directorate are not aware of this. There should be clear communication so that all employees are aware about what to do when faced with an asset problem. Public sector asset management difficulties result from responsive tactical approaches employed in the management of immovable properties, also due to irregular assets monitoring and general lack of information (Gibson, 1994; Zailan, 2001)

There was also a discussion on how Asset Management can contribute to the overall performance of the department and one of the research participants had this to say:

"Effective and efficient asset management can contribute positively to the department. However inefficient asset management translates to the following:

- *Loss of government properties such as vehicles, computers and other machinery and equipment*
- *Abuse of government properties, e.g. employees utilising machinery and equipment for personal reasons due to lack of asset management internal controls*
- *Failure to provide services to the public e.g. Graders are always not available for servicing roads in communities due to theft and abuse by staff members" (Interview, Research Participant 2, May 2019).*

4.2.8 Budget allocation to asset management

On the issue of budget allocation in the department towards asset management, participants all agreed that this is an issue that is not dealt with appropriately and timeously. Substantial amounts of money are spent on movable assets at financial year-end so that it is not rolled over to the next financial year.

“There is inadequate budget for asset management in terms of staff compliment and actual acquisition of assets. This can be attested during the last month of the financial year where there is a sudden surge in expenditure on movable assets in the department. This shows lack of proper planning by the leadership of the department. It is not on at all. Do you get my point?” (Interview, Research Participant 2, May 2019).

4.3 Document Analysis

As part of the methodology on data collection, this study also employed document analysis where a few documents were looked at with the lens of asset management. Annual reports of the department were looked at together with the Auditor General’s report and that of Internal Audit provided by employees located within the Provincial Treasury. The discussion that follows will look firstly at Internal Audit report with a special focus on findings on asset management in the department.

4.3.1 Internal Audit Reports

In their audit of the department before the Auditor General comes to audit, internal auditors conducted an audit across the department and in one of the findings it is noted that:

“A Grader was moved from Bela Bela cost centre to Bakenberg cost centre without prior approval from the Bela Bela cost centre Manager/Assets Manager since the request for the Grader was signed by the new assets holder after the Grader was already moved from Bela Bela cost centre and evidence could not be produced to indicate where the Grader was located for 2 days as from 15/02/2019 to 18/02/2019”.

Table 1.3:

No	Registration Number	Asset Number	Date signed by person requesting Grader	Date Request to move approved	Date Taken from Bela Bela	Date Delivered at Bakenburg cost centre
1	GGW 070 L	01000548	19-Feb-2019	20-Feb-2019	15-Feb-2019	18-Feb-2019

Source: Internal Audit Report, 2019

The Inventory List that the department uses in its management of the assets clearly states that employees should “not move any asset as captured on the inventory list without informing the Asset Management Section within your institution and completing the necessary documentation” but this was not adhered to in the case outlined in the preceding table.

What is worth noting is that management of the department agreed with the findings of Internal Audit and indicated steps that will be taken to correct the situation. Not disputing the findings by Internal Audit therefore suggests that the department does not have a comprehensive overview of its assets and this does not augur well for efficient and proper accountability on assets.

No inventory list was kept in two locations to list all the assets in these locations.

Table 1.4:

Number	Location	Description	Assets in Location
1	WKNY 1919	Lephalale	<ul style="list-style-type: none"> • Bush Cutter 01466811 • Bush Cutter 01466825 • Bush Cutter 01466827 • Bush Cutter 01466816
2	WKNY3488	District Office	<ul style="list-style-type: none"> • Couch 02309052 • Couch 02309053 • Couch 02309051

Source: Internal Audit Report, 2019

The Inventory List constitutes one of the basic instruments of asset management without which institutions will not be able to account fully for their assets and their values. That in two locations there were no Inventory List is very problematic and shows internal deficiencies in the department on asset management. What is more worrying is that the Department agreed with the findings of Internal Audit, as they did in the previous point made in the preceding paragraphs.

Besides Inventory lists that were not closely monitored on moving assets and recording of assets, it was also found that PERSAL numbers of users were not updated in the Assets Register when assets were re-allocated to users since four assets are still allocated to previous user in the assets register.

Table 1.5:

No	Assets Description	Assets Number	Previous user PERSAL No (still in the Assets Register)	Current user PERSAL No
1	Computer CPU	01464183	80973671	83548700
2	Laptop	01927165	80697232	80713581
3	Acer Desktop	01454331	80703259	82686521
4	Acer Veriton	01454330	80703259	82686521

Source: Internal Audit Report, 2019

4.3.2 Auditor General's Report

Part of the document analysis also paid attention to reports by the Auditor General and it was found that in a number of cases, the department showed deficiencies in its internal control mechanisms which must be reviewed if there is to be improvement in accounting for its assets as reflected in both the financial and performance reports. For example, the AG found that:

“The Department did not recognize all items of movable capital assets in accordance with Modified Cash Standards. Major assets were incorrectly recognized as minor assets. As a result, major capital assets were understated, and their minor assets were overstated by undeterminable amounts. Consequently, I was unable to determine the appropriate amount unstated of major and minor movable tangible asset stated at R749 980 00” (Auditor General Report, 2018).

The AG further noted material under-spending of the budget as reflected in the following:

“As disclosed in the appropriation statement, the department materially underspent its budget on Programme 1: Administration by R30 000 000; Programme 2: Infrastructure Operations by R47 050 000 and Programme 4: Roads Infrastructure by R56 174 000, due to the following reasons:

- Human resources' prolonged process of filling vacant posts
- Delay in the SCM procurement processes for the procurement of garden tools
- Delays in the appointment of training capacitation employees
- Delays in the appointment of plant hire term contract.”

Analysis of the questionnaire interview data in the earlier section of this chapter indicated that there was serious concern with under-staffing and vacant posts not filled and here again the AG confirms that, building on information provided by the department in relation to underspending. If one looks at bullet number one (“Human resources' prolonged process of filling vacant posts”), one therefore gets the picture raised by many researcher participants in this study about under-staffing.

It is also very problematic that the AG in Note 46 of the Annual Report states that:

“The department did not implement proper record keeping system to ensure that complete, relevant and accurate information is accessible and available to support financial and performance reporting.”

Again, the discussion of the questionnaire and interview data pointed to issues of poor recording keeping in the department especially in relation to asset management and this was found by many research participants to be the root cause of inability to account for all the assets of the department. It was further suggested that capacity training for the employees should be prioritised on this aspect. That the employees of the department themselves indicated problems of lack of proper record keeping, before even the Auditor General and Internal Audit comes in, is very telling. The issue however remains as to what is being done to correct and address the situation. The study will make recommendations on this issue.

4.3.3 Comments by the MEC and HOD

It is worth noting the comments by the member of the executive and head of the department in some of the important documents of the Department. For example, one finds the following quote by the MEC in the foreword of the Annual Report 2017/18:

“The Department has developed a draft on a clean audit strategy to mitigate and resolve the findings from the Auditor General and Internal Audit which will be aligned

to the provincial strategy. We are mindful of the fact that positive audit opinion is a great indicator of among others and not limited to, good governance, fiscal prudence, accountability and transparency” (Ndalane, 2018, page 10).

The points made by the MEC are to be welcomed and appreciated as they indicate that the department is fully aware of its shortcomings. It is often the case that those in senior management of institutions at times sweep issues that show shortcomings on their part under the carpet so that the public is not fully aware of the challenges they face. But in the case of the MEC, there is acknowledgment of challenges in the department and more importantly it is indicated that this will be addressed and corrected. The issue here is that authorities in institutions should not only give a rosy picture of the workings within their department but also acknowledge where they fall short.

Similarly, the Head of the Department (HOD) also picked up on the issue of underspending in the department which was also identified by the AG is worrying. The HOD put it as follows:

“The Department has spent R3 292 601 billion or 96% of the allocated budget of R3 428 100 billion. This translates into an underspending of R135 452 million or 4% which is mainly attributed to delays in recruitment process, late implementation of road maintenance household projects as well as delays in relocation from Lebowakgomo Government Complex for a refurbishment project” (Mushwana, 2018, page 13)

It is very telling that the HOD acknowledges underspending and the reasons behind such underspending, but it is confusing if the head of an institution talks of delays in recruitment processes for which he is responsible, and which must be handled within the required timeframes. Taking the context of Limpopo into account where unemployment is high, the issue of department delays in filling fully funded vacant posts does not augur well for fighting poverty and reducing unemployment and the HOD should be held responsible for failing on this score.

Still on the observations and points made by the HOD, he also states where the department has fell short of its targets as in the following:

“The Department could not complete all storm damaged schools at construction stage due to over-commitment of funds in Education. The design for the storm damaged schools at planning stage was also not completed” (Mushwana, 2018, page 13).

