

# **AN ASSESSMENT OF OWN REVENUE MANAGEMENT FOR FINANCIAL SUSTAINABILITY OF THE EASTERN CAPE MUNICIPALITIES**

Research submitted in fulfillment of the requirements for the degree of

**MASTER OF BUSINESS ADMINISTRATION**

in the

**RHODES BUSINESS SCHOOL**

by

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December 2017

## DECLARATION

I, **Vuyolwethu Majikijela**, hereby declare that the research mini-thesis entitled “an assessment of own revenue management for financial sustainability of the Eastern Cape municipalities” is my own original work, except where indicated in terms of acknowledgement, and has not been submitted for any other degree in any other University.

**Signed**

**Date**

.....

.....

## **ACKNOWLEDGEMENTS**

I wish to record my acknowledgement and grateful thanks to the following people for their direct and indirect assistance, encouragement and contributions, which ultimately led to the completion of this research.

To God Almighty for the strength, power and ability given to me throughout this journey, to Him be the glory.

**Professor O. Skae**, for his motivation, professional manner in which he continued guiding me as my supervisor throughout the duration of the research. Without his motivation and encouragement, this research would not have been completed.

**Mrs N. Oliphant** and **Mr W. Groom** at Provincial Treasury for their support, insightful knowledge and words of encouragement during my tenure at Rhodes University.

**Professor W. Jacobson**, for her assistance in language editing and Quality review

**All respondents** to the questionnaire at the municipalities who responded amidst their busy schedules

I dedicate this work to my late father **Caleb Dube**, my grandmother **Nogcobo Majikijela** and my daughter **Aluvuyo Maqolo** for giving me a purpose in life.

## **ABSTRACT**

The purpose of the research is to assess the financial viability of municipalities in the Eastern Cape. Municipalities that are not financially viable and sustainable will always struggle to deliver basic services to communities. Without sound financial management systems, municipalities will be forced to discontinue their operations. Municipalities, particularly small and rural ones, are not self-sufficient thus cost benefit theory emphasises that municipality must adopt cost recovery revenue management.

The application of cost recovery revenue management requires that municipalities take into account internal and external revenue management challenges that will be factored on user charges. Cost recovery also requires governance to lead the process through capacitation, transparency and communication with all stakeholders.

This research highlights that municipalities in the province have not matured to a level wherein they are able to adopt cost recovery revenue management because of prevalent external revenue management challenges caused by high unemployment rate in the province and the slow economic growth. Municipalities in the province are thus financially unsustainable.

This research therefore proposes that a phase in approach to cost recovery should be adopted in line with the changes in unemployment and economic growth. Increased transparency and consultation with intergovernmental relations should also be promoted to enable financial sustainability of municipalities in the province.

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## **LIST OF ACRONYMS**

CBA :	Cost Benefit Analysis
CoGTA:	Department of Co-operative Governance and Traditional Affairs
Constitution:	Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)
DoRA:	Division of Revenue Act
EFT:	Electronic funds transfer
FBS:	Free Basic Services (FBS)
GDP:	Gross Domestic Product
HR:	Human Resource
IGR:	Intergovernmental Fiscal Relations Act, 1997 (Act 97 of 1997) IGFR
IT:	Information Technology
LED	Local Economic Development
MFMA:	Local Government Municipal Finance Management Act, 2003 (Act 56 of 2003)
MFPFA:	The Municipal Fiscal Powers and Functions Act, 2007 (Act 12 of 2007)
MPRA:	Municipal Property Rates Act 2004 (Act 6 of 2004)
MSA:	Municipal Systems Act, 2000 (Act 32 of 2000)
NERSA:	National energy regulator of South Africa
QLFS:	Quarterly labour force survey
REB:	Real economy bulletin
SALGA:	South African Local Government Association (2010:31)
USAID:	united States agency for international development
WSA:	The Water Services Act, 2004, (Act 30 of 2004)

## CHAPTER 1 – INTRODUCTION

### 1.1 INTRODUCTION

The aim of this research is to analyse the factors that influence effective and efficient revenue management in municipalities in the Eastern Cape Province. Van der Waldt, Venter, Van Der Walt, Phutiagae, Khalo, Van Niekerk and Nealer (2007, p.186) describe revenue as the lifeblood of municipalities which enable them to discharge their mandate of service delivery. Van der Walt et al. (2007, p.186) believe that if an entity such as the municipality does not have a sustainable income base it cannot make service commitments. In a study conducted by the United States Agency for International Development (2010) it was established that municipalities in South Africa are confronted by uncollectible consumer debts and therefore service delivery backlogs. This persists in the current year as depicted in the table below showing the amounts budgeted and collected by municipalities in each province for revenue from service charges and property rates.

**Table 1: Over and under collection of total revenue as at 30 June 2017**

Over and under collection of total revenue as at 30 June 2017

R thousands	Main appropriation	Adjusted Budget	Year to date: 30 June 2017	Total Revenue as % of main appropriation	Total Revenue as % of adjusted budget	(Over)	Under	(Over) as % of adjusted budget	Under as % of adjusted budget
<b>Summary per Province</b>									
Eastern Cape	39 203 827	37 476 387	31 274 266	79.8%	83.4%	(105 833)	6 309 925	(0.3%)	16.8%
Free State	19 668 163	18 077 284	16 949 403	86.2%	93.8%	(280 554)	1 403 434	(1.6%)	7.8%
Gauteng	142 827 992	141 732 812	130 568 074	91.4%	92.1%	-	11 164 738	-	7.9%
Kwazulu-Natal	68 763 534	69 761 045	65 413 861	95.1%	93.8%	(261 938)	4 609 122	(0.4%)	6.6%
Limpopo	20 775 018	20 384 223	16 848 209	81.1%	82.7%	(111 240)	3 646 253	(0.5%)	17.9%
Mpumalanga	18 957 436	18 735 187	16 164 814	85.3%	86.3%	(61 163)	2 631 536	(0.3%)	14.0%
North West	16 043 754	18 528 202	16 263 492	101.4%	87.8%	(306 316)	2 571 527	(1.7%)	13.9%
Northern Cape	7 732 719	7 385 469	7 245 553	93.7%	98.1%	(639 386)	779 302	(8.7%)	10.6%
Western Cape	60 066 993	62 045 054	58 639 368	97.6%	94.5%	(54 091)	3 459 777	(0.1%)	5.6%
<b>Total National</b>	<b>394 039 446</b>	<b>394 127 662</b>	<b>359 368 040</b>	<b>91.2%</b>	<b>91.2%</b>	<b>(1 820 991)</b>	<b>36 580 613</b>	<b>(0.5%)</b>	<b>9.3%</b>
						<b>Net</b>	<b>34 759 622</b>		

Source: National Treasury Local Government Database

At a national level, municipalities currently under-collect revenue by R 34.7 billion; the Eastern Cape leads the pack with a percentage of 16.8% under-collection. Research conducted by Cloete and Thornhill (2005) established that declining revenue collection was due to hyperinflation which has declined in recent years but is still high, at 6.3%, in 2017. Inflation exceeds the rate of economic growth at 1.3% (Statistics South Africa; 2017). Under-collection is also due to a lack of efficient, effective internal controls in municipalities and a lack of efficient management of external revenue management factors. External management factors will be discussed in chapter two.

## 1.2 BACKGROUND TO THE RESEARCH

Local government exists for two reasons as enshrined in the Constitution of South Africa 2017 (Act 108 of 1996), namely: for service delivery and to promote the equitable distribution of wealth. It entails the efficient and effective rendering of services to local communities, and this depends on the ability of residents to pay for these services. Local government is obliged to use its resources efficiently.

Municipalities are the custodians of public funds, whether raised from their own revenues or received through intergovernmental grants. They are tasked with using these resources to respond to the needs of their communities for infrastructure, local services such as water, electricity, and refuse removal, and for the enabling and guidance of the spatial development of their community. Although municipalities are entitled to a share of the national fiscus, this money is for municipal administration rather than for the funding of service delivery projects, which should be funded through the collection of revenue from citizens (Division of Revenue Act, 2016 p.38).

### **1.3 DEFINING EFFECTIVE AND EFFICIENT REVENUE MANAGEMENT**

Maclea (2012) describes revenue as the total gross income generated from taxes, which should be used for service delivery. Municipal revenue, also referred to as municipal tax, is defined in The Municipal Finance Management Act (2003, p.12) as property rates, taxes, levies, or duties imposed by the municipality on its residents.

Gildenhuys (2008, p.243) asserts that for an effective and efficient tax system to be realised, three functions must exist:

- a revenue function which is aimed at supplying enough money to finance the costs of supplying public goods and services to the public;
- secondly, a redistribution of wealth function which is aimed at spreading the aggregate wealth of a country evenly over the total population, in other words to reduce wealth differentiation;
- Finally, an economic regulation function to create economic stability and an equilibrium between economic growth, inflation, and unemployment.

### **1.4 OVERVIEW OF SOURCES OF MUNICIPAL REVENUE**

Municipalities derive revenue from the following streams: firstly, an own revenue stream such as property rates, traffic fines, service charges which include the supply of primary services such as water, sanitation, electricity, refuse removal, and other services. The second stream arises from grants and subsidies from national and provincial governments to particular departments. Thirdly, the receipt

of donations from international, national, or local funders. The municipality is also empowered to fund its budgets through loans. Own revenue generation streams are discussed below:

#### **1.4.1 The Property Rates**

Property rates are legislated in terms of the Municipal Property Rates Act (Act 6 of 2004). De Visser and Singana (2010) define property rates as a form of tax imposed on the market value of land and buildings. All municipalities are required to conduct the valuation of all properties in their respective areas and keep a complete and accurate valuation roll indicating the market value of all properties (Municipal Property Rates Act, (Act 6 of 2004, p.41). Information relating to each debtor is captured and maintained in a debtors' master file, or sub-ledger, on the municipality's database, and is used for billing purposes (Fourie, Opperman and Scott;2007, p.170). Municipalities are required to review the rates to be levied on an annual basis thereby prompting the revision of property rates policies (MPRA, 2004, p.21).

#### **1.4.2 Electricity Services**

The municipality is responsible for the provision of electricity to the community (Constitution of South Africa Act 108 of 1996, p.159). Quality supply of electricity services in a sustainable manner is an enormous responsibility that needs a well-capacitated and resourced municipality. Therefore, due to capacity constraints experienced especially by small and medium capacity municipalities, Eskom distributes electricity services directly to such municipalities. The Municipal Fiscal Powers and Functions act (2007, p.149) and the Municipal Finance management act (2003, p.42) ensure that the municipality charges its community a fair and affordable electricity tariff. This is achieved by the submission of a proposed tariff pricing to the National Energy Regulator of South Africa (NERSA) for review and approval. This is followed as part of a wider consultation process with the community and all stakeholders of the municipality.

### **1.4.3 Water and Sanitation Services**

Water is the most important and indispensable natural resource to humankind and to livelihood in general (Department of Health, 2016). The provision of water and sanitation services by the municipalities is a requirement of the Constitution (1996, p.159). The division of powers and functions between local and district municipalities helps to avoid duplication of resources and allows for the co-ordination of service delivery. Fourie et al. (2007, p.170) establishes that the municipality may impose a fixed charge per property or per water connection to cover fixed costs and also a consumption charge per kilo-litre consumed; furthermore that due to scarcity of water resources many municipalities have a tariff structure for direct consumption which penalises consumers who use more than a given volume. Three tariff structures are used to determine pricing structure, namely, a flat rate tariff, a two-part tariff, and a block rising tariff. The greatest challenge faced by the municipality is to contend with high debt levels; because water is protected by the constitution as a necessity of life, thus water supply must be maintained.

### **1.4.4 Refuse Removal**

Staff Reporter (2014, p.51) raises a concern that about 40 percent of the South African population, particularly in rural areas do not have access to refuse removal services whilst 60% living in urban areas have access to refuse removal. The refuse removal and dumping in urban areas is disposed at landfill sites that are managed by municipalities. According to Staff Reporter (2014, p.75) landfill sites are becoming full, thus maximizing the option of recycling. He maintains that the accessibility of recyclable material could be better managed by dual bag collection; one contains recyclable material to be sent for recycling while another is used for household or wet waste. Refuse removal as a form of own revenue attracts tariffs imposed to the 60% being serviced. Tariffs for critical services such as refuse removal should be affordable for the poorest households and should cover only operating and maintenance costs (Pauw, Woods, Van der Linde, Fourie and Visser, 2009, p.306). Inadequate refuse management is a serious health hazard with life threatening consequences.