Again, as was the case with the MEC, the acknowledgement of shortcomings in the department must be welcomed and appreciated. The HOD provides information where they fell short of their targets and in other cases points out achievement which is a very good thing. This provides objective assessment, not a one-sided story. In the quotation below, the HOD indicates what they were able to achieve:

“The implementation of the asset disposal plan has seen the Department collecting revenue of R28 million from public auction. This included the disposal of heavy machinery and vehicles that contributed to high maintenance and repair costs” (Mushwana, 2018, page 13).

All in all, both the MEC and HOD are forthright in their comments on the activities of the Department and provide a balanced view of internal workings in the department without giving a rose-coloured assessment. This must be commended and emulated by other institutions.

Samples of inventory lists from some of the offices in the department are provided at the end of the report as part of ANNEXURE 2. Please note that the names of the employees in Figure 1 reflected on the inventory list will be deleted in the final report:

Figure 1.8

March 26, 2019

**Department of Public Works
Inventory List**

11:38 am

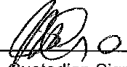
Asset Options = Verified

Employee: 82634050 - M.S MOLEPO	
Organisation: HDO	HEAD OFFICE
Building: B020	HEAD OFFICE
Department: D028	RISK MANAGEMENT
Location: WKCO1953	office
Person: M.S MOLEPO	Floor No: 6
Exist No: 6-1-4	Phone:

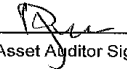
Asset	Sub	Description Manufacturer	Serial No Make	Existing No Model	Condition
00577106	0000	CHAIR VISITOR		NONE	Good
00577118	0000	CHAIR VISITOR		NONE	Good
00578810	0000	CABINET FILING WOOD		NONE	Good
00578837	0000	CABINET FILING WOOD		NONE	Good
00578873	0000	CABINET FILING STEEL		NONE	Good
00578888	0000	CABINET FILING WOOD		NONE	Good
00581894	0000	CHAIR MIDBACK		NONE	Good
01457531	0000	DESK EXECUTIVE		NONE	Good
01459941	0000	OFFICE TELEPHONE CISCO	FCH13039ZUG CISCO	NONE 7945	Good
01460955	0000	CHAIR HIGH BACK		NONE	Good
01468614	0000	LAPTOP LENOVO	PFOOPX39 LENOVO	NONE X240	Good
01469352	0000	LAPTOP	SPC0VQ5BK LENOVO	THINKPAD X280	Good

IMPORTANT NOTICE

1. Please review and check the physical existence off all assets captured on the Inventory Sheet as correct prior appending your signature.
2. Do not move any asset as captured on the Inventory Sheet without informing the Asset Management Section within your institution / core function and completing the necessary documentation.
3. Note that you are accountable for all assets signed-off on your Inventory Sheet.
4. Disciplinary measures will be taken for failure to safeguard assets signed off as per your Inventory Sheet.


Molepo M.S
26/03/2019

 Custodian Signature Print Name Date


NGAPE DM
26/03/2019

 Asset Auditor Signature Print Name Date

Source: Department of Public Works, Inventory List

4.4 Analysis and presentation of findings from quantitative data

4.4.1 Profile of Research Participants

Table 1 below on the profile of participants indicates that the distribution of research participants was as follows: seven (13) females and seven (7) males and most participants were below the age of thirty (30). In addition, most of the research participants did not have lengthy working experience, which often ranges from fifteen (15) years and above. What is critical also is to mention at the outset that fourteen (14) research participants were located mainly within the Asset Management Directorate while 6 were closely situated with assets in the form of Internal Control and Risk Management.

Table 1.1: Profiles of the respondents

Respondents	Gender	Position	Directorate	Years of Experience	Station/Location
Participant 1	Male	Deputy Director	Asset and Facilities	15 years	Head office
Participant 2	Male	Deputy Director	Asset and fleet management	8 years	Head Office
Participant 3	Male	Deputy Director	Finance	5 years	Head Office
Participant 4	Female	Senior Admin Officer	BAUD system (Asset)	9 years	Head office
Participant 5	Male	Deputy Director	Risk Management	2 years	Head Office
Participant 6	Female	Assistant Director	Asset and Fleet Management	4 years	Head Office
Participant 7	Female	Assistant Director	Enterprise Risk Management	3 years	Head Office
Participant 8	Male	Director	Logistics Asset Management	10 years	Head Office

Respondents	Gender	Position	Directorate	Years of Experience	Station/Location
Participant 9	Male	Deputy assistant Director	Logistics Asset Management	6 years	Head Office
Participant 10	Female	State Accountant	Internal Control	4 years	Head Office
Participant 11	Female	Assistant Director	Asset Management	6 years	Capricorn District
Participant 12	Female	Assistant Director	Asset Management	2 years	Capricorn District
Participant 13	Female	Senior Admin Officer	Asset management	6 years	Sekhukhune District
Participant 14	Male	Senior Admin Officer	Asset management	3 years	Sekhukhune District
Participant 15	Female	Senior Admin Officer	Asset management	5 years	Mopani
Participant 16	Female	Senior Admin Officer	Asset management	2 years	Vhembe
Participant 17	Male	Assistant Director	Asset Management	4 years	Waterberg
Participant 18	Male	Senior Admin Officer	Internal Control	10 years	Head office
Participant 19	Male	Assistant Director	Asset management	3 years	Head office
Participant 20	Male	Assistant Director	Internal Control/HR	6 years	Head office

As will be seen in the discussion that follows, in most cases, differences of gender did not offer marked differences in responses. Put somewhat differently, there was not a pattern where males answered in a particular way as opposed to females. What was

worth noting is that differences were observed in terms of years of experiences and whether the research participant is located within or outside the Asset Management Directorate.

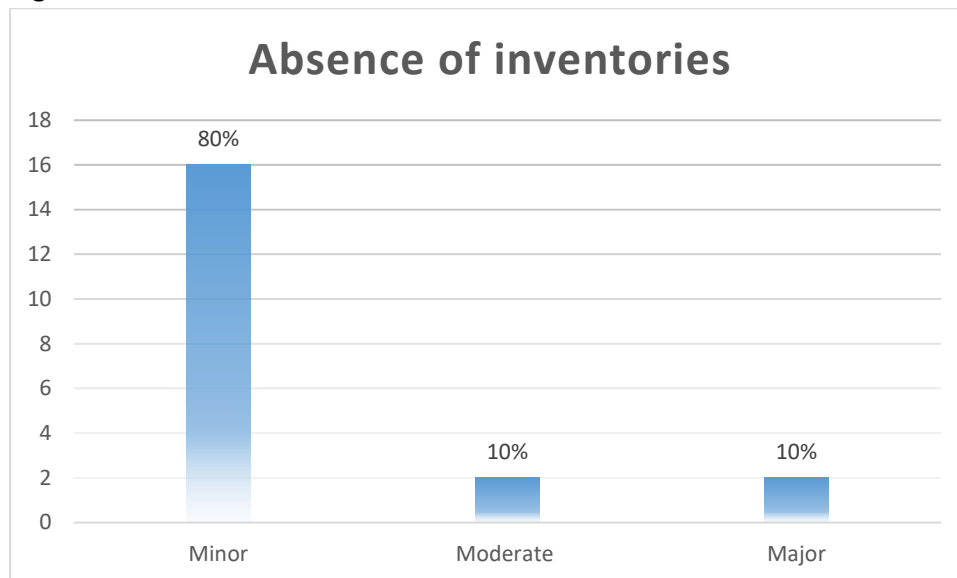
4.4.2 Challenges in Management of Assets

Public sector asset management difficulties result from responsive tactical approaches employed in the management of immovable properties, also due to irregular assets monitoring and general lack of information (Gibson, 1994; Zailan, 2001). The situation is further worsened by the unavailability of incentives and effective asset management strategies (Abdullah et al., 2011).

Research participants were asked to rate several issues that emerged from the literature review as common challenges of management of assets across institutions and counties. While the list was not that exhaustive about challenges of asset management, the issues discussed below are some of the most prevalent in either making asset management work or fail.

Table 2 below starts with a discussion of inventories in asset management which it is argued is very central in making asset management succeed or fail. It is often suggested that without inventories or with inventories that are inadequate, the management of assets and properly accounting for all the assets of the department will be less successful.

Figure 1.1: Absence of Inventories



Inventories form a critical point in the whole asset management process and strategy and research participants were asked to rate them on three levels [*minor; moderate and major*]. From the data collected through a questionnaire, eighty percent (80%) of the research participants pointed out that inventories are a minor challenge for the department. The division of respondents in term of moderate and major was ten percent (10%) respectively which makes up only twenty percent (20%).

If one was to combine the category of minor and moderate responses to the question, an overwhelming majority of eighty percent (80%) are of the view that absence of asset inventories is not a serious challenge for the department. On this score, it means that the Department is doing well on one of the basic tools in asset management without which many problems will follow in managing and accounting for assets in the Department.