#### **1.4.5 Nominal levies and Sundry Revenue Source**

Gildenhuis (2008, p.109) states that a nominal levy is paid for a privilege or right granted by the municipality to an individual or a business enterprise, and that these privileges or rights incur expenses for the municipality. Examples are trading licenses, dog licenses, building plan fees, and searching fees. Also due are revenues from library membership fees, rentals from the municipal sporting facilities such as swimming pools and sports grounds, rent from the hiring of halls and vehicles, and rentals from housing. Traffic fines, incidental fines, and forfeitures also provide revenue.

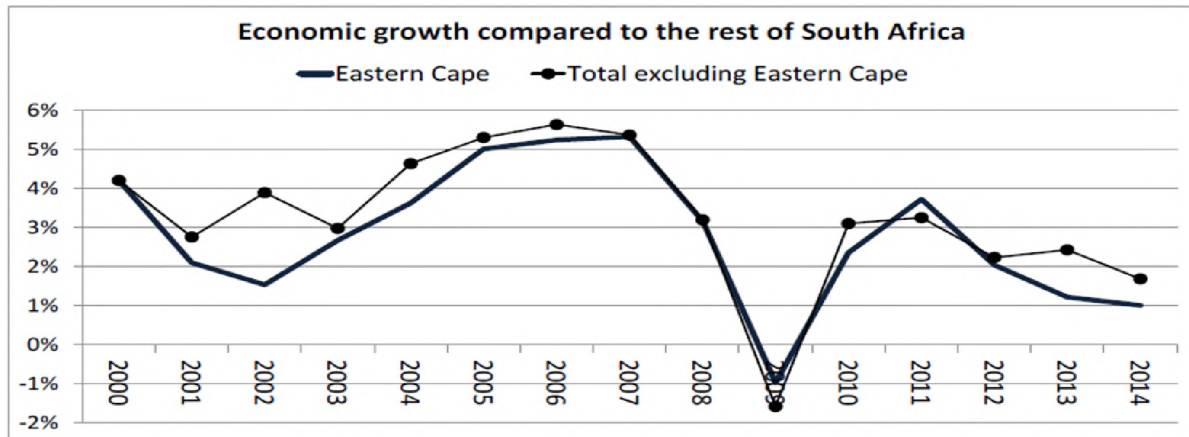
### **1.5 GEOGRAPHICAL ANALYSIS OF THE EASTERN CAPE.**

The Real Economy Bulletin (2016) reveals that the economy of the Eastern Cape is characterised by a relatively high share of manufacturing, but lags behind in productivity. This is largely because of the proximity of:

- A strong manufacturing sector centered on the auto industry in the coastal metros; and
- The incorporation of two large apartheid “homeland” regions, which were historically deprived of resources, infrastructure, and public services.

The province has seen relatively slow employment growth and low remuneration especially in the past four years. Since the transition to democracy, it has experienced unusually high levels of migration out of the province. The Eastern Cape benefited from South Africa’s faster growth during the commodity boom from 2003 to 2011, seeing a rapid recovery from the 2008/2009 Global Financial Crisis, but since then growth has slackened at an average of 1,4% a year from 2011 to 2014 more than the rest of the country.

**Figure 1: Economic growth compared to the rest of South Africa**



Source: StatsSA, GDP Annual and Regional Tables 2016. Excel spreadsheet downloaded in June 2016.

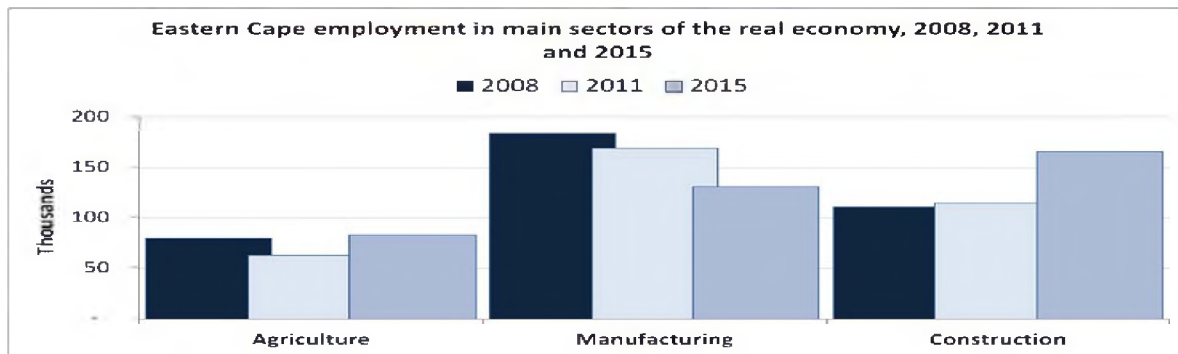
The Eastern Cape share in the national economy fell during the Global Financial Crisis in 2008/2009, recovered somewhat, but lost ground between 2012 to 2014. The employment data shed further light on the structure of the economy in the Eastern Cape. In 2015, employment data from the 2015 Quarterly Labour Force Survey showed the province accounting for 9% of total employment in SA.

Some 393,500 people employed in the real economy sectors contributed 28% of the total provincial employment in 2015, and of these

- 165 000 were in construction
- 131 000 were in manufacturing
- 83 000 were employed in agriculture
- 1 500 were in mining (in 2014)

The chart below uses the average of quarterly figures for each year to show changes in employment in the real economy in 2008, 2011, and 2015, by using the average of quarterly figures for each year. Employment tended to decline steadily while construction increased rapidly from 2011 to 2014.

**Figure 2: Eastern Cape employment data**



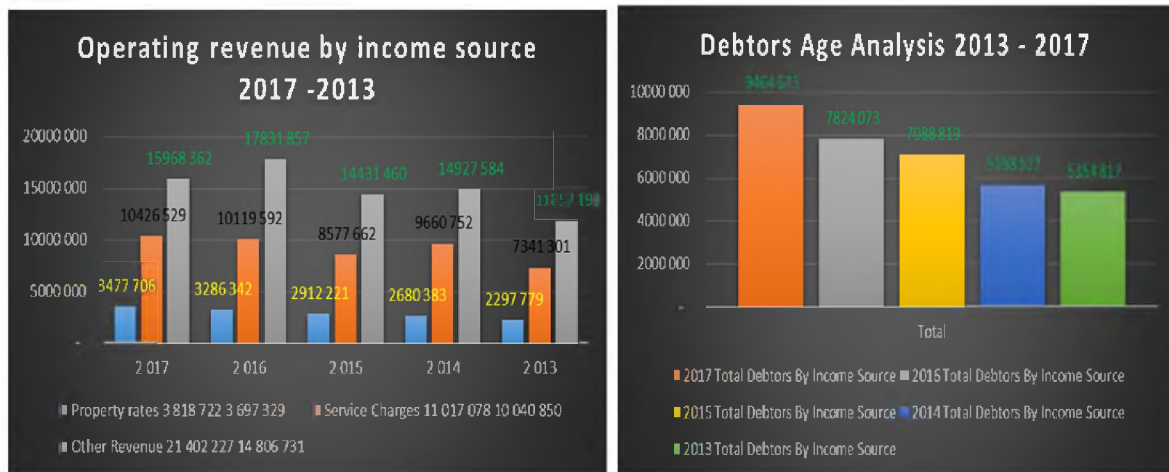
Source: Statistics South Africa, QLFS Trends 2008-2016. Excel spreadsheet.

The Eastern Cape has high levels of joblessness. Just 31% of the working-age population was employed in 2015, which is below the national average of over 40% (using the average of the QLFS for 2015). The international norm is around 60%. In the rest of the country employment climbed from 2010 when it hit a low point following the 2008/2009 Global Financial Crisis. In the Eastern Cape, by contrast, employment was lower in 2015 than in 2010, when 33% of adults were employed (REB, 2016). In 2014, the median formal wage in the Eastern Cape was R3 300 and the median wage for domestic, informal, and agricultural workers was R1 213, compared to R4 000 nationally for formal workers and R1 500 for other employees. Yet 73% of total employment was in the formal sector, compared to the national average of 69%. Limited job creation combined with poor pay help to explain relatively high outmigration. Its population grew 13% from 1996 to 2015 compared to a national average of 35% (REB, 2016).

## **1.6 ANALYSIS OF EFFECTIVE AND EFFICIENT REVENUE MANAGEMENT IN EASTERN CAPE MUNICIPALITIES**

The analysis of own revenue generation by municipalities in the Eastern Cape is depicted by the operating revenue by source trend analysis and the increase in debtors over the years.

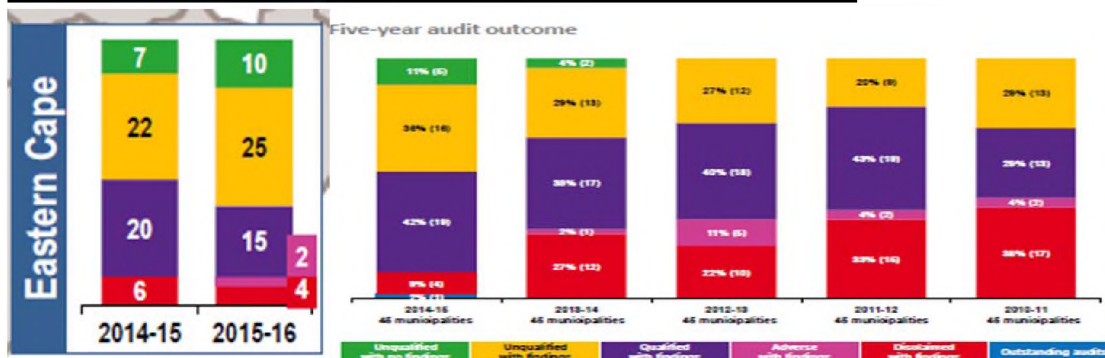
**Figure 3: Debt and revenue management comparison over time in Eastern Cape**



*Source: National Treasury Local Government database 2017*

The above table for revenue collection shows a slow increase in collection of revenue compared to the increase in debtors over the years 2013 – 2017. This indicates challenges for revenue management. The Auditor General report (2016) analysis of audit outcomes demonstrates Internal Control deficiencies in accounting for the costs of particular service provisions as being a major contribution to poor municipal revenue management.

**Figure 4: A view of Eastern Cape audits 2011 and 2016:-**



*Source: Auditor general MFMA report (2016, p.31)*

Inefficient and ineffective cost recovery techniques adopted by municipalities' compromises the delivery of municipal priorities and municipal financial sustainability. It is the responsibility of municipal managers, senior managers, and municipal officials to implement and maintain effective and efficient systems of internal control (accounting for costs for social welfare). Figure 5 below shows the

status of the different drivers of internal control over the past three years and the movement since the previous year.

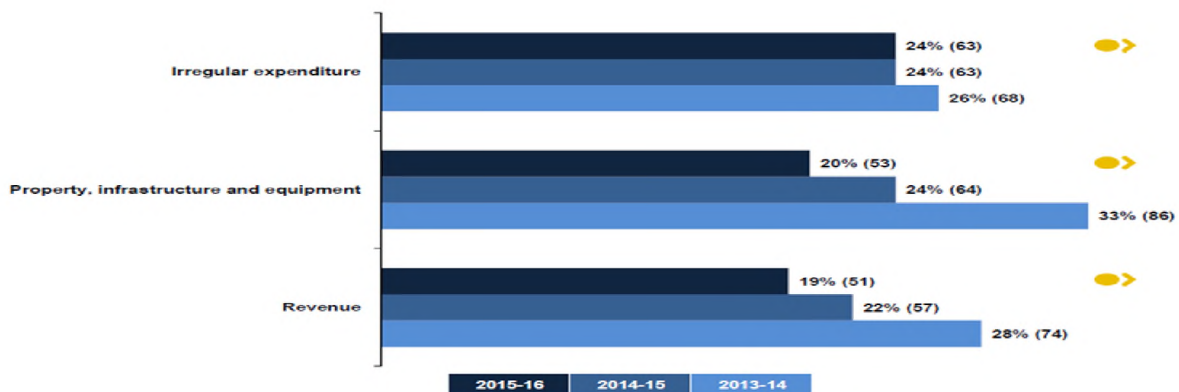
**Figure 5: Qualification paragraphs from Auditor general on municipalities**



Source: Auditor general MFMA report (2016)

The above mentioned financial and performance management internal control is as a result of three areas of qualification by the Auditor general, which account for the inability to account or produce sufficient audit evidence to confirm the completeness and verify the amounts reported in the municipal financial statements:-.