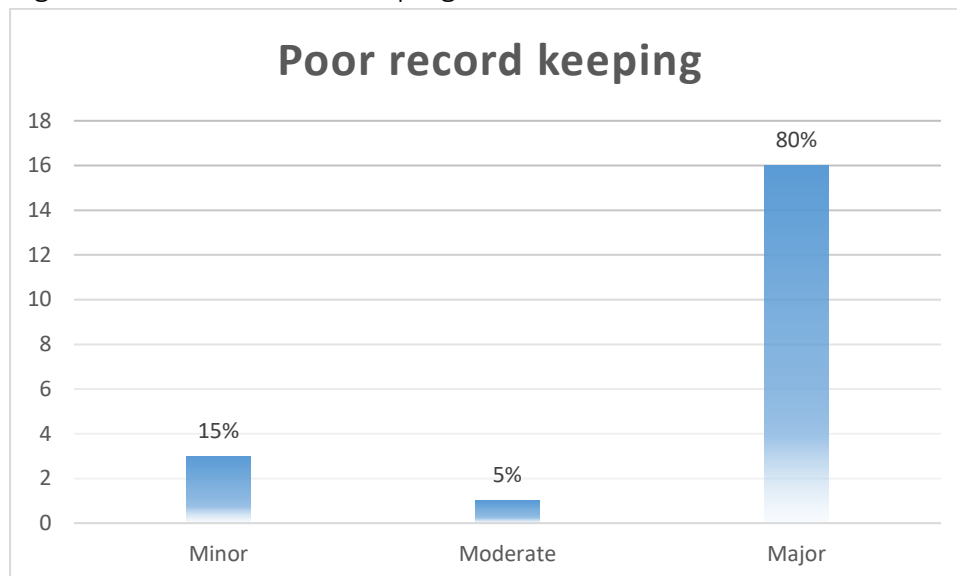
The data was also analysed in terms of those within and outside Asset Management Directorate and the findings are that they seem to have common responses across the board, that is, there was no marked differences on this aspect. Even if we are to disaggregate according to years of experiences, no notable differences were observed – that is, those who have recently joined the department and those who have been in the department for over fifteen (15) years shared similar responses. Similarly, there were no gender differences noted in the responses to this question. In summary therefore, there was near total agreement about inventories not being a serious

challenge across all the category of research participants – gender, years of experience and directorate in which each is working.

As indicated in the opening paragraphs of this chapter, going through some of the documents on Assets in the department, the issue of inventories as rated by the research participants is not identified as very problematic. Annual Reports of the Auditor General and those of the department agree that existence of inventories is that much of a challenge. But having an asset inventory is not an end in itself but rather a means to end – which essentially revolves around proper management and accounting for all Departmental assets across the five districts in Limpopo.

Besides asset inventories, the literature review chapter indicated that at times institutions and organisations fail to account fully for their assets (movable and immovable), often because of poor record keeping of assets. Research participants were asked to rank record keeping on assets and table 2 below provides a summary of the responses.

Figure 1.2: Poor Record Keeping



Eighty percent (80%) of the research participants pointed out that record keeping is a major challenge in the department. Only fifteen percent (15%) were of the view that record keeping is a minor challenge. The data was disaggregated in terms of gender and there were no observable differences between the responses of males against females. Similarly, when the data was further analysed according to years of experience in the department, there were no marked differences. The same applies to

analysis based on one's location either directly in the Asset Management Unit or slightly outside in Internal Control, or Finance, or Risk Management.

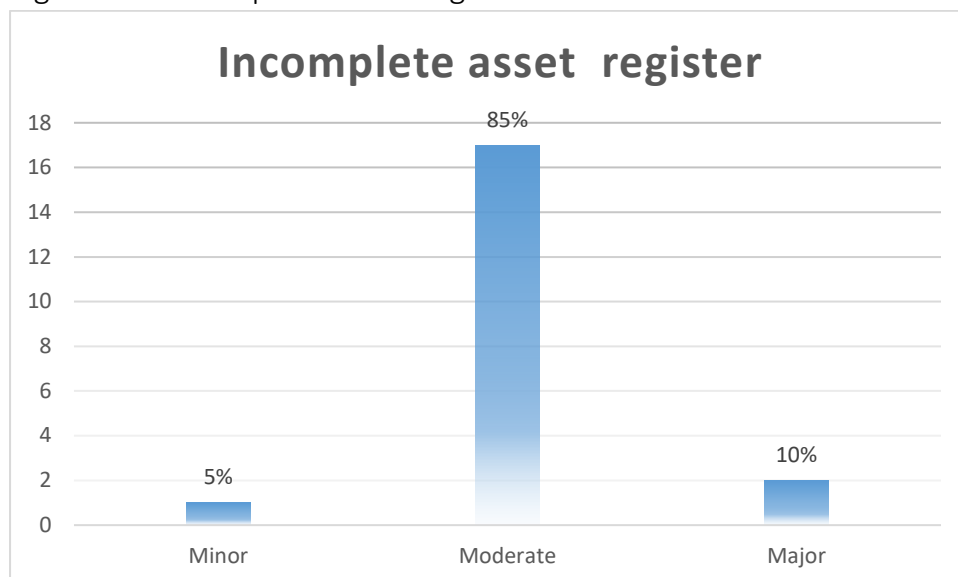
It is also important to state that having asset inventories as discussed in the preceding paragraphs and at the same not paying closer attention to proper and up-to-date record keeping will lead to serious challenges in accounting fully for the assets and managing them well.

All in all, proper record keeping of assets is an important step in working towards accounting and managing assets well and in the case of the Limpopo Department of Public Works, according to the research participants in this study, the picture is not satisfactory at all. It does not augur well for accountability on assets.

Findings by Internal Auditors in the previous two financial years within the Waterberg District provided a disturbing picture where there were assets with no bar codes and in other cases assets were not physically verified, with the results that the records provided are not credible and less to be believed (Internal Audit Exception Report, 2017 and 2018). The Auditor General also provided a qualified audit opinion for the department among others as a results of asset records not tallying with what is there physically in the Department (RSA, 2019).

As with Inventories and proper record keeping of assets, research participants were asked to rank their responses on "incomplete Asset Register" and table 4 below provides a summary of the responses gathered.

Figure 1.3: Incomplete Asset Register



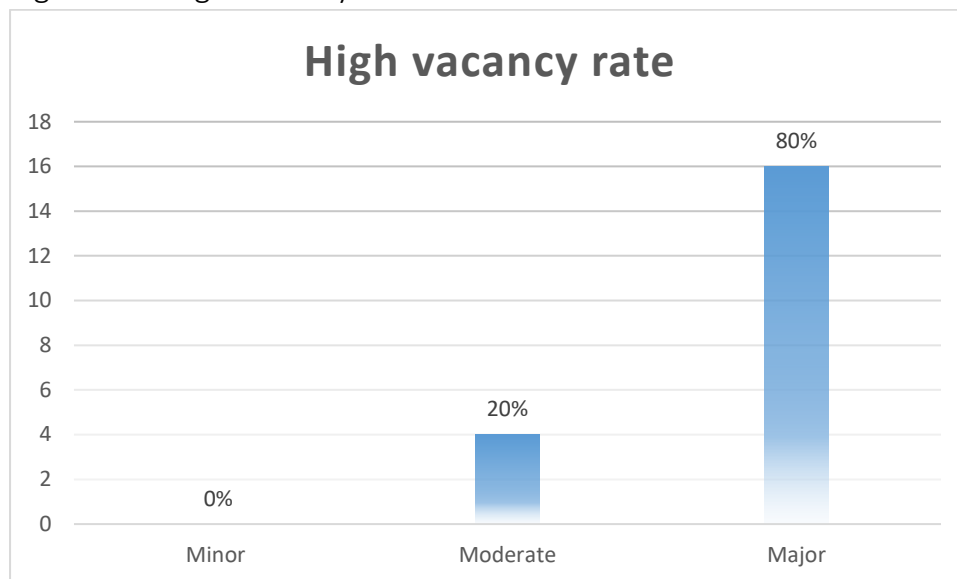
Eighty-five percent (85%) were of the view that an incomplete asset register was of moderate concern, that is neither minor or major. On the other hand, ten percent (10%) considered it as a major challenge while only five (5%) percent said it is minor. Attempts were made to disaggregate the responses according to years of experience, location either in Asset Management Directorate or outside and gender, and the data did not yield any marked differences whatsoever. Kaganova & McKellar, (2006) argues that the absence of key policies to support public assets management, lack of information and general disorganisation in the economy contributes to the challenges in asset management in the public sector. White (2011), agrees with the lack of information and indicated that in some cases value and size of the asset portfolio are unknown.

The asset register is one of the basic tools in assisting in proper asset management and performance of departments on this issue should be well above ninety percent. That 85% ranked the item not as minor is very worrying and if taken together with responses to poor record keeping and inventories, already the department shows some problematic areas in the basic tools of managing assets.