**Figure 6: Qualification paragraphs from Auditor general on municipalities**



Source: Auditor general MFMA report (2016)

The main reason for municipalities being qualified on revenue was that their financial statements failed to disclose all revenue earned, and disclosed revenue that was not earned. They were unable to account for the process of determining tariffs / tax imposed on residents and could not submit sufficient evidence that all

revenue had been disclosed. This then distorted the financial sustainability of municipalities (Auditor General MFMA report, 2016).

### **1.7 PROBLEM STATEMENT**

The Auditor General report (2016, p.14) revealed that municipalities in the Eastern Cape have difficulty in ensuring that sufficient operating revenue is maintained for the provision of efficient and effective services to all its residents without discrimination. Signs of poor financial management were apparent in the budget preparation, in monitoring processes, and in the financial viability of municipalities, which continued to weaken. In 2015-16 the financial health of 65% of the municipalities were rated as either concerning or requiring intervention. The most troubling indicators were that municipalities over-spent and incurred a net deficit: current liabilities exceeded current assets at year-end (net current liability position); debts were slow in recovery or not being collected at all; municipalities were unable to account for the costs of service provision; and creditors were not being paid on time, if at all. In total 27% of municipalities were in a particularly poor financial position by the end of 2015-16, with material uncertainty regarding their ability to continue operating. This poor financial management poses a challenge for the delivery of effective and economically efficient services.

### **1.8 RESEARCH AIM**

The aim of the research is to investigate all factors compromising effective and efficient revenue management through a cost benefit analysis and to propose measures to account for these factors through costing tax / tariff setting processes.

### **1.9 OBJECTIVES OF THE RESEARCH**

The objectives of the research are:

1. To investigate the factors influencing effective and efficient cost recovery revenue management in municipalities in the Eastern Cape;
2. To investigate the application of cost recovery initiatives in municipalities to account for provision of services that promote financial sustainability;
3. To make recommendations of various ways and means effectively and efficiently to manage revenue for municipalities in the Eastern Cape.

### **1.10 SIGNIFICANCE OF THE RESEARCH**

The research is of value to:

- The oversight bodies of the municipalities in the province in that it will provide information from which to set clear realistic strategies for revenue enhancement;
- The residents for whom increased revenue generation will be used to provide sustainable service delivery;
- To the municipalities as they will have to review their revenue related strategies and policies such as Credit Control and Debt management policy;
- The municipalities as they will be encouraged to strive for better customer care and quality in service delivery in view of payment of municipal services.

### **1.11 CONCLUSION**

Chapter 1 has introduced the aim of the research together with the broader revenue management challenges experienced by municipalities in the Eastern Cape. The research problem, its aims and objectives, highlight the need for effective and efficient management of revenue in municipalities in an attempt to provide better, sustainable services for residents. The research benefits municipalities and local government stakeholders.

The next chapter provides a detailed review of the literature dealing with various aspects of efficient, effective revenue management in municipalities.

## **CHAPTER 2 – LITERATURE REVIEW**

### **2.1 INTRODUCTION**

It is important to locate this research within the broad socio-economic challenges facing municipal revenue management and the delivery of basic household services that are a major concern among researchers, policy makers, and municipal officials in South Africa (Community Agency for Social Enquiry; 2015). Challenges facing local government are delivering basic services; expanding; maintaining infrastructure and; managing the physical environment. These challenges have arisen because of rapid urbanisation, rising unemployment, and limited economic growth all of which compromise efficient revenue management. At the micro-level, municipalities must address the needs of poor households by honouring the promise of free basic services (National Treasury; 2016). Seen from another perspective, poor households must balance their budgets to pay for the primary needs of their families and pay for municipal services, or they face not receiving services (Community Agency for Social Enquiry, 2015). The Community Agency for Social Enquiry (2015, p.15) argues that because municipalities cannot cover the costs of service delivery, they are obliged to institute revenue recovery initiatives to promote financial sustainability to enable their mandate

This Chapter will look at the theoretical underpinnings of the thesis from a cost recovery perspective and will look into arguments for and against cost recovery by an analysis of cost benefits. The research reflects on how revenue management is impeded by poor management of both revenue recovery and judicious expenditure.

### **2.2 THEORETICAL FRAMEWORK**

The framework of this research is based on the theory of cost recovery, which is an extension of cost-benefit-analysis (CBA) theory encompassing the accounting of costs. “Once upon a time, protection of human health and the natural environment did not seem to require economic analysis. Before the 1980s, public health and environmental policies were debated primarily on scientific, ethical, and legal grounds, with less emphasis on costs – let alone monetized benefits.

More recently, it has become the norm to assume the need for cost-benefit analysis of new policies, comparing monetary costs and estimates of the monetary value of benefits. Just as a business should only make an investment if the expected revenues exceed the costs, the new approach suggests that government should only adopt a new initiative if its expected benefits exceed its costs” (Ackerman, Holz, Frey, 2008,p.1). Williams and Giardina (1993, p.26) describe cost-benefit-analysis as the tool used in welfare economics which connects the decision to perform an action with its effects in terms of benefits and costs to all members of a community. Cost-benefit-analysis is designed to help public bodies make decisions, which will affect the welfare of those individuals in the community to whom the public body is accountable (Canwell and Sutherland, 2004, p.76). In the context of this research public bodies are the municipalities, and the municipalities are accountable to the communities they serve. Ackerman (2008, p.1) argues, “cost-benefit analysis is a flawed procedure, which should not be central to public policy decisions on climate change or other issues. In practice, cost-benefit analysis exhibits numerous problems, ranging from deep ethical and logical contradictions to a persistent tendency toward forecasting errors and partisan abuse”.

Ackerman (2008) refers to six flaws in the application of cost benefit analysis to decision making:

1. **Pricing the priceless:** The costs and benefits of a service are not normally expressed in comparable units. The costs are frequently well defined in economic and quantitative terms. The benefits, on the other hand, frequently involve human lives, which are unquantifiable from a qualitative factor control perspective or other fundamentally nonmonetary values (Ackerman, 2008). “Cost-benefit analysis absolutely requires monetary values for these benefits. If services of human life and natural systems are unpriced, they will remain uncertain wherein they cannot be numerically accounted for in the cost benefit analysis.” (Verchick, 2005, p.12).
2. **Troubling trade-offs** – The problem is, of course, is that the lead phase down does not guarantee success in future precautionary initiatives. In addition, as CBA advocates correctly point out, overcautious behaviour in one area can lead to bad tradeoffs in another. Progressive and

conservative behavior are acceptable in CBA, but are cautious about different things: progressives are cautious about ecological harm, conservatives about economic harm (Verchick, 2005, p.41).

3. **Uncertainty and precaution:** Cost-benefit analysis requires definite numbers on each side of the costs and benefits to social welfare to allow for the comparison of costs and benefits. Many important questions of environmental policy or welfare economics are uncertain.
4. **Distorting the future:** Costs and benefits of public policies do not always occur simultaneously. While both can occur over a period of years, the benefits of a service or project often extend further into the future than do costs. In addition to reducing all costs and benefits to monetary terms, cost-benefit analysis follows standard economic practice in discounting future amounts converting them to their equivalent value today, or “present value”.
5. **Exaggerated costs:** The cost side of the cost-benefit comparison poses fewer problems than does the benefit side because many of the costs of health and environmental protection are frequently expressed in monetary terms. Yet even here, there are pitfalls in the standard methods. The costs of regulation are routinely overestimated in advance; several studies have found that advance predictions of costs are much more likely to be too high than too low. Once a regulation is adopted, it often spurs innovation in environmental technology, thereby making earlier cost predictions obsolete.
6. **Partisans and technicalities:** Cost-benefit analysis is often proposed with the best of intentions. In the imagination of its advocates, it provides an objective transparent calculation of the pros and cons of a policy proposal. Ideally, it seems as if this could reduce the partisan squabbling involved in policy debates by providing a shared, empirically based understanding of exactly how good or bad a proposal would be. This noble ambition can fail in at least two respects: biases may enter into the choice of alternatives for analysis, and in the interpretation of complex, technical data.

In simple terms, cost-benefit-analysis is a device for accounting for all the costs of providing a particular service and for the benefits of that service.

Here a service may refer to the provision of electrification or water to communities thereby altering the productive capacities of that economy. Cost-benefit-analysis, therefore, is a welfare-maximising decision-making procedure, which functions as a practical decision-making tool (Maclean; 2012). According to Misham (1988, p.201), “cost-benefit-analysis can be regarded as an extension of an efficient price- or tariff-setting system”. Cost-benefit-analysis can be a powerful tool particularly if the qualitative items, namely the secondary costs and hidden costs, are considered in the decision-making process. Holistic evaluation of costs and benefits, multi-criteria analysis, the logic of precaution are applied; fixed targets and cost-effectiveness analysis is maintained (Ackerman, 2008).

### **2.3 EXTERNAL FACTORS THAT CONTRIBUTE TO INCREASED COST RECOVERY REVENUE MANAGEMENT**

#### **1. Culture of entitlement leads to non-payment for services and free-riding**

The problem of non-payment stems from the “culture of entitlement” and dependency. It is argued that many people believe that public services are a basic right and should not have to be paid. Many people are too dependent on government and believe themselves to be entitled to get free services (Fjeldstad, 2004, p.8). This is evident in municipalities with low cost housing whose beneficiaries regard these as entitlements. Recipients are often not in a position to pay for services that are due to them if they are regarded as indigents. Another challenge for municipalities is that these people withhold payments without regard to the quality of services rendered (National Treasury, 2015; p.10). Perhaps the most potent argument for non-payment of municipal services is widespread poverty and high costs to the poor of municipal services; this is discussed below. In the interim, we can refer to this problem of entitlement and the withholding of payment as the phenomenon of ‘free-riding’. A survey conducted by Burger (2001, p.13) found that in many urban municipalities households and individuals who could pay for services opt for a “free ride” because the basic behavioural assumption is that people are free riders. No one will voluntarily contribute to government unless the threat of punishment makes it advisable.

The temptation not to comply, even if others do, defines the free-riding problem (Burger, 2001, p.14). With high levels of non-payment, municipalities incur high rates of debt impairment thus costing the conditional assessments of assets used to service the community. Imposing these costs on the paying consumers increases the tariffs and debtors book.

2. Non-payment as a result of poverty and affordability

As the majority of citizens derive their income from employment, it could be argued that part of the problem is attributable to high levels of poverty resulting from high unemployment rates. This view is supported by Burger (2001, p.10) who argues that affordability is the biggest concern when it comes to the payment of service bills. The poor face an affordability crisis, which is why many South African households default on municipal service payments. Municipalities who adopt costing of services in the municipal billing tariff burden those who are poor because there is no clear identification of indigents nor is there a cross-subsidization of the poor. Municipalities charge interest to outstanding debtors, but if unpaid, long outstanding debts increase and this adds to the total amount owed to municipalities. This interest burden further diminishes residents' willingness to pay for services and decreases the possibility that arrears are affordable.

3. The effect of intergovernmental relations and political support for service delivery

Support from various levels of government is necessary to ensure that municipalities succeed in service delivery. The South African Local Government Association (2010, p.31) maintains that the only way municipalities with no significant urban centre will be able to increase revenue is when they eliminate service delivery backlogs and provide housing to informal settlements.

This would however, require ongoing fiscal support from government in order to make inroads into the eradication of backlogs and to expand services to finance operating and maintenance costs. The diversity of services rendered by municipalities affects financial self-sustainability.

The South African Local Government Association (2010, p.20) asserts that a municipality that has a diverse revenue base will probably be more self-sustainable than a municipality that does not render a range of services. It further advises that the expansion of services to the poor cannot be fully recovered through cross-subsidisation from higher income consumers and ratepayers. The Association found a lack of political will to support revenue collection initiatives because of dissatisfaction with the level of service and perceptions that billing is unreliable.

#### 4. Audit Opinion

Municipalities routinely receive poor audit reports and therefore gain a reputation of poor service delivery, ineffectiveness, incompetence, and high levels of corruption (Van Niekerk, 2012, p58-59). These municipalities often face poor revenue management challenges as raised in the audit reports in Chapter one because of ineffective and inefficient costing methods.

## **2.4 INTERNAL FACTORS THAT CONTRIBUTE TO INCREASED COST RECOVERY REVENUE MANAGEMENT**

1. Inaccurate Billing arises from unreliable and corrupt consumer data, which can be attributable to the failure of municipalities adequately to verify and clean data following upon the municipal amalgamations that occurred during the demarcation processes of 2016. Such factors have been linked to worsening billing, metering, and revenue administration processes. Inaccurate billing is caused by a lack of adequate capacity in municipal finance departments to design innovative processes for the collection and enhancement of revenue; process are not automated nor are they integrated into municipal mainframe databases in order to distinguish between the debtors system, financial system, and satellite offices (Community Agency for Social Enquiry, 2015).

Other important factors that compromise effective billing are the ineffective control of technology. Technological factors not only contribute to effective billing but also promote financial integrity. Successful billing is therefore mostly a function of the accuracy of the data input.

Systems and controls need to supplement the financial software that would ensure complete and accurate billing.

2. According to the National Treasury Local Government Budgets and Expenditure Review (2015, p.40), municipal data purification compromises customer information stored on the database thereby impeding tariffs applied to each customer resulting in a customer's sometimes being billed for a residential tariff instead of a business tariff. Incorrect data inhibits the development of accurate cost recovery tariffs. Customer tariffs are not cost reflective according to the use of variables such as land usage, debtor type, and example: business or residential, land zoning, and service type.
3. Ineffective Financial Control System. National Treasury Local Government Budgets and Expenditure Review (2015, p.41) is of the opinion that ineffective financial control systems contribute to inefficient billing processes, such as giving financial staff access to software systems, passwords, or biometric protection systems; and supervisors could be given authority to open and close accounts or alter account status. Financial system controls also create problems with the identification of indigent households, the updating of customer details, or continuous data purification and problems, which need to be resolved in respect of the implementation of Free Basic Services. Therefore, financial systems must be able to allocate and store all costs of providing a service and the details of customers.
4. According to the National Treasury Local Government Budgets and Expenditure Review (2015, p39) other factors that affect Municipal revenue management are:
  - Incomplete Property Valuation Rolls;
  - Not understanding the revenue Chain;
  - Ineffective and inefficient measuring of actual monthly consumption;
  - Service interruptions;
  - Lack of management of outsourced functions;
  - Not understanding the property value chain;

- Inadequate and inappropriate policies and procedures of promoting and collecting revenue. These are often seen as confrontational and are not understood by households and consumers;

In the light of the above the National Treasury Local Government Budgets and Expenditure Review (2015, p.39) describes municipal billing process as not being broken down into three separate components, namely: Customer; tariff; and usage/service. Furthermore, if effective and accurate municipal billing with each of these components is not maintained, customer confidence is compromised, thus compromising financial sustainability.

## **2.5 APPLICATION OF COST RECOVERY FROM A COST BENEFIT ANALYSIS TO ACCOUNT FOR THE PROVISION OF SERVICES AND EFFICIENT, EFFECTIVE REVENUE MANAGEMENT**

The theory and practice of cost recovery in dealing with efficient and effective revenue management is based on cost benefit analysis. According to McDonald and Pape (2002, p.1) cost recovery refers to the practice of charging consumers full or nearly full costs of providing services such as water and electricity. Research conducted by Gildenhuis (1997, p.241), demonstrates that there is no sense in imposing a tax of which the net yield after the costs of collection is almost zero Gildenhuis conclusion is that municipalities must include all costs of revenue collection in the tariff for the provision of a service. Effective administration is important for this particularly a good postal/payment system. Of equal importance are the punitive measures used to persuade and to force consumers to pay their bills (McDonald; 2002).

The National Treasury guideline for costing in local government (2016) asserts that full cost recovery is the process of gathering and reporting information about actual cost (the direct plus the indirect costs) of providing a service by tracking and accumulating the total price of the process of provision. Although it is crucial that all costs are recovered through the tariff structure, there will be situations when it may be necessary to recover less than the full cost. The basis of under-recovery can be justified through policy, for example where support is provided to indigent

people and in terms of affordability considerations (Eskom; 2007). It is imperative, however, that full costs are known so that tariff decisions are made in the full knowledge of the cross-subsidy that will be required and provided from other revenue sources.

Decisions in terms of infrastructure investments or levels of service cannot be made if the costs are not known (Walsh; 2012). Full cost recovery of a tariff service is an important strategy for the provision of financial stability as it ensures sufficient and stable finance for future services and is a key indicator of the financial health and overall performance of any particular service. Municipalities that are not recovering full costs often experience financial difficulties leading to the severe compromise of their financial condition and a gross loss of service and resources for the community (Louw; 2015).

Municipalities that apply full cost recovery are in general very efficient and provide a high level of service, contributing to customer satisfaction and thereby encouraging payment for services, resulting in investment for replacement and expansion of services (National Treasury; 2016). By adopting a full cost recovery system, municipalities have a better understanding of the principles and techniques of cost allocation, and benchmark their costs against those of municipalities of a similar size. It should be emphasised that the costing forms an integral part of the budgeting process (Eskom; 2012). Most municipalities in South Africa use job costing to track costs; this fits the needs of engineering services, but is unhelpful for decision-making, as it only tracks incurred costs without informing the budget process; this results in tariffs not being cost reflective (USAID; 2014).

Cost recovery for basic municipal services has not always been a policy of national and local government in South Africa. Most South African municipalities, especially those that are small and rural, are a long way from meeting cost recovery goals. There were user fees, tariffs, and general property rates for services under successive apartheid regimes, but for the most part, these charges had little relevance to the actual cost of providing a service which is virtually impossible to estimate (Macdonald; 2002, p.20). In terms of fiscal arguments the single most important reason given for cost recovery is the need to balance books as a matter of good fiscal practice (Louw; 2015).

Macdonald (2002, p.26-34) highlights arguments against cost recovery:

1. Historically unfair on the poor and beneficial to the rich on application;
2. progressive block tariff will hamper poor families with large households;
3. cost recovery comes with harsh measures of application;
4. cost recovery is not legislated and practically unconstitutional;
5. cost recovery is ideal for revenue management and sustainability;
6. There are narrow accounting methods for the application of cost recovery.

The annual municipal budget benchmarking engagements conducted by National Provincial treasuries and the Auditor General's report (2016) found that most municipalities struggle to achieve financial sustainability. The Auditor General reports (2016) that municipalities are not applying sound budget principles, that service charges are not informed by any costing method or basic cost recovery principle, and that rarely is there a correlation between annual tariffs for basic services (water, electricity, sanitation, and waste management) and the cost of providing such services.

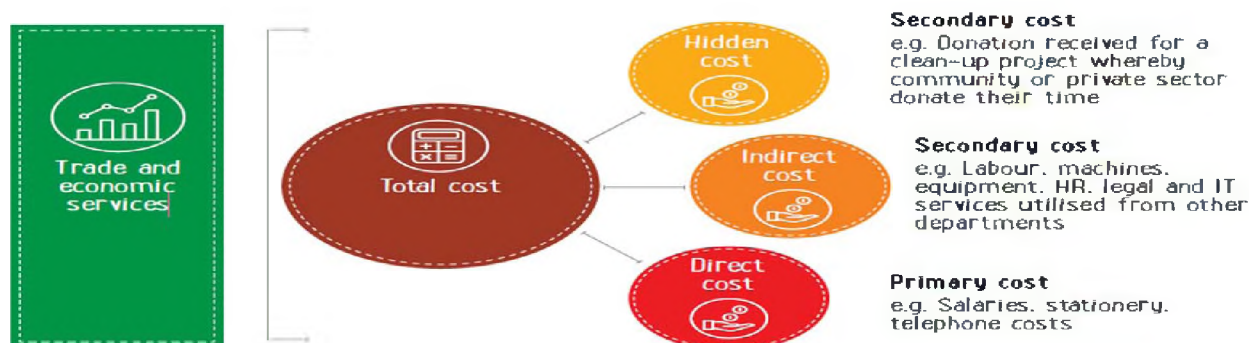
Tariffs are typically based on the direct cost of rendering the service and are mostly adjusted incrementally, but as systems deteriorate and maintenance costs increase historical costs no longer serve as a reliable guide for budgeting (National Treasury; 2016). As a result, the gap between what should be spent on a service and what is being spent continues to widen. Planning to recover the full cost of these services, that is cost-reflective tariffs, will ensure sufficient funding to sustain them; as systems age, however, inadequate cost recovery and rising renewal costs lead to insufficient investment in capital renewal. Ultimately, such insufficient re-investment leads to deferred maintenance and to a decline in, or total collapse of, services.

Furthermore National Treasury guidelines for local government (2016, p.13) asserts that when tariffs for a service are not cost reflective services are cross-subsidised by other services or property rates which is a practice that means high-end users of services are subsidised by poorer consumers. Furthermore, the high collection rate of some of these municipalities was not reflected in their cash position, which could only be attributed to having non-cost-reflective tariffs. In

addition, municipalities are put under significant pressure when the tariff structures of one municipality are compared to those of others. Then citizens increasingly question how municipalities determine the price of their services. In most cases these questions are difficult to answer if no costing methods are applied and associated costs of provision of services are not known; this questions the transparency of tariff determination (National Treasury; 2016).

## 2.6 ELEMENTS OF COST RECOVERY

**Figure 7: breaking down elements of cost recovery**



*Source: National Treasury costing methodology guideline for local government (2016)*

Initially cost recovery will be applied to the four core municipal functions of electricity, water, wastewater, and waste management (Eskom; 2007). Focus on these functions is essential for setting cost-reflective tariffs for the most significant revenue-generating functions. Service charges and the calculation thereof are important to consumers and investors. If service charge revenues do not keep pace with increases in the cost of service provision, or if fees are set only partially to recover costs, the cost burden can ultimately revert to the ratepayer whose property rates are utilised to cross-subsidise tariff services (Eskom; 2007) . If tariffs are set so that the full cost is recovered, the consumer can use the tariff to benchmark the efficiency of the municipality in providing services. It also creates user satisfaction or expectation that service standards are in line with appropriate norms and standards, indicating that the municipality is managing its service delivery costs effectively.

## **2.7 ARGUMENTS FOR APPLYING COST RECOVERY ACCOUNTING TECHNIQUES (COST-REFLECTIVE TARIFFS)**

The most important advantage of implementing cost recovery accounting is that it provides accurate and complete information on the real cost of managing a tariff service. All secondary costs can be identified and allocated to the relevant service, ensuring that those who are using the services are paying their full cost (National Treasury; 2016). Once the cost of each service is calculated, municipal managers have a better understanding of obligations and so can predict future costs precisely. Informed decisions about potential cost savings can then be made, as well as the types and levels of service provision. Implementing cost accounting will ensure that tariff services are adequately funded over the long term resulting in an efficient, sustainable, and reliable service (National Treasury; 2016). In addition to the general advantages that come with understanding costs and cost drivers, full cost recovery provides the following benefits to municipalities:

- Being able to set fees and charges for services;
- Managers can drive improvement measures based on an understanding of their costs and the impact on operational costs;
- Ensures transparency to its customers;
- Ensures the sustainability of services;
- Promotes efficiency and cost effectiveness in services;
- Ensures correct pricing of services (and will result in consumers not abusing scarce resources);
- Assists in decision-making around levels of increasing or decreasing service;
- Indicates the subsidisation between different type of consumers or different services;

- Ensures accountability and business units which re-charge costs to other projects and/or services would have to motivate the increase in costs as well as the basis of re-charging costs;
- Promotes allocation of internal resource, ensuring that available resources are utilised optimally and the duplication of services can be identified;
- Helps to maintain and improve services;

## **2.8 RISKS OF NOT IMPLEMENTING COST RECOVERY ACCOUNTING**

Should a tariff service not recover the full cost of rendering a service, the municipality will not be able to finance network expansions or properly maintain existing infrastructure. This results in low service levels, which in turn has a negative effect on the willingness of customers to pay. In essence, low levels of cost recovery from the user will result in insufficient income for the effective and efficient operation and management of the service. This implies that the municipality will not be in a position to invest in further services which exacerbates the problem and can result in a possible loss of scarce resources if infrastructure is not maintained properly (Eskom; 2017). The following summarises some additional risks of not implementing full cost recovery of services:

- Potential for cross-subsidisation from property rates or other services;
- An increased risk of service outages as preventative maintenance is not being done, with the concomitant inconvenience for customers and a loss of revenue for the municipality;
- A widening gap between full cost and current expenditure will result in huge tariff increases when rectified;
- No transparency around tariff determination;
- A steady degradation of system infrastructure resulting in a reduction of service level standards;
- Reduced ability to attract new business;
- An increase in emergency repairs against scheduled or preventative maintenance;
- Can result in higher insurance costs;

- A lower credit rating and higher lending costs National Treasury (2016).

National Treasury Local Government Budgets and Expenditure Review (2016) is of the view that where a municipality has the sophistication and the capacity to implement activity-based costing they may do so, but for those who do not have such capacity, traditional costing methods should be applied. It is important that a cost accounting method be used to identify and assign overheads as well as other indirect costs service provision. Cost accounting is more than just collecting cost data; it is also a tool to provide municipal managers with information that can be used to improve management decisions through a social welfare and cost benefit analysis (Louw; 2015).