If we factor in findings by Internal Auditors whereby it was observed the asset register was not updated when assets were allocated to new users, the views of the respondents who indicated it as moderate and the ten percent that said it is major gains credibility and therefore cannot be dismissed as unfounded or not backed up by evidence.

Research participants were asked to rank the vacancy rate in the department and the table below provides a glaring picture of the high vacancy rate.

Figure 1.4: High Vacancy Rate



Among the various factors that may negatively affect an institution in optimal management and accounting for all its asset is the issue of human resources in terms of having the required number of people in the posts and with the requisite skills. Eighty percent (80%) said the vacancy rate is a major challenge with only twenty percent saying it's a moderate challenge. The percentage for minor challenge was zero.

With such a high vacancy rate in the department, it is therefore not surprising that:

- (a) some assets are not physically verified
- (b) assets are not in the Inventory list
- (c) assets have no Bar code
- (d) asset are transferred without approval
- (e) asset registers are not updated when assets are allocated to new users (Internal Audit Exception Report, 2019).

It must also be noted that transferring assets and liabilities without approval is a criminal offence according to the PFMA and the Accounting Officer of an institution will be charged. Table 7 focuses on non-compliance with the PFMA and more information will be shared on this aspect. For now, it will suffice to say from the growing evidence discussed here and validated by findings of Internal Auditors, the department seems to be standing on shaky ground on proper asset management and accountability.

There possibly exists a weak association between accounting and asset management reforms, transparency, liability, and understanding of the difference between ownership and management (Kaganova, 2011).

Analyses of the Department's organizational structure paying attention to unfilled funded vacant posts shows a disturbing picture in the five districts, with a vacancy rate of approximately 30%, which is very high. At the Head Office, the picture is quite good, but since service delivery in the department takes place mainly at the district level, strategies and remedies should be worked out to improve the situation. Buying assets and not being able to fully account for them is a wastage of vital resources in the public sector and particularly troubling to poor provinces such as Limpopo which is predominantly rural and poor.

Figure 1.5: Poor Asset Management Skills

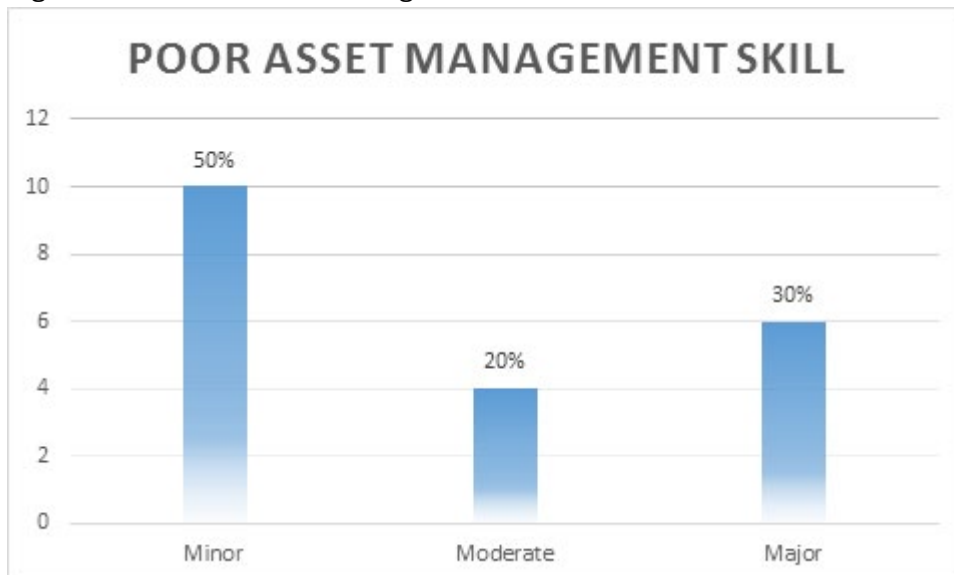


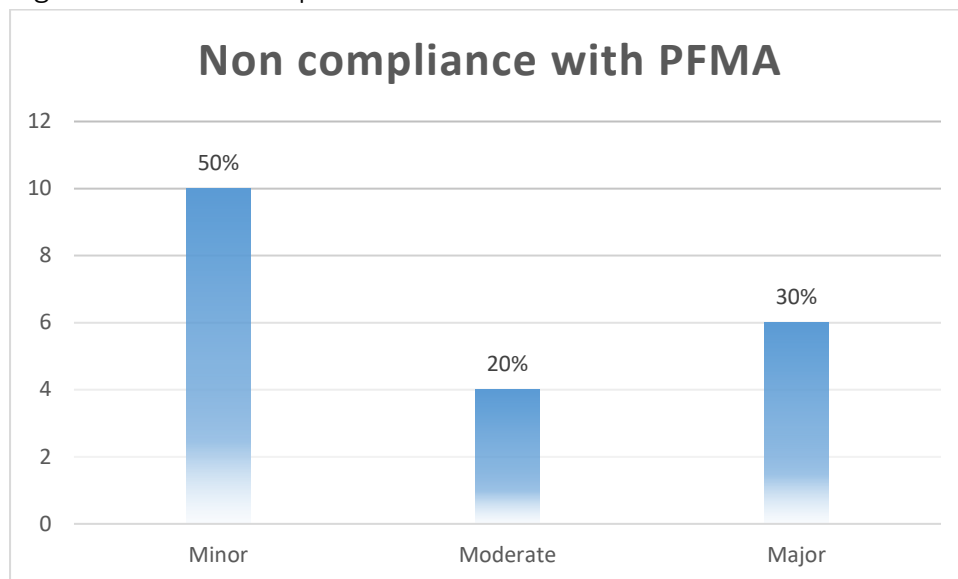
Figure 1.5 indicates that thirty percent of research participants are of the view that asset management skills are poor. Things that negatively affect management programmes include skills shortage and lack of competencies of the managers (Brackertz & Kenley, 2002), and undistinguishable roles and responsibilities which results in many people performing the same task. (Boyne, 2002a)

This should be very concerning to the department, suggesting a need for training to improve the practice. But it is important to note that at least fifty percent (50%) of the

respondents view the issue of skills as minor. Only twenty percent (20%) said asset management skills are of moderate concern.

Research participants were asked to rank whether there is non-compliance with the PFMA and, as with other items discussed in the preceding pages, this was on a scale of 3 (minor, moderate and major) and the results are presented in table 6 below

Figure 1.6: Non-Compliance with PFMA



Half (50%) of the participants considered non-compliance with the PFMA a minor challenge, while thirty percent (30%) rated it as a major challenge. Twenty percent (20%) stated that it is a moderate challenge. Disaggregation according to years of experience pointed out that of those who said it is a major challenge (30%) most had more than 6 years of experience. On the other hand, within the 50% that said non-compliance with PFMA is minor, there was a high number of research participants with less than six years' experience.

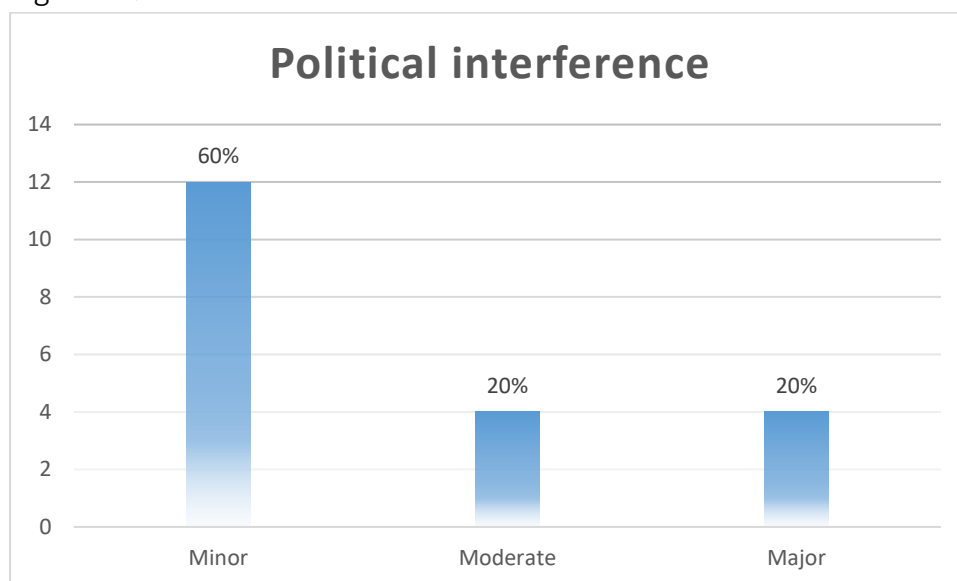
In addition, those working outside the Asset Management Directorate also made up a significant portion of the 50%. One possible interpretation of this is that those with relatively few years in the job and not located directly in Asset Management Directorate, have not fully familiarised themselves with the PFMA and how it directs asset management in public service. The PFMA guides public institutions on a number of issues and relevant to the present study is the aspect of transferring assets and liabilities and the important steps that must be followed. Those with relatively fewer years of experience and not placed within the Asset Management Directorate may not

have knowledge of issues that negatively impact on the PFMA or those steps that should be taken strictly according to PFMA. This may explain why 50% of the respondents, within which we have those working in directorates such as Risk and Internal Control, were less concerned about non-compliance with the PFMA in managing assets properly and taking responsibility.