The manner in which activities are costed is very important as inappropriate costing can distort decision-making and may lead to:

- Inappropriate allocation of internal resources;
- Underfunding /overfunding of a service;
- Inability to identify inefficiencies;
- Inability to benchmark against other municipalities (National Treasury; 2016, p15).

## **2.9 CONCLUSION**

Municipalities need to understand the level of service to be delivered, as well as the impact on sustainability in providing a service at that level. The higher the service level, the greater the impact on input costs which results in higher tariffs for the consumer which then affects affordability. Using cost accounting principles to manage the full cost of providing services enables a municipality to determine appropriate tariffs and ensures that the community receives fair value for the tariffs they pay. Although it is important to achieve full cost recovery, adjusting prices to achieve equity considerations are important factors affecting municipal pricing decisions and for determining the appropriate level of cost recovery for given services. This involves balancing the desire to distribute costs equally to all users who benefit from the service with ensuring equal access to those with less capacity to pay. While full cost recovery represents the optimum pricing outcome, it is important to note that there will be situations in which it is necessary to address socio-economic issues such as indigence by using a redistributive

mechanism such as cross-subsidisation. Even in cases in which services are subsidised it is important to calculate the full cost of the service to determine the subsidy that is being provided. To give effect to these pricing principles, and to make informed, rational decisions about the allocation of resources, municipalities need to be able to make informed costing decisions.

## **CHAPTER 3 – RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

Chapter 3 discusses notions that were considered while conducting this research. The rationale for choosing quantitative research methodology is described, followed by an explanation of the design of the research. Also discussed is that the sampled participants for the research are drawn from Financial Departments of the municipalities examined. The research covers how ethical considerations are observed during the conduct of the research.

### **3.2 RATIONALE ON METHODOLOGY**

There are two possible approaches to this research, namely, qualitative and quantitative research (Neuman, 2006, p.151). Babbie and Mouton (2011, p.270) describe qualitative research as that which focuses on the process rather than the outcomes and is conducted in a natural setting of social actors. Booth, Comb, and Williams (2003, p.174) argue that the strength of qualitative research is its ability to provide complex textual descriptions of how people experience a given research project. Kumar (2005, p.240) argues that the quantitative method focuses on the collection and analysis of numerical data and statistics. The methodology followed here is quantitative. Based on the description by Welman, Kruger, and Mitchel (2008, p.8), a quantitative research method emphasises the measurement and analysis of causal relationships between variables in a value free context.

### **3.3 RESEARCH DESIGN**

According to Welman et al. (2008, p.25), the research design is a plan from which data is obtained from participants. Based on the description by McNabb (2002, p.269) the research is explanatory as it is concerned with identifying the social and economic practices that could be explained as causes for inefficient and ineffectual revenue management in Eastern Cape municipalities. Furthermore, the identification of these underlying factors gave ample scope for the formulation of strategic plans to boost the management of revenue in municipalities.

### **3.4 RESEARCH PARADIGM**

For the overall selection of the research paradigms, the Positivist approach is used.

### **3.5 POSITIVIST APPROACH**

According to Welman et al. (2008, p.25) the positivist approach underlies the natural scientific method and holds that the research must be limited to what can be observed and objectively measured. The positivist approach maintains that whether or not the world has a "real" existence beyond human experience of that world is an open question. For positivist researchers most assuredly there is a "real" reality "out there" apart from the flawed human apprehension of it. Further, that reality can be approached only through the utilisation of methods that prevent human contamination of its apprehension or comprehension. For foundationalists in the empiricist tradition, the foundations of scientific truth and knowledge about reality reside in the rigorous application of testing phenomena against a template as much devoid of human bias and misperception, (Guba and Lincoln, 2005, p.176). True knowledge is limited to the objects and the relationships between them that exist in the realm of time and space. The positivist methodology in this thesis verifies hypotheses through quantitative methods arguing that the nature of knowledge is verified through hypothesis, facts, and laws (Guba and Lincoln, 2005, p.177).

### **3.6 HYPOTHESIS**

The hypothesis is as follows: While local government has its own revenue, base municipalities are financially unsustainable. Municipalities do not collect outstanding revenue, which compromises financial sustainability and inhibits the service delivery required by communities. The hypothesis predicts a relationship between independent (factors influencing own revenue) and dependent variables (own revenue) that can be tested. Municipalities that have apply proper credit control policies are financially sustainable. The analysis of the data collected reinforced the hypothesis; the hypothesis was tested through the literature review, which showed high rates of external revenue management challenges due to the inefficient management of municipal funds; inefficient costing methods for revenue management resulted in widespread financial unsustainability. The researcher could not perform T-tests because the number of respondents were below thirty, so he opted for depicting frequencies and relationships between the variables.

### **3.7 TARGET POPULATION**

Goddard and Melville (2005, p.34) define the population as any group that is the subject of research. For Axelson, Bihler, and Djert (2009, p.108) the target population is those individuals in whom the researcher is interested. For this research, the target population was the 39 municipalities of the Eastern Cape and the specific officials targeted included all Chief Financial Officers from whom, however, the response was below five, so revenue managers in municipalities in the Province were targeted; they can also provide assurance and ensure reliability, validity, and accountability of the data.

### **3.8 SAMPLING**

According to Goddard and Melville (2005, p.34) sampling is a subset of the population, and that the sample must represent the population being studied, so that findings can be generalised to other municipalities. Welman et al. (2008, p.57) distinguish between two broad categories of sampling designs: Probability Sampling and Non Probability Sampling: in Probability Sampling, any member of the population could be included in the sample, but that probability could not be specified in the case of Non Probability Sampling. Non-probability sampling is,

therefore, non-random and subjective. Therefore, non-probability sampling has been used in selecting participants in municipalities, along with purposive sampling. According to Babbie and Mouton (2011, p.166) purposive sampling is about selecting the sample on the basis of the researcher's own knowledge of the population, the population's elements, the nature of the research, the aims and the purpose of the study. Purposive sampling was used to identify key participants in municipalities, and these are the Revenue Managers. The justification for selecting these officials was their significance in strategic development in municipalities thereby providing reliable legitimacy to the research process. These participants are also central in the management and monitoring of finances in their municipalities. The total sample size, comprising thirty-nine respondents, is the full population.

### **3.9 RESEARCH INSTRUMENT**

The instrument selected for data collection is a questionnaire. McNabb (2002, p.125) states that the questionnaire is flexible, structured, and it can be customised to meet the objectives of almost any type of research project. He added that the questionnaire could measure the factual knowledge gleaned from audit reports, literature reviews, and can gather opinion; it can also reduce turnaround time and lower project costs..

### **3.10 QUESTIONNAIRE CONSTRUCTION**

The questionnaire is not an official form, nor is it a set of questions casually jotted down (Oppenheim, 1992, p.65). In designing the questionnaire, a number of questions carefully chosen and pointed were subdivided as to their research objectives, and directed at the overall research aim. Thirty-nine questions are formulated for collecting the data to address the objectives listed below:

#### **3.10.1 To investigate the factors affecting effective and efficient cost recovery revenue management in municipalities in the Eastern Cape.**

It is important that municipalities are clear about where the use of cost recovery is justified and can show that all necessary efforts are being made to ensure that fees and charges are applied efficiently and effectively. To achieve this, there are

certain inherent Internal and External challenges, which must be identified so that they are calculated into cost recovery revenue management when applying user fees.

### **3.10.2 To investigate the application of cost recovery initiatives in municipalities to account for the provision of services to promote financial sustainability**

This section identifies three key issues to be addressed concerning cost recovery: (a) setting cost recovery policy and principles; (b) capturing, monitoring, and reviewing the cost of services; and (c) fee and charge collection and enforcement. Questions that local authorities should consider when developing their cost recovery options are outlined. Finally, the research poses recommendations as to how these questions should be addressed.

The questionnaire construction also allows participants to provide comments necessary for the finalisation of the data collection instrument. Each test item is measured on a six point scale ranging from 1 (strongly agree) to 6 (not applicable) which eventually will be aggregated at a provincial level to assess to what extent the hypothesis is true. The Likert scale make it easy to draw frequencies and understand the extent of the challenges in municipalities. Respondents are asked to rate their perceptions for each test item.

### **3.11 ADMINISTRATION OF QUESTIONS**

Bowling (2005) maintains that the different modes of delivering questionnaires to respondents result in different qualities in the data collected. The preferred method for administering the questionnaire was by E-mail because it is fast and cost effective: participants could respond on the same day, thereby reducing unnecessary delays. To ensure the return of the responses the researcher sent email reminders, made telephone calls, and visited some municipalities several times to clarify questions when they were not understood.

### **3.12 COLLECTION OF QUESTIONNAIRES**

The participants were given at least four weeks to complete the questionnaire and return them by email. A folder for saving completed questionnaires was created which was double password protected to ensure confidentiality and prevent fabrication of results.

### **3.13 DATA ANALYSIS**

McNabb (2002, p.136) maintains that responses to questions produce the 'raw data' and only when the data is coded, tabulated, and interpreted does it become information. The data was captured and analysed with Microsoft excel. For each question, tabulation reflected differences of opinion using actual frequencies. These frequencies were converted to percentages to illustrate relative levels of agreement and or disagreement. Analysis revealed inconsistencies in responses and identified trigger questions most pertinent to the research objectives. The researcher then analysed the relationship among the variables as per objectives.

### **3.14 VALIDITY AND RELIABILITY**

Trochim (2011, p.1) defined reliability as the degree to which an instrument measured in the same way each time it is used, and under the same conditions, with the same subjects would yield the same results. There are three types of reliability:

- Parallel forms of reliability
- Test –retest reliability
- Inter-rater reliability

For the purposes of this research, the test-retest method is used to test the reliability of the instrument. The analysis of the data revealed a strong similarity in the responses of the data. Trochim (2011, p.1) defined validity as the strength of the conclusion made, inferences, or propositions. Validity determines whether the measuring instrument measures what it is intended to measure. According to Tredoux and Durrheim (2006, p.216) there are four specific types of validity:

- Face validity – this refers to the appearance of the test.

- Content validity refers to how well the test items represent the construct to be measured. There are two ways of ascertaining content validity: face validity and the views of expert judges.
- Criterion-related validity refers to how well the test anticipates the behaviour or outcome either by predictive validity or by concurrent validity.
- Construct validity attempts to establish whether the test really does measure what it is intended to measure. Furthermore, face validity is a useful indicator of the appearance of the test.

This research uses construction validity to address the hypothesis through analysing the content validity of the literature provided. Participants are selected by means of the researcher's knowledge to promote validity of response.

### **3.15 LIMITATIONS AND DELIMITATIONS OF THE RESEARCH**

Revenue management for municipalities is an extensive phenomenon. The research was conducted from a narrow empirical perspective in that it only focuses on a province, rather than on the National level. This narrow method naturally limits the scope of the research as well as the generalisation of results at a national level. The closed ended questionnaire also limits the type of responses obtained for each test item. The author was limited in accessing current peer reviewed references pertaining to the topic being researched and therefore greatly relied on unpublished data. In some instances old references had to be used to draw certain inferences because of the uniqueness of the topic and inhibiting challenges that have not been tested before.

Cline (2002) describes the limitations of the research as characteristics that limit the scope of an inquiry as determined by the conscious exclusionary and inclusionary decisions made in the proposal. Certain areas are excluded and included as when the objectives of the research are reduced to only three while the research instrument consists of only thirty-seven questions. The sample size in this project is also limited by it being confined to one province.

### **3.16 ELIMINATION OF BIAS**

Sica (2011, p.1) defines bias as a form of systematic error that can affect scientific investigation and distort the measurement process. He asserts that in the process of eliminating bias, new bias might be introduced or research rendered generalised, thereby making it difficult to eliminate bias. To eliminate bias, respondents are given the freedom of remaining anonymous during the analysis of findings. This choice of anonymity is noted in the questionnaire and indicates that the email could have been sent from anyone in the municipality. The data is electronically collected avoiding any bias through human interaction in as much as respondents may wish to protect their municipality. In these cases, the questionnaire compilation created trigger questions and those that test or are aligned to trigger questions. An important ethical principle is respect for people's rights and dignity of all people, which is observed by researchers.

According to Orb et al (2001), researchers respect the rights of individuals to privacy, confidentiality, self-determination, and autonomy, mindful that legal and other obligations may lead to inconsistency and conflict with the exercise of these rights. Researchers are also aware of cultural, individual, and role differences, including those due to age, gender, race, ethnicity, national origin, religion, sexual orientation, disability, language, and socio-economic status (Mauthner, M., Birch, M., Jessop, J. & Miller, T., 2002). Researchers try to eliminate the effect on their work of bias based on those factors, and do not knowingly participate in or condone unfair discriminatory practices (Orb et al., 2001). There are many other ethical principles and the best way to make sure that they are not violated is to make sure that you familiarise yourself with the code of principles so that you know which is acceptable and not unacceptable

### **3.17 ETHICAL CONSIDERATIONS**

Ethical principles are essential to all types of research. In quantitative research, ethical principles prevent the fabrication or falsifying of data because truth is the determining goal of the research (Mauthner, M., Birch, M., Jessop, J. & Miller, T., 2002). For qualitative research, ethical principles are based on protecting the participants doing the research to ensure that they are not harmed (Orb,

Eisenhaurer, & Wynaden, 2001). Therefore, the core and inviolable ethical principles are set out below. Welman et al. (2008, p.181) state that ethical considerations are concerned with matters such as plagiarism and honesty in reporting results, as well as respect for the rights of individuals during data collection. The goal of ethics is to ensure that participants are not negatively affected by the research project. This study complied with all ethical considerations, including all legislation concerning local government.

### **3.18 ENSURING PARTICIPANTS HAVE GIVEN INFORMED CONSENT**

Based on a description by The National Academy of Engineering (2003), the purpose and the goals of the research are fully disclosed in the consent letter to participants to ensure complete understanding of the intention of this research. Participants are assured that their participation is voluntary and there is no coercion or undue influence of participants by the researcher.

### **3.19 ENSURING NO HARM COMES TO PARTICIPANTS**

Welman et al. (2008, p.201) maintain that respondents should be given the assurance that they are indemnified against any physical or emotional harm. In this instance, participants were provided with this assurance.

### **3.20 ENSURING CONFIDENTIALITY AND ANONYMITY**

According to the National Academy of Engineering (2003), privacy includes an agreement between the researcher and the participant regarding the disclosure of the participant's identifiable data and how it would be handled. For this project, names of participants were not requested in order to protect their identity. The computer file folder with restricted access was created to ensure the safekeeping of all data received.

### **3.21 ENSURING THAT PERMISSION IS OBTAINED**

Written permission to conduct the research was obtained from the municipalities participating in this research and from the researcher's employer because the

author is employed to oversee compliance of municipalities in the province. Copies of the letters are attached as annexures.

### **3.22 CONCLUSION**

This chapter described the research methodology, which emphasised the research objectives, aims and hypothesis. Quantitative research methodology is the rationale for this research, the design of which, its philosophy and strategies are explored. It is indicated that the total number of the targeted population is thirty-nine. The choice of non-probability sampling is discussed, as are aspects of the research instrument ranging from the construction of the questionnaire to data collection. This chapter also covers various aspects of the ethical considerations observed while conducting this research.

## **CHAPTER 4 – RESULTS AND INTERPRETATION**

### **4.1 INTRODUCTION**

Chapter 4 presents and discusses the findings and analyses the results obtained from the administration of the data instrument. All the findings are presented in graphics and tables in accordance with the order in which they appear in the research instrument. This chapter therefore marks the turning point of the research as it determines whether the research objectives have been achieved or not. The author uses percentages in presenting his results and these are achieved by grouping the “strongly agree” and “Agree” responses together and then group the “disagree” and “strongly disagree” responses together. It is to be noted that the research instrument was sent to the whole sample of 39 municipalities and the researcher received responses from 17 municipalities.

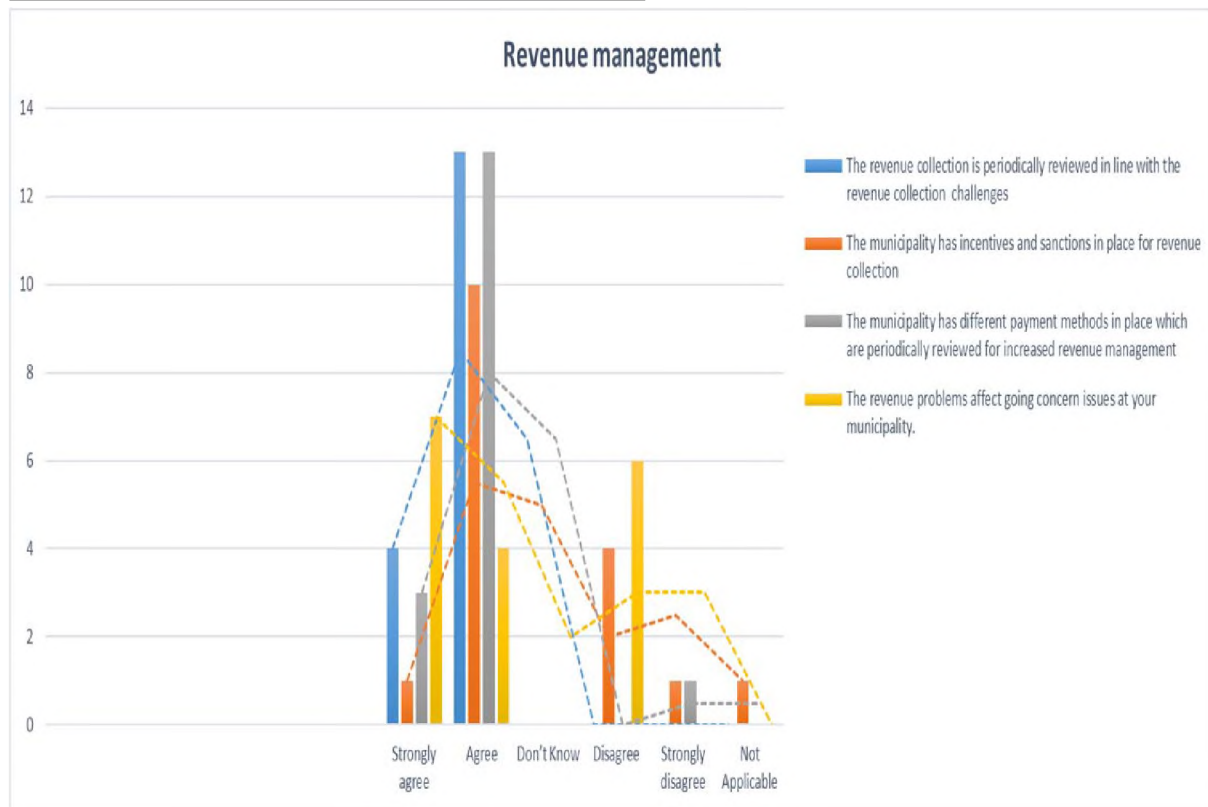
### **4.2 ESTABLISHING THE EXISTENCE OF REVENUE MANAGEMENT PROBLEMS**

Table 2: Analysis of own revenue factors

No.	Question	Strongly agree	Agree	Don't Know	Disagree	Strongly disagree	Not Applicable
1	The revenue collection is periodically reviewed in line with the revenue collection challenges	4	13	0	0	0	0
2	The municipality has incentives and sanctions in place for revenue collection	1	10	0	4	1	1
3	The municipality has different payment methods in place which are periodically reviewed for increased revenue management	3	13	0	0	1	0
4	The revenue problems affect going concern issues at your municipality.	7	4	0	6	0	0

Table 2 above establishes whether the municipality has revenue management challenges. The questions posed (from question 01-04) as per research reflect inconsistency. Questions one to question three reflect that there are controls in place to detect revenue management problems and to treat them internally. Upon analysis, it was found that municipal efforts to promote the payment of municipal revenue are neither effective nor efficient. Regarding question four, the author notices that the municipality has revenue management problems that affect the municipal going concern as 11 of the 17 (64%) respondents have financial constraints. In their responses, municipalities agreed that because they are rural with very limited resources, they do not have the ability to disconnect. This means that in those instances in which the municipality charges property rates and for the collection of refuse, and when their expenses are not met, revenue cannot be collected, partly because it is only through the supply of water, by the district Municipality, and of electricity, from Eskom, that payment can be enforced. In addition, payment incentives fail to produce returns; and requests to Eskom to prohibit supply fail, indicating poor intergovernmental relations. The overall result is increasing and crippling bad debt. In this instance, the debtor book is growing and the provision for bad debts is ever increasing. This contributes to the overstatement of current assets, thus creating a sustainability and going concern problem for municipalities.

**Figure 8: Analysis of own revenue factors**



### 4.3 EXTERNAL FACTORS THAT CONTRIBUTE TO INCREASED COST RECOVERY REVENUE MANAGEMENT

**Table 3: analysis of external factors hampering own revenue**

No.	Question	Strongly agree	Agree	Don't Know	Disagree	Strongly disagree	Not Applicable
5	The revenue problems affected service delivery at your municipality	5	7	1	4	0	0
6	All relevant government departments are sufficiently supporting the municipality to ensure efficient service delivery and revenue management (IGR)	3	5	2	7	0	0
7	The unemployment and poverty in the municipal jurisdiction contributes to the revenue position at the municipality	10	5	0	2	0	0
8	The culture of entitlement contribute to the increase in the debtor's book	6	8	1	2	0	0
9	The charges for rates and tariffs are affordable to customers	3	13	0	1	0	0
10	The Municipal audit Opinion has a negative effect on the collection and management of revenue	1	2	1	9	4	0
11	Stakeholders are continuously educated on their role of paying for services to avoid free-riding	2	8	1	6	0	0

#### The revenue problems affected service delivery at your municipality

The table above indicates that a substantial 70% (12 out of 17) respondents experience service delivery protests due to lack of revenue generation or management. Respondents agreed that this is because of political promises that are unfulfilled during the budget preparation stage. The Budget is at times not cash backed due as commitments outweigh available cash. Cash does not always reinforce municipal budgets because outgoing commitments exceed incoming and available cash. Moreover, projects undertaken by municipalities are not always calculated according to available and collectable revenue nor is the recovery of revenue included in costs.

**The government departments sufficiently support the municipalities to ensure efficient service deliveries**

The above table indicates that a substantial 47% (8 out of 12) of the participants concurred with the view that government departments sufficiently support municipalities to ensure efficient service deliveries, 41% (7 out of 17) disagreed, and the remainder did not know. A reading of the responses indicates that there are no efficient or effective intergovernmental relations. Chapter 7 of the Constitution of the Republic of South Africa (1996:88) emphasizes that national and provincial governments must support and strengthen the capacity of municipalities in managing their own affairs so that they can satisfactorily exercise their powers and perform their functions.

Phosa (1990, p.1) raised the concern that situations exist in which plans for projects to be implemented by provincial departments are not clearly communicated to municipalities which causes confusion and creates increasing waste of resources. This endorses the overall view of respondents that government does not sufficiently support municipalities.

**Unemployment and poverty in the municipal jurisdiction contributes to the revenue position at the municipality and an increased debtor's book.**

An alarming 88 % (15 out of 17) respondents concede that revenue problems are due to unemployment and poverty resulting in the municipality carrying a huge burden so that service delivery is not carried out because of a decreasing revenue base. In addition, failed payment incentives are the result of poverty and unemployment; and when people can afford to pay but do not do so, respondents consider that this is due to poor service delivery.

82% (14 out of 17) of the respondents argue that their debtors books have increased due to an increased culture of entitlement and because the community is not made aware enough of why they need to pay for the services they receive.

### **Charges for rates and tariffs are affordable**

94% of respondents agree that charges for services are affordable and that tariff increases by the annual consumer price index do not take into account the cost of services because the baseline for tariffs has never been reviewed. The general view is that should cost reflective tariffs be applied, the tariffs would drastically increase as would the debtors book because of issues of entitlement, free-riding, unemployment, poverty, and the deprived rural nature of the Eastern Cape province.