As with most responses in relation to other issues discussed earlier, disaggregation in terms of gender did not yield any marked differences between responses of females versus those of males. Briefly, it did not make any difference whether the responses were from a man or a woman.

Still on items or issues that research participants were asked to rank in terms of being either minor or moderate or a major asset management issue, political interference was included in the questionnaire and table 8 below summarises the responses of the participants.

Figure 1.7: Political interference



White (2011), echoed that the problems or challenges faced in public sector asset management are inadequate information, shortage of qualified personnel and finance, poor financial analysis, shortness of term of office, political meddling and lack of prioritisation by senior management. Sixty percent (60%) of the respondents' rated political interference is being a minor challenge – something that the department must not spend sleepless nights trying to address. The responses in terms of it being a

moderate or major challenge was rated equally by twenty percent each (20%). Analyses were conducted to see whether the responses provided showed any marked or significant differences in terms of years of experience, that is, whether those with less than 6 years of experience and those with 6 and more signalled any observable pattern at all. Nothing came out of this disaggregation. The same applies to issues of observable differences between those located directly in Asset Management Directorate and those outside and nothing to discuss emerged from this. As has been the case in the 7 tables discussed in the preceding pages, disaggregation on gender lines yielded nothing to discuss.

The foregoing discussion focused on one important aspect of the research instrument (quantitative data) and in this section that follows, attention will be paid to the second critical component of the questionnaire, that is, qualitative data. Part of the research instrument contained questions that were open-ended and not that restrictive to the research participants. Put somewhat differently, research participants were not channelled on what to say - which is always the case with close-ended questions and those that sought ranking. Readers should remember that a mixed method of data collection was utilised in this study, namely quantitative and qualitative.

The questionnaire also had several questions about asset management strategies wherein research participants were presented with close-ended question and had to select either yes or no. Table 2 below presents the summary of findings.

Table 1.2: Summary of findings

Opinion on:	Female		Male		Total
	Yes	No	Yes	No	
Service delivery needs guide asset management practices	10	3	4	3	20
Asset planning is integrated	9	4	4	3	20
Ownership, control and accountability	6	7	2	5	20

When asked whether service delivery needs give guidance to asset management practices, fourteen (70%) of the research participants said yes. What this suggests is that there are no major issues on this aspect. Most of the research participants were also of the view that the implementation strategy for assets is effective. Almost all those working in the asset management directorate state that the implementation of the strategy is effective. Some of those who said it's not effective work in Risk and Internal Control Units. It is important to further draw a distinction here: those who say it is not effective substantiate their responses by stating how you explain that it is effective, when the department cannot account for all its assets. It is a contradiction to state that it is effective, yet the department cannot fully account for all its assets.

But there is a problem here: one cannot argue that asset management strategies are effective and yet the Auditor General gives a qualified audit opinion on movable assets. There is something amiss here and some of the research participants pointed this out and rightly so. The views of those outside the Asset Management Directorate are backed up by findings by the Auditor General for a few consecutive years.

From table 1. 2 above it is also evident that many respondents were of the view that asset planning and management is integrated with the departments' strategic and operational plans, budgeting and reporting process, as indicated by 12 out of 20 respondents which represent 60%. One of those who said this is not the case put it as follows: "No: Ownership is communicated; however, control and accountability remains a challenge here and we have vandalism and subletting". From the data gathered, most of the research participants pointed out this is not a problem at all. But regarding the three who responded in the negative, their supporting arguments are worth pursuing as they illuminate certain salient points

It could also be argued that those who say it's effective and are mainly working in the asset management directorate may feel that saying it is not may be a negative reflection on their performance or responsibilities. One cannot be working in this Directorate and state that the strategy is not effective, which can then be rightly interpreted as not doing their job. Since they are steeped in the practice and within Asset Management Directorate, they may be subjective and not that self-critical about their practices. But a caution is in order. It does not necessarily mean that if one is closer to the actions one will always be subjective, and the opposite is also true here,

that if someone is far from the action that person will always be objective rather than subjective. It cannot simply be taken that since those that are not located in the Asset Management Directorate are not steeped in the internal workings of asset management, their views are more objective.

4.5 Conclusions

From the available evidence, the Department of Public Works is still faced with several challenges in asset management and properly accounting for all the assets in the possession of the institution. Steps in proper asset management, such as updated asset registers and good record keeping, and inventories need urgent attention from the top management of the department as failure in this regard leads to wastage of resources. The data presented in this chapter and discussed at length, showed that there is a high vacancy rate in asset management in the department especially at district level where service delivery takes place, and urgent steps should be taken to arrest this malady.

Chapter 5: Conclusion and recommendations

5.1 Introduction

The purpose of this study was to investigate challenges in the implementation of asset management strategy in the LDPWR&I. This study comprised of the theoretical framework from the literature review and the primary data about the research. Data was collected using questionnaires and interviews, the following objectives which were used in this study:

1. To examine the effectiveness of asset management practices in the LDPWR&I.
2. To determine the challenges faced by the LDPWR&I in the implementation of asset management strategy.
3. To recommend strategic interventions that should be undertaken to improve asset management in the department

5.2 Summary of key findings

The first section of the chapter looked at data from a questionnaire and there are two subsections here: one looking at responses to open-ended questions and the other on statistical data through graphs. The other important section of this chapter was made up of data from interviews. It was pointed out that there are two main sections in the chapter: the 1st section looking at quantitative data and the 2nd section paying attention to qualitative data. The chapter briefly described purposive sampling that informed the research. There was also a recap on key methodological considerations in developing the research instrument and more importantly on how purposive sampling was deemed suitable in conducting this research.

5.1.2 How effective is asset management strategy

The data obtained from the study reveals that the asset management in the department is not effective. There are a number of reasons why asset management is not effective; it is because of unfavourable audit opinions, continuously losing movable assets such as graders, laptops, desktops, and assets transferred without authorisation. Furthermore, the results showed the strategy of asset management was ineffective.

5.1.3 Are asset management strategies sufficient and proper?

From the primary data, it was clear that the asset management applied in the department is not effective and is poor. The participants highlighted several issues that indicate that there are no proper asset management strategies. They indicated that the differences in audit reports is one of the indications that shows that there is no clear asset management strategy for leadership of the department of public works. Furthermore, they indicated a challenge of disposing of technological materials which is an indication that there is poor planning of technological assets.

5.1.4 Difficulty in implementing planned strategy

The results obtained from the primary study show that there is difficulty in implementing the strategy. The participants indicated that there is an inadequate budget which means that the values used are not correct. Therefore, the planned strategy cannot be effective unless there is accurate information.

5.1.5 Departmental response to capacity problems in asset management.

It was found that the department is not addressing the problem of skilled personnel in the department, and this will create a problem in terms of planning for the future. Furthermore, there are other challenges such as accountability in terms of the asset used in the department by the employees.

5.2 Challenges in asset management

5.2.1 Absence of inventories

The data obtained in this section was based on three categories of opinion that includes moderate, minor, and majority. The data indicate that eighty percent (80%) of the research participants pointed out that inventories are a minor challenge for the department. In addition, the moderate and major opinions in this regard was ten percent (10%) respectively which make up only twenty percent (20%). If one was to combine the category of minor and moderate responses to the question, an overwhelming majority of ninety percent (90%) are of the view that absence of asset inventories is not a serious challenge for the department.

5.2.2 Poor Record Keeping

The results from the data and participants indicate that there is an 80% opinion on major challenges in poor recording keeping about the assets. If there is misinformation in line with the record of the assets, this implies the valuation of the assets will be incorrect. Furthermore, this can lead to poor planning and budget of assets. It was also discovered that there is a 15% opinion that there are minor challenges of asset management in the department of public works.

5.2.3 Incomplete Asset Register

The data obtained from the participants shows that there is eighty five percent (85%) who were of the view that the incomplete asset register was of moderate concern, which is neither minor nor major. On the other hand, ten percent (10%) considered it as a major challenge while only five (5%) percent said it is minor. The results on incomplete asset information were confirmed by the internal audit which indicated that the register was not updated.

5.2.4 High vacancy rate

From the data obtained from the participants, it shows that there is a high rate of vacancy because of the human resources department's failure to respond to the high vacancy rate. The inability to hire and retain talent is one of the challenges that can lead to other variances within the department that has to do with keeping of records, asset registering, and assets transferred without approval.

5.2.5 Poor asset management skill

The study shows that there is low level of concern about poor asset management skills. The data reveals that fifty percent (50%) of the respondents view the issue of skills as minor. Only twenty percent (20%) of the respondents said asset management skills are of moderate concern, while fifty (50%) percent did not consider it a major concern in the management skills.