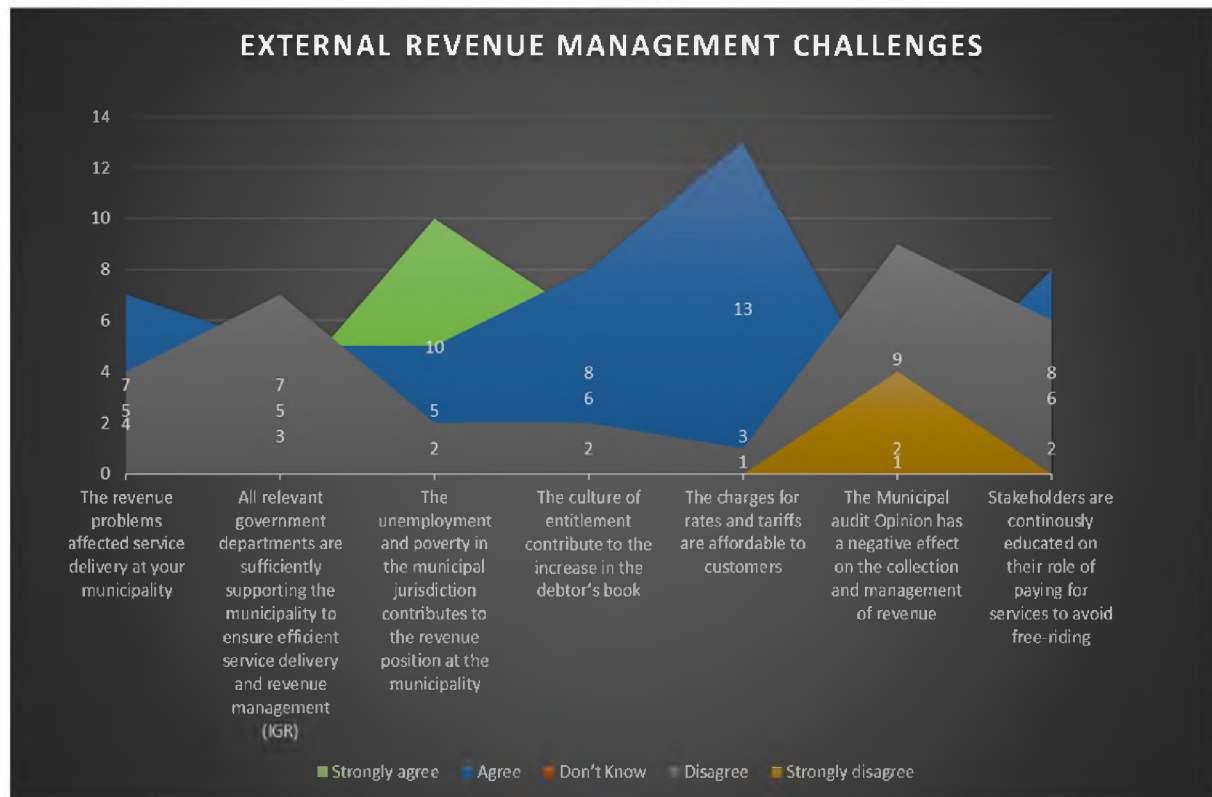
### **Stakeholders are continually educated regarding their role of paying services in order to avoid free riding**

Table 3 above indicates that while 58% of respondents agreed, 42% disagreed that municipalities always communicate its challenges to the community regarding service deliveries. This low margin in responses suggests that respondents are not sure on the deliverable. A question of the reliability of the responses creeps in.

The minority of the participants (42%) suggest that their municipalities do not always communicate their challenges to the community regarding service deliveries. Fourie et al. (2007:127) state that municipalities are obliged to establish mechanisms, processes, and procedures for community participation in the general affairs of the municipality and its annual budget process. Therefore, feedback by municipalities to communities regarding the challenges of meeting deadlines is important so that the community is aware of what to expect. The 58% who agree that there is communication between the municipality and the community are probably those respondents who do not want to compromise reputations out of loyalty to the municipality; or they do not want to be seen as poor managers. Van der Walt et al. (2007:186) maintain that, since South Africa is part of the global village, particularly through modern communication technology, it

should reach other countries continuously and maintain optimal transparency regarding access to the nature and extent of its local governance.

**Figure 9: analysis of external factors hampering own revenue**



#### 4.4 INTERNAL FACTORS THAT CONTRIBUTE TO INCREASED COST RECOVERY REVENUE MANAGEMENT

**Table 4: analysis of internal factors hampering own revenue**

No.	Question	Strongly agree	Agree	Don't Know	Disagree	Strongly disagree
12	The majority of the bills reach the correct customer addresses and there is a low rate of undelivered bills	2	10	0	4	1
13	The municipality implements credit control and debt management policies effectively and efficiently	6	7	0	4	0
14	The municipality has an adequate software solution for its revenue management controls	3	7	0	7	0
15	The municipality is able to effectively profile the customers in order to differentiate those that cannot pay for services	3	9	0	5	0
16	The municipality has Budget and Treasury capacity to manage revenue challenges	2	11	1	2	1
17	The municipality implemented an effective Indigent policy and free basic services policy	5	11	1	0	0
18	The municipality charges interest on outstanding debtors that eventually overstates the debtors book	6	9	0	1	1
19	The municipal financial systems are automated from sub-ledger to ledger without any manual journal interface	8	3	0	5	1
20	The Municipality has sufficient financial system controls to ensure continuous reviews of internal control deficiencies identified by Auditor General to actively address ineffective and inefficient revenue management	4	11	0	2	0

### **The bills that reach the correct addresses of the customers**

The question was asked if the majority of the bills reach the correct addresses of customers. The table above shows that a significant portion of 70% of the respondents agreed. While this finding is pleasing, the fact that 30% disagreed with this statement is a cause for concern. The municipalities should have greater control over the processing and dispatch of bills, a view supported by the studies of Mahlaba (2010) who indicates that improving service delivery is a priority for municipalities. Mahlaba (2010) asserts that revenue management together with improving service delivery also integrates the geographical information system, including the correct residential or postal addresses of customers. The guide by the United States Agency for International Development (2010:4) maintains that

accurate billing for services is a critical element of the municipal revenue management business model. The majority view that the rate of undelivered bills is low positively supports the previous majority view that most of the bills reach correct customer addresses. This view is supported by the studies of Mahlaba (2010) who stresses the need to keep accurate records of all clients.

### **The municipality implements credit control and debt management policies effectively and efficiently**

The table above shows that 76% (13 out of 17) of respondents agreed with the opinion that their municipalities adhere to the strict implementation of credit and debt management policies while 24% disagreed. It is imperative that municipalities adhere to policies and their implementation in order to improve service delivery and increase revenue generation. This view is supported by Fourie et al. (2007:188) who maintain that the implementation of credit control and debt management policy ensure that municipalities receive full payment for services delivered from residents who can afford to pay or can resort to a recourse in accordance with its indigent management policy. The split in opinion regarding the strict implementation of credit control and debt management policies raises the concern that procedures might be compromised to a certain extent resulting in unnecessary revenue loss by the municipalities.

### **The municipality has adequate software solutions for its revenue management controls and the system is able effectively to profile customers in order to identify those that cannot pay**

58% of the respondents agreed that their municipality has adequate software for revenue management while 42% disagree. This narrow margin indicates that those respondents who agreed might have been demonstrating loyalty to their municipality.

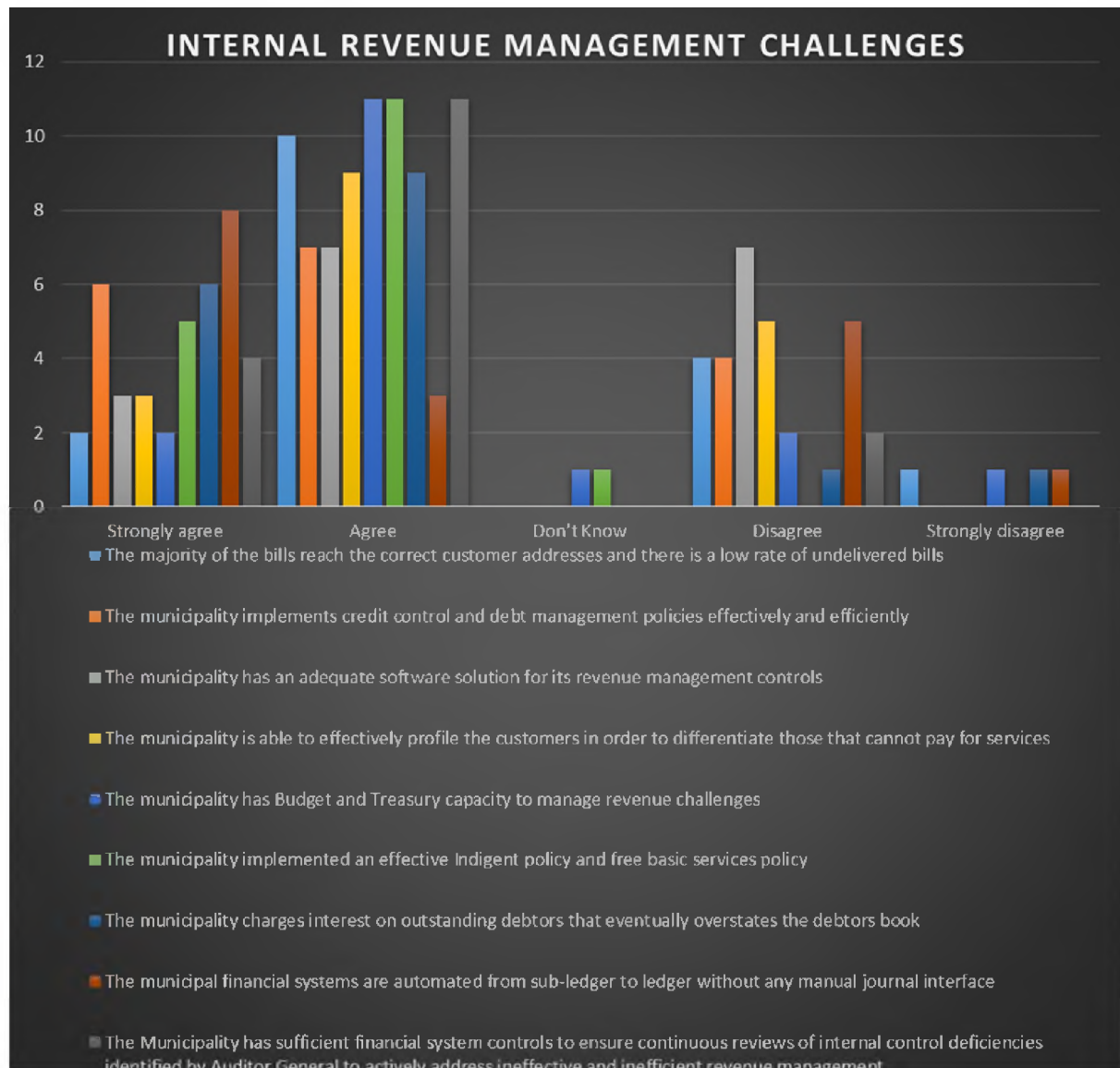
One municipality inferred that the financial system reforms that were directed by the Municipal standard chart of accounts regulation published in March 2014 to be effective 01 July 2017 resulted in system failures adequately to account for revenue management control and daily transactions. On the other hand, it is important for municipalities also to distinguish those customers who can afford to

pay for services from the indigents who cannot. The above table shows that although no respondents strongly agreed, 70% did agree that their system is effective in this regard while 30% disagreed that the system can differentiate between those who can afford to pay from those who cannot. This high response rate is a cause for concern: Patel (2009) emphasises that Free Basic Services provided to the poor must be the cooperative effort of all spheres of government in order to ensure that they are efficient, effective, sustainable, and that they can improve the capacity to provide them. He said that free basic services programmes apply to specified capped services including water, sanitation, energy, and refuse removal. Fourie et al. (2007:188) state that there should be indigent relief measures for those who have registered as indigents in terms of the approved indigence management policy the implementation of which ensures that municipalities are able to target those residents who can afford to pay the municipal services from leaning heavily on poor residents who cannot afford municipal services.

### **The municipality has Budget and Treasury capacity to manage revenue challenges**

The above table reveals that 76% (13 out of 17) of the participants agreed while a further 5% (1 out of 17) stated that it is not applicable implying that they are undecided. That 19% disagreed with this question indicates that there is cause for concern as it also reveals a lack of communication between municipality members and a lack of adequate support for job creation (United States Agency for International Development, 2010: 12).