5.2.6 Non-Compliance with PFMA

The study shows the guidelines that must be provided to ensure that there is proper management of assets. The results showed that half (50%) of the participants were of the view that non-compliance with the PFMA is a minor challenge, while thirty percent (30%) rated it as a major challenge.

The data indicates clearly that the managers, and employees at the department of public works did not familiarize themselves with the PFMA and this led to a situation where the department does not comply with the asset management according to PFMA. Attention was paid to inventories, asset registers, record keeping, skills in management of assets, non-compliance with PFMA and political interference. All in all, it was illustrated that what the participants argued were challenges to asset management were also backed by the findings by the Auditor General and therefore there is validity in the argument and conclusions of the research participants about asset management in the department.

5.2.7 Political interference

The results obtained in this study indicate that there is 20% of opinion (moderate and minor) about political interference regarding the asset management. This indicates that there is a little interference in asset management from the political parties. Furthermore, 60% of participants indicated that there is low level of political interference. Therefore, the results indicate political interference is not playing a huge role in asset management.

5.3 Possible causes of qualified audit opinion

The results obtained shows that asset management and facilities directorate came up with new issues such as the merger of Roads/Infrastructure with the department Public Works, and the history of asset management in the department. The merging of the two departments allowed for the possible causes of a qualified audit opinion. The merging of the infrastructure department with the department of public works was of great use because it indicated other things such as that the road infrastructure had lot of assets which were not recognised, and the department was unable to verify them.

5.3.1 Under-staffing

The results obtained from this study indicate that there is a smaller number of employees which makes it difficult for the employees to plan for the asset management. This implies that there is less staff for asset management for the utilization of the resources. Under-staffing of employees can lead to various challenges that can affect the planning of asset management.

5.3.2 Asset Management Strategies

The participants indicated that there are asset management strategies in the organization because of the planning that is used in daily routines. One of the participants showed that there are strategies that are being used otherwise they were not going to account for assets in the organization. However, some reported the absence of the application of asset management strategies in the organization because they were not aware of the same strategies.

5.3.3 Budget allocation to asset management

The results obtained from the study show that there is an inadequate budgeted asset management in terms of the finances. The finances used in the organization for the year are not completely used and as such money is used randomly to allow the allocation of money to start in the new financial year.

5.4 Findings from document analysis

Document analysis also supported the findings from the questionnaire and interview data, especially findings by Internal Audit. Examples were given where the asset register was not updated when people acquired new assets. Record keeping was also identified as a challenge. In the same vein, the Annual Report affirmed the vacancy rate in the department where delays in recruitment processes result in funded vacant posts not being filled. Both the MEC and HOD also pointed to issues regarding audit and that this need to improve. A balanced view of the internal workings of the department were provided by the top leadership of the department and this is very commendable given the fact that often leaders of institutions tend to speak more about achievements and less about underachievement and problematic areas.

5.5 Recommendations

Based on the data analysed from 1) questionnaire; 2) Interviews and 3) document analysis, the following recommendations are made

- I. The asset register should be regularly updated and tightly controlled to ensure that all assets of the Department are fully accounted for. Updated and tightly controlled resources allow for the proper planning of the resources for proper usage and inventory control.
- II. The Inventory List should be closely managed, and action taken against those who do not adhere to instructions stipulated in the Inventory List. Instructions concerning the usage of resources should be adhered to allow for the correct update of information.
- III. Asset Management strategies should be communicated to all employees and easily accessible on the Intra-Net of the Department for ease of reference and consultation. In addition, the strategies planned by the management should always be communicated to all the employees and practised.
- IV. Urgent drastic steps should be taken to ensure that vacancies in the Asset Management and Logistics Directorate are filled without fail and within the acceptable service standards as stipulated by DPSA. There is a need to employ relevant candidates and as such the management and HR department must ensure that they hire and retain the relevant talent for asset management. This will allow for better management of the assets.
- V. Capacity training programmes should be identified for those in the asset management section. In addition, the training programmes will assist the employees to gain the necessary skills and knowledge to effectively implement asset management. Therefore, the department should invest more in training programmes to develop and initiate change.
- VI. Punitive measures should be taken against those who transgress asset management policy and Inventory List regulations. The management should ensure that there is the necessary discipline for the employees that do not follow standard procedure. Furthermore, there is a need to maintain an intense discipline for the entire asset management process.

5.6 Conclusion

The data obtained in this study was from the participants and it provides detailed information about how assets are used in the LDPWR&I. The importance of asset management in organisational planning were outline during the synthesis of relevant literature in Chapter 2. However, the objectives cannot be achieved without the framework of policy designed to regulate the entire process of planning. The research methods which were used include interviews and questionnaires to obtain data from the participants. The data was obtained from the participants, and it was analysed to understand how the employees apply asset management strategy in the department of public works. In addition, the response from the participants indicated a lot of challenges which indicate the poor asset management strategy applied in the department of public works. Therefore, the final part in this study provided conclusions and recommendations that can improve asset management at the department of public works.

5.7 Limitations and areas for further research

There are several limitations to this study, for example, the domain of asset management is wide, and this study did not cover all aspects of international research. Public sector asset is compelled to operate by principle and legislation, the impact of legislation on service delivery, and how public assets are managed to require further study. Such a study will inform implementation or recommendation on to improve its effectiveness.

Lack of training could be contributing to poor service delivery in the public service; it is therefore recommended to explore if managers are suitably qualified to manage public assets. It is expected in the private sector that asset managers should have financial knowledge, but it is generally not required among public service managers. However, financial training of public service managers could improve service delivery among asset managers. A comparative study could be used to test this claim and make appropriate recommendations.

6. REFERENCES

- Abdullah, S., Razak, A.A., Hanafi, M.H. & Salleh, M.N., 2011. Managing Government Property Assets: The Main Issues from The Malaysian Perspective. *Journal of Techno-Social* | ISSN 2229-8940 | Vol. 3 No. 1 April 2011
- Alderson, P. & Morrow, V. 2011. *The Ethics of Research with Children and Young People: A Practical Handbook*. London: Sage.
- Ball, A., Bowerman, M. & Hawksworth, S., 2000. Benchmarking in local government under a central government agenda. *International Journal of Benchmarking*, 7(1), pp. 20-34.
- Audit New Zealand. 2010. Asset Management. Available at <https://www.auditnz.govt.nz/good-practice/asset-management>
- Avis, M., Gibson, V. & Watts, J. 1989. *Managing Operational Property Assets*. Reading: Department of Land Management and Development, University of Reading.
- Babbie, E. 2007. *The practice of social research*. 11th Edition. Belmont: Thompson Wadsworth.
- Ball, A., Bowerman, M. & Hawksworth, S., 2000. Benchmarking in local government under a central government agenda. *International Journal of Benchmarking*, 7(1), pp. 20-34.
- Bhattacharjee, A. 2012. *Social Science Research: Principles, Methods, and Practices*
- Bond, S. & Dent, P., 1998. Efficient management of public sector assets. The call for correct evaluation criteria and techniques. *Journal of Property Valuation & Investment*, 16(4), pp. 369-385.
- Boyne, G.A., 2002a. Theme: Local Government: Concepts and Indicators of Local Authority Performance: An Evaluation of the Statutory Frameworks in England and Wales. *Public Money & Management*, 22(2):17-24.
- Boyne, G. A., 2002b. Public and Private Management: What's the Difference? *Journal of Management Studies*, 39(1):97-122.
- Brackertz, N. & Kenley, R. 2002a. A service delivery approach to measuring facility performance in local government. *Facilities*, 20(3/4):127-135.
- Brackertz, N. & Kenley, R. (2002b), Evaluating community facilities in local government: Managing for service enablement. *Journal of Facilities Management*, 1(3):283-299.

Brown, K., Laue, M., Keast, R., Montgomery-Hribar, J., 2012. An Integrated Approach to Strategic Asset Management. Delft University of Technology, 18-20 June 2012, Third International Engineering Systems Symposium.

Bryman, A., & Bell, E. (2007). Business research methods. Oxford, UK: Oxford University Press.

Buyts, F. & Mavasa, T. 2007. The management of government immovable assets. *Acta Structilia: Journal for the Physical and Development Sciences*, 14(1):81-92.

Byrne, D. (1997). An overview (and under view) of research and theory within the attraction paradigm. *Journal of Social and Personal Relationships*

Creswell, J.W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage Publications.

Erol, T. 2008. *A Facilities Management Transformation Strategy for The Public Sector*. Port Elizabeth: Nelson Mandela Metropolitan University.

Freedman, D.A., Whiteside, Y.O., Brandt, H M., Young, V., Friedman, D.B., & Hébert, J.R. 2012. Assessing readiness for establishing a farmers' market at a community health centre. *Journal of Community Health*, 37(1):80-88.

French, N., 1994. Asset Registers and Asset Rents for Local Authorities: A Viable Property Management Tool. *Property Management*, 12(3):15-23.

Gallagher, M. 2009. Ethics. In E.K. Tisdall, J. Davis & M. Gallagher (eds.), *Researching with children and young people: Research design, method and analysis*. London: Sage Publications.

Garba, S.B. 1997. An assessment framework for public urban land management intervention in metropolitan Kano, Nigeria. *Habitat International*, 21(3): 305-317.

Gibson, V. 1994. Strategic Property Management: How Can Local Authorities Develop a Strategy? *Property Management*, 12(3):9-14.

Graham, A. & Fitzgerald, R. 2010. Children's participation in research: Some possibilities and constraints in the current Australian research environment. *Journal of Sociology*, 46(2): 133-147.

Hanis, M.H., Trigunaryah, B. & Susilawati, C. 2010. Elements of public asset management framework for local governments in developing countries. 8th International Conference on Construction and Real Estate Management (ICCREM 2010), 1-3 December. Royal on the Park Hotel, Brisbane.

Institute of Public Finance and Auditing (IPFA). 2005. *Perspective of generally recognized accounting practice*. Available online: www.ipfa.co.za/technical/grap.htm

Kaganova, O. 2011. Government Property Assets in the Wake of the Dual Crisis in Public Finance and Real Estate: An Opportunity to Do Better Going Forward? *Real Estate Issues*.

Kaganova, O. & McKellar, J. 2006. *Managing Government Property Assets: International Experiences*. 1st ed. Washington, DC: Urban Institute Press.

Kaganova, O. & Nayyar-Stone, R. 2000. Municipal Real Property Asset Management: An Overview of World Experience, Trends and Financial Implications. *Journal of Real Estate Portfolio Management*, 6(4):307-326.

Kaplan, B and Duchon, D (1988) « Combining Qualitative and Quantitative Methods in Information Systems. Research: A Case Study; MIS Quarterly, PP571-586.

King, N. & Churchill, L. 2000. Ethical principles guiding research in child and adolescent subjects. *Journal of Interpersonal Violence*, 15(7):710-724.

Male, S. 2006. Improving Property Asset Management in The Central Civil Government Estate. The Property Asset Management Conference, University of Leeds.

Martin, S. 2000. Implementing 'best value': Local public services in transition. *Public Administration*, 78(1):209-227.

Martindale, N. 1995. Local authority investment property – a virtual reality? *Property Management*, 13(1):10-23.

Moore, D.S. & McCabe, G.P. 2005. *Introduction to the Practice of Statistics* (5th ed.). New York: W.H. Freeman & Company.

Morrow, V. and Richards M. (1996) The Ethics of Social Research with Children: An Overview, *Children and Society*, 10: 90-105.

Ness, D. & Lambie, B. 2004. Raising the performance bar: Gauging asset management improvement in a government. Proceedings of Clients Driving Innovation International Conference, Australia.

PricewaterhouseCoopers 2008. *Property Management Department Business Improvement Project*. Cape Town: City of Cape Town.

Republic of South Africa (RSA). 1996a. *Constitution of the Republic of South Africa*, Act no.108. Pretoria: Government Printers.

Republic of South Africa (RSA). Batho Pele. 1997. Transforming Public Service Delivery White Paper.

Republic of South Africa (RSA). National Treasury. 1999. *Public Finance Management Act 1 of 1999*. Available <http://www.nationaltreasury.gov.za>

Republic of South Africa (RSA). National Treasury. 2002. *Treasury Regulations for Departments, Trading Entities, Constitutional Institutions and Public Entities Issued in terms of the Public Finance Management Act, 1999*. Pretoria. Available at <http://www.nationaltreasury.gov.za>

Republic of South Africa (RSA). Department of Public Works 2004a. *Asset Management Framework*. Pretoria. Available at <http://www.nationaltreasury.gov.za>

Republic of South Africa (RSA). National Treasury. 2004b. *Asset Management: Guidelines for Implementing the New Economic Reporting Format: Learners Guide*. Pretoria: Government Printers. Available at <http://www.nationaltreasury.gov.za>

Republic of South Africa (RSA). 2005a. *Amended Treasury Regulations in terms of section 76 of PFMA*. Pretoria: Government Printers.

Republic of South Africa (RSA). Department of Public Works (2005b). *Government-wide immovable asset management policy of 2005*. Available at <http://www.publicworks.gov.za/>

Republic of South Africa (RSA). Department of Public Works. (2007). *Government Immovable Asset Management Act (GIAMA) 19 of 2007*. Cape Town. Available at <http://www.publicworks.gov.za/>

Republic of South Africa (RSA). National Department of Public Works. (2012). *Strategic Plan 2012-2016*. Available at <http://www.publicworks.gov.za/>

Republic of South Africa (RSA). Auditor-General. (2014). *Consolidated general report on the national and provincial audit outcomes 2013-14*. Available at <http://www.nationaltreasury.gov.za>

Republic of South Africa (RSA). Auditor-General. (2015). *Consolidated general report on the national and provincial audit outcomes 2012-13*. Available at <http://www.nationaltreasury.gov.za>

Republic of South Africa (RSA). National Department of Public Works. 2015. *Strategic Plan 2012-2016*.

Republic of South Africa (RSA). Auditor-General. (2016). *Consolidated general report on the national and provincial audit outcomes 2012-13*. Available at <http://www.nationaltreasury.gov.za>

Republic of South Africa (RSA). Auditor General. 2019. *Annual Report*.

Robson C. 2011. *Real world research*. 3rd ed. Wiley, Chichester

Royal Institute of Chartered Surveyors (RICS). 2008. *RICS Public Sector Asset Management Guidelines A guide to best practice*

Savage, J. 2000. *Framework Analysis: A Qualitative Methodology for Applied Policy Research*. *Journal of Administration and Governance*.

Sharir, A.S. 2007. *Critical Issues in Managing Government's Assets and Facilities in Malaysia*. Presented at National Asset & Facility Management (NAFAM) Convention PWTC, Kuala Lumpur on 13-14 August 2007.

Sigcau, S. 2000. Briefing by The Minister of Public Works on Behalf of the Employment and Investment cluster.

Simons, R.A., 1993. *Public Real Estate Management: Adapting corporate practice to the public sector*. *Journal of real estate research*. Fall pp 639-653

Vermiglio, C *Public property management in Italian municipalities*. 2011.

Visser, C.B. & Erasmus, P.W. 2002. *The management of public finance*. Cape Town: Oxford.

Waldo, D. 1953. *Ideas and issues in public administration*. London: McGraw-Hill.

Webster, C. & Lai, L., 2003. *Property Rights, Planning and Markets: Managing Spontaneous Cities*. Northampton, MA: Edward Elgar.

White, A.D. 2011. *A review of UK public sector real estate asset management*. *Journal of Corporate Real Estate*, 13(1): 6-15.

Wilson, A. (1999) *Asset Maintenance Management: A guide to developing strategy and improving Performance*, A. Wilson (ed). Oxford. Alden Press. Woodhouse, J. 2001. *Asset Management Decision Making*. Conference Paper. Available from: <http://www.iam-uk.org>

Woodhouse, J. 2003. *Asset Management: Concepts & practices*. The Woodhouse Partnership.

World Bank (1997). *World Development Report*. Washington, D.C.: World Bank. World Competitiveness Yearbook. 1997. IMD. Yiu, C.Y., Wong, S.K. & Yau, Y. 2006. *Property*

management as property rights governance: exclusion and internal conflict resolution. *Property Management*, 24(2):87-97.

Young, P. 1994. Market valuation with no market – valuing properties with little evidence. *Journal of Property Valuation & Investment*, 12(3), 9-27.

Zailan, M.I. 2001. *The management of public property in Malaysia*. Paper presented at the International Conference FIG Working Week 2001, Seoul.

Annexure A

APPENDIX 1: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Mrs MB Myeni
POSTNET Suite 45
Private Bag x 9700
Polokwane
0700

03 March 2017

The Head of Department
Department of Public Works, Roads and Infrastructure
Private Bag X 9300
Polokwane
0700

APPLICATION FOR PERMISSION TO CONDUCT RESEARCH

I, Mrs MB Myeni, presently on the staff of the Department of Public Works, Roads and Infrastructure, am studying for my Master's in Public Administration through Turfloop Graduate School of Leadership (TGSL) under the supervision of Dr A. Asha. My research topic is Challenges in Implementation of Asset Management Strategies in the Limpopo Department of Public Works, Roads and Infrastructure.

I would like to conduct interviews in the Department during the course of 2017. Fifty (50) participants representing officials and employees of the Department will be interviewed during suitable times. Every effort will be made not to disrupt the daily functioning of the Department. Confidentiality and anonymity of participants will be maintained at all levels of this research project.

I am confident that my request will be favourably considered.

Yours faithfully

Myeni MB- Student No- 200403528

Annexure B

APPENDIX 2: FACULTY APPROVAL



University of Limpopo
Faculty of Management and Law
OFFICE OF THE EXECUTIVE DEAN
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2558, Fax: (015) 268 2873, Email: johannes.tsheola@ul.ac.za

13 June 2017

M.B Myeni (200403528)
TURFLOOP GRADUATE SCHOOL OF LEADERSHIP
MASTER OF PUBLIC ADMINISTRATION

Dear Ms Myeni MB

FACULTY APPROVAL OF PROPOSAL

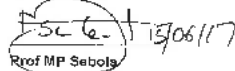
I have pleasure in informing you that your Masters proposal served at the Faculty Higher Degrees Committee meeting on 13 June 2017 and your title was approved as follows.

"Challenges in Implementation of Asset Management Strategies in the Limpopo Department of Public Works, Road and Infrastructure".

Note the following: The study

Ethical Clearance	Tick One
Requires no ethical clearance	<input type="checkbox"/>
Proceed with the study	<input type="checkbox"/>
Requires ethical clearance (Human) (TREC) (apply online)	<input checked="" type="checkbox"/>
Proceed with the study only after receipt of ethical clearance certificate	<input type="checkbox"/>
Requires ethical clearance (Animal) (AREC)	<input type="checkbox"/>
Proceed with the study only after receipt of ethical clearance certificate	<input type="checkbox"/>

Yours faithfully


Prof MP Sebola

Chairperson: Faculty Higher Degrees Committee

CC: Dr A.A Asha, Supervisor, Dr E. Zwane, Acting Programme Manager and Prof MX Iethoko, Acting Director of School

Annexure C

APPENDIX 3: ETHICAL CLEARANCE CERTIFICATE



University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2212, Fax: (015) 268 2306, Email:noko.monene@ul.ac.za

**TURFLOOP RESEARCH ETHICS
COMMITTEE CLEARANCE CERTIFICATE**

MEETING: 02 November 2017

PROJECT NUMBER: TREC/315/2017: PG

PROJECT:

Title: Challenges in implementation of assets management strategies in the Limpopo Department of Public Works, Road and Infrastructure

Researcher: MB Myeni

Supervisor: Dr AA Asha

Co-Supervisor: N/A

School: Turfloop Graduate School of Leadership

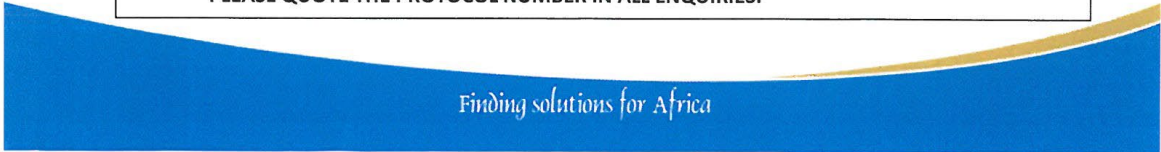
Degree: Masters in Public Administration


PROF. TAB MASHEGO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol. PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.



Annexure D

APPENDIX 4: COPY OF INFORMED CONSENT FORM

CONSENT FOR PARTICIPATION IN INTERVIEW RESEARCH

I volunteer to participate in a research project conducted by Mrs MB Myeni from the Department of Public Works, Roads and Infrastructure. I understand that the project is designed to gather information about the Challenges in Implementation of Asset Management Strategies in the Limpopo Department of Public Works, Roads and Infrastructure. I will be one (1) of fifty (50) people being interviewed for this research.

1. My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. If I decline to participate or withdraw from the study, no-one in the Department will be told.
2. I understand that most interviewees will find the discussion interesting and thought provoking. If, however I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.
3. Participation involves being interviewed by Mrs MB Myeni from Department of Public Works, Roads and Infrastructure. The interview will last approximately 45 to 60 minutes. Notes will be written during the interview. An audio tape of the interview and subsequent dialogue will be made. If I don't want to be taped, I will not be able to participate in the study.
4. I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.
5. Managers from the Department will neither be present at the interview nor have access to raw notes or transcripts. This precaution will prevent my individual comments from having any negative repercussions.
6. I understand that this research study has been reviewed and approved by TGSL.
7. I have read and understood the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

8. I have been given a copy of this consent form.

My Signature

Date

My Printed Name

Signature of the Investigator

For further information, please contact:

Mrs MB Myeni (Investigator)

Contact Number

Annexure E

Semi-structured Questionnaire

Research topic: Challenges in Implementation of Asset Management Strategies in the Limpopo Department of Public Works, Roads and Infrastructure

You are kindly requested to participate in this study by completing the questions below. The information you provide will be treated as confidential and for the purposes of this study only.

Mark the most appropriate response with an X on close-ended questions and fill in your responses for the open-ended questions.

Section A: Personal Information

1.1 Gender

Female	1
Male	2

1.2 Race

African	1
White	2
Coloured	3
Indian	4
Other	5
If other, please specify	

1.3 Age

20-29	1
30-39	2
40-49	3
50-59	4
60 & above	5

1.4 In which programme are you working?

1.5 What is your position and how long are you in the position?

1.6 What are your responsibilities in the Programme?

Section B: Asset Management strategy implementation in the LDPWR&I.

2.1 Are the service delivery needs giving guidance to asset management practices and decisions?

Yes	1
No	2

2.2 If no, please explain giving an example.

2.3 Is asset planning and management integrated with the corporate and business plans, budgeting and reporting processes?

Yes	1
No	2

2.4 If no, please explain

2.5 Do you think Asset Management decisions are based on evaluations of alternatives that take into account the full life cycle costs, benefits and risks of assets?

2.6 Are ownership, control and accountability, and reporting requirements for assets established, clearly communicated and implemented?

Yes	1
No	2

2.7 If no, what do you think are the challenges?

2.8 Are Asset Management activities undertaken within an integrated government Asset Management Policy Framework?

Yes	1
No	2

2.9 How effective do you think is the implementation of the Asset Management Strategy?

Section C: Challenges in Asset Management in the LDPWR&I

3.1 How would you rate the severity of the challenges in the implementation of the asset management strategy in the Department on a scale of 1 to 5 using the indicators below?

1- Major 2- Moderate 3- Minor

Tick one only.

	Challenge	1	2	3
1	Absence of inventories in the Districts			
2	Poor record-keeping			
3	Non-compliance with the PFMA			
4	Poor asset management skills			
5	Incomplete asset registers			
6	Lack of interest by senior management			
7	Political interference			
8	Poor financial analysis			
9	Short-termism			
10	Inadequate people/ High vacancy rate			
11	Lack of financial resources			
12	Chronic data shortfall			

3.2 As an official/ employee of the LDPWR&I, do you think the existing Asset Management strategies are sufficient and proper to manage movable and immovable assets?

3.3 Do you think there is difficulty in implementing the planned strategies? Please elaborate?

3.4 How does the Department respond to capacity problems regarding asset management?

3.5 Does the Department have a need to establish standards and implement benchmarking for effective Asset Management?

3.6 Any other information /comments relevant to the project.

Name

Date

Annexure F

APPENDIX:4

Interview Schedule for Senior Officials in the Limpopo Department of Public Works, Roads and Infrastructure

Research topic: Challenges in Implementation of Asset Management Strategies in the Limpopo Department of Public Works, Roads and Infrastructure

You are kindly requested to participate in this study by answering the questions below. The information you provide will be treated as confidential and for the purposes of this study only.

Interview Date _____

Questions:

1. The Department has received qualified audit opinions from the AG on movable assets for three consecutive financial years (2013/14, 2014/15 and 2015/16). Where do you think the problems emanate from?
2. Do you think that the asset management strategies in the Department are adequate and or efficient in addressing asset management?
3. Do you think that the objectives of the Department are translated into programme objectives, delivery strategies, outputs and outcomes?
4. According to you, does the Department undertake asset management within the integrated government asset management policy framework?
5. Does Management discuss and communicate asset management in their meetings?
6. When the strategic plans are formulated, is asset management incorporated in the strategic plans?
7. How do you think asset management contributes to the overall performance of the Department?
8. The high vacancy rate in the asset management unit is concerning; how is management addressing this matter?
9. Do you believe that effective, efficient asset management can be achieved?
10. How does the Department allocate budget to asset management?

Annexure G

Language Editor letter

Anne Kruger Language Practice

- ❖ 19 Nooitverwacht, 105 Main Street, Paarl 7646
 - ❖ tel 072 374 6272 or 021 863 2315
 - ❖ annekruger25@gmail.com
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To whom it may concern

DECLARATION OF LANGUAGE EDITING

I, Elsje Anne Kruger, hereby declare that I have personally read through the dissertation of Baatseba Myeni and have highlighted language errors and checked references. The track changes function was used and the author was responsible for accepting the editor's changes and finalising the references. I did no structural rewriting of the content.

Yours faithfully



Date