**Figure 10: analysis of internal factors hampering own revenue**



#### 4.5 APPLICATION OF COST RECOVERY REVENUE MANAGEMENT

**Table 5: analysis of cost recovery revenue application**

No.	Question	Strongly agree	Agree	Don't Know	Disagree	Strongly disagree	Not Applicable
21	The municipality has a policy in place with regards to cost recovery of basic services	5	7	2	2	0	1
22	Municipal services are periodically (annually) reviewed to determine if user fees and charges are appropriate	3	12	0	1	0	1
23	The Municipal system is able to capture Indirect cost of providing a service	1	5	5	4	1	1
24	The Municipal system is able to capture direct cost of providing a service	1	7	4	2	2	1
25	The system is able to store comprehensive data on all charges and fees for services and rates	4	10	1	1	1	0
26	The information base for allocation of cost for a particular service or rate is sufficient and complete	4	6	2	3	1	1
27	The municipality has an effective and efficient review and reporting procedure in place for all tariffs applied	3	11	1	1	0	1
28	The municipality applies a differentiated tariff structure based on quality and quantity of consumption / usage	4	7	0	3	2	1
29	The municipality cross-subsidizes services where under recovery is experienced through property rates or any other income	2	9	2	3	1	0
30	The municipality has Continuously budgeted for a surplus over the years	2	6	2	3	4	0
31	The municipality has continuously over the years had a material under collection on revenue budgeted for	0	9	0	7	1	0
33	The municipality applies a costing methodology when budgeting and charging tariffs	2	9	0	4	1	1

This section identifies three key issues to be addressed concerning cost recovery: (a) setting cost recovery policy and principles; (b) capturing, monitoring, and reviewing the cost of services; and (c) fee and charge collection and enforcement. Questions that local authorities should consider under each heading when developing their cost recovery options are outlined.

**The municipality has a policy in place with regard to the cost recovery of basic services**

Good practice guidance suggests the need for clear policies and principles to decide if cost recovery is appropriate, and the setting of suitable fees and charges when it is agreed cost recovery should be pursued. Clear policies provide a context and framework within which decisions can be made and provide a rationale for action taken. With reference to the above question, 12 out of 17 (70%) of the respondents seem to have a policy for cost recovery and that this policy is embedded in their debt and credit control policy. For the purpose of full cost recovery and effective revenue management, cost recovery is a stand-alone

policy, which gives effect to the costing methodology guideline published by National Treasury (2016) which details how each asset-rating income is designed to recover the cost of providing a service at a profit or at break-even. The debt and credit control policy gives rise to revenue from non-exchange transactions and the cost recovery relates to exchange revenue. Of concern is that 5 out of 17 respondents have not adopted cost recovery revenue management and those that have done so have not fully adopted cost recovery revenue management.

**Municipal services are periodically (annually) reviewed to determine if user fees and charges are appropriate**

Services should be examined to determine whether they should be funded or partly funded through fees and charges in the light of the policy statement (Boyle, 2012). It is notable that 15 out of 17 (88%) of the respondents agree that services are periodically reviewed. The contradictory matter lies with municipalities that had not indicated that they have a cost recovery policy. The question then is on what basis do they review their services? It is important to note these inconsistencies in the responses because this makes it apparent that some respondents did not understand the significance of cost recovery.

**The Municipal system is able to capture direct and indirect costs for providing a service.**

Systems should be capable of capturing both direct and indirect costs in order to determine the full cost of services. This information is needed to guide the fee or charge setting process to determine that fees and charges are set at appropriate levels. Regular reporting to senior management and the council is necessary to ensure the efficient use of resources and for the effective management of costs (Boyle, 2012).

On analysis of the responses, it is apparent that most participants do not agree on the above question, thereby making the basis for a tariff applied inaccurate and incomplete.

**The system is able to store comprehensive data on all charges and fees for services and rates**

Each authority should maintain a comprehensive log of all fees and charges. This should include the name, amount, and description of all charges and fees, the department responsible for collection, and the date of the last review. This information should be publicly available (Boyle, 2012). On analysis 14 out of 17 (82%) of the respondents agree that the system can store comprehensive data on all charges. It is clear that respondents alluded to those tariffs that are stored on the system, however the compilation of tariffs are not stored systematically which makes it impossible to arrive at the appropriate tariff to be imposed.. This then makes cost recovery not specific and not well defined in the system. One is not able to say that an effective and efficient cost recovery revenue management is applied to revenue from exchange and non-exchange transactions.

**The information base for allocation of cost for a particular service or rate is sufficient and complete**

Both the direct and the indirect costs associated with the service should be determined. In the case of small-scale services, it may be appropriate to use estimates for allocating indirect costs rather than to develop elaborate cost accounting systems (Boyle, 2012). It is concerning to note that the systems are not able to allocate the direct and indirect costs of providing a service; 10 out of 17 (58%) respondents agree, however, that the information base for allocation of costs is complete while the rest disagree. This is a good indicator of capacity challenge within the municipality and of the need for training.

**The municipality has an effective and efficient review and reporting procedure in place for all tariffs applied**

Effective reporting should include a detailed analysis for senior management and the council of the full costs and revenues against targets or benchmarks relating to the cost of services in order to assess operational efficiency. There should be regular reporting to senior management and council on the efficiency and full costs of services and how this relates to fees and charges collected.

High cost recovery charges and fees may warrant an annual review whereas low cost recovery charges and fees, particularly those assessed infrequently, may justify a review once every three to five years (Boyle, 2012).

**The municipality applies a differentiated tariff structure based on quality and quantity of consumption / usage and cross-subsidises services where under-recovery is experienced through property rates or any other income**

A product or service may be differentiated based on quality or based on time, such as an express option for service delivery, in order to accelerate throughput and to increase customer convenience. Online payment may be facilitated by setting lower fees for online payments or higher charges for over the counter payments because of the administrative costs involved (Boyle, 2012). The respondents agree to the above question.

**The municipality has continuously over the years had significant under collection of revenue for which it had budgeted**

Revenue collection performance is challenging for local authorities at the best of times, but poses particular difficulties in the current economic climate. An effective and efficient system for collecting user charges is critical for the credibility of any user-charging regime (Boyle, 2012). Nine out of 17 respondents agree to this statement and hence face revenue management problems on a continuous basis. Applying cost recovery would result in material under-collection and the budgeting issue may be a mere book balancing exercise. The policies may be there, however practicality of implementation is challenged due to these macro-economic challenges.

**The municipality applies a costing methodology when budgeting and charging tariffs**

11 out of 17 (64%) respondents agree to the fact that they apply costing methodology starting from cost recovery policies. It is apparent that municipalities are not fully implementing cost recovery revenue management and that they are not yet mature enough to apply it. This is due to the internal and external capacity of employees and stakeholders.

The rural nature of the province, its poverty, unemployment, and dependency create revenue management challenges to the extent that cost recovery initiatives will hamper the consumer. Hence, there is a need for more revenue raising

initiatives that will not stifle service delivery. Addressing the macro-economic challenges will boost local economic development and then have a ripple effect on municipal revenue-raising initiatives such as cost recovery revenue management.

#### **4.6 CONCLUSION**

Chapter 4 presented and discussed the findings of the research, which demonstrate that most respondents indicate that the existing local government legislation sufficiently supports municipalities in levying revenue. The majority of respondents also held the view that their municipalities are not doing enough to skill poor residents to enable them to be employable. These findings were supplemented by theoretical information from other sources.

## **CHAPTER 5 – CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 INTRODUCTION**

Chapter 5 discusses solutions and recommendations related to the findings of this research. This chapter seeks to demonstrate the extent to which the objectives

and questions of this research have been met. The conclusion will propose recommendations to municipalities.

## **5.2 AIM OF THE RESEARCH**

The aim of the research is to investigate all factors affecting effective, efficient revenue management in the Eastern Cape with the intention of maximizing the ability of municipalities to account for revenue management costs. The expected outcome is to ensure that municipalities in the province are financially sustainable enough to enable them to provide efficient and effective service delivery.

## **5.3 FINDINGS OF THE RESEARCH**

There is an increasing reliance by municipalities on intergovernmental transfers largely due to the rapid growth in the local government Equitable Share and in national conditional grants to local government. On the other hand, there is substantial evidence that municipalities are underperforming on revenue collection due to unrealistic tariffs that are applied, unrealistic budgets, mismanagement of internal and external revenue management challenges, and, lastly, the ineffective and inefficient application of costing methods in the preparation of cost reflective tariffs.

## **5.4 CONCLUSIONS FROM THE FINDINGS**

Based on findings discussed in Chapter 4, the following conclusions can be drawn:

- The constitution of the Republic of South Africa and existing local government legislation adequately supports municipalities in the generation and collection of revenue from property rates and the provision of services.
- External revenue management challenges are aligned with the culture of non-payment, free riding, inefficient service delivery, ineffectual inter-governmental relations, and affordability all of which compromise the sustainability of municipal financial management.

- Internal Revenue management challenges are linked to :
  - Financial systems are incomplete, inaccurate, and not well enough maintained to promote effective revenue management;
  - The absence of financial systems that are able to trace the direct and indirect costs of providing services to develop a credible cost reflective tariff.
- The application of costing methods also impedes an effective and efficient financial sustainability because municipalities:
  - Do not have efficient revenue management policies that promote cost recovery and transparent tariffs;
  - Competency of Municipal management is compromised because municipalities are not able to account for cost recovery based revenue management;
  - Stakeholders are not work-shopped on transparent tariff setting and the applicability thereof.

Based on the above conclusions the following recommendations are provided to address this revenue management crisis.

## **5.5 RECOMMENDATIONS**

### **Possible solutions to external revenue management challenges**

One solution for external revenue challenges can be found in economic growth and job creation. Infrastructure is an important catalyst for economic growth and job creation, thus infrastructure development is essential. An improvement in the provision and maintenance of infrastructure reduces the degree of uncertainty and risk faced by existing and prospective investor's uncertainty. Should infrastructure not be maintained because of non-payment of services, municipalities are faced with the possibility of increased costs. Municipalities must ensure, therefore, that adequate provisions are made in their annual budgets for renewal, repair, replacement, and expansion of essential service delivery infrastructure.

#### To improve levels of support from other spheres of government

The municipality should communicate its plans to sector departments for programmes to be implemented well in advance and encourage meaningful consultation on these programmes in order to ensure support. The IDP and Budget process plans should be timeously indicated to all stakeholders.

#### Communicating challenges to the community

To ensure sufficient and meaningful consultation with the community and all stakeholders, municipalities would be well advised to start their IDP and budget process 10 months before the beginning of the financial year, as prescribed by MFMA (2003:31). Regular ward meetings by councilors to discuss the programmes of service deliveries with the community are important. Publications of programmes and reports on websites and local newspapers are vital.

#### Campaign or Awareness Programmes

Awareness campaigns need to educate consumers regarding the benefits of paying for municipal services and transparency in the calculation of tariffs that are

imposed. Frankness and honesty are essential when conveying such messages. Ward councillors should co-operate with the identification of those who can afford to pay for services and the circumstances, of those who cannot afford to pay, should be explained. The United States Agency for International Development (2010:10) maintains that target stratification is essential to ensure that the right message gets to the right people in an understandable manner so that they will react responsibly. Attitude and perception regarding municipal services should be tested because ignoring this would not contribute to payment of services.

### **Possible Solutions to internal revenue management challenges**

#### Management must ensure effective financial systems and internal controls

The United States Agency for International Development (2010:15) is of the opinion that effective financial control systems are critical for an efficient billing process.

These controls will improve both accountability and billing efficiencies. In addition the National Treasury (2016:41) holds that the municipal billing system requires a number of processes that need to be completed, including the finalisation of each billing run as well as the capturing of all metre readings, receipts, and Electronic Funds Transfers (EFT) from financial institutions and journals and credit notes. Further information technology processes that need to be followed include pre-billing reports, variance reports, backup's bill, produce audit reports, verifying reports, and the preparation of files for bill print and roll-over for the next period.

### **Possible Solutions to Cost recovery**

#### Tariffs

Tariff charges are a pricing system whereby the per-unit price of a service increases as more of the service is consumed, thus, higher per unit costs are charged for a service to those who consume more in order to subsidise the costs of supplies of services to the poor (McDonald, 2002:20). The rationale behind tariffs is twofold.

Firstly, they act as a cross-subsidisation mechanism by higher charges for higher levels of consumption (mostly by middle and upper income households). These revenues are then used to pay for the initial cheap or free blocks of consumption for poor households. Secondly, if properly calculated tariffs can curb over-

consumption of environmentally sensitive resources such as water and electricity by acting as a price dis-incentive at higher levels of consumption.

#### Recovery of fixed and operational cost in tariffs

Section 74 of the MSA provides that municipalities must include in their tariff policy:

- base tariff costs should be reflected and should be reasonable;
- users of the tariff should be treated equitably in the application of tariffs;
- varies per customer classification – indigence should be updated;
- Section 75 of the MSA requires that council before implementation, approve tariff policy annually.
- Tariffs should be set at levels that facilitate the financial sustainability of the service. Tariffs must reflect the costs reasonably associated with rendering the service, including capital, operating, maintenance, administration, replacement costs, interest charges and environmental rehabilitation costs.
- Municipalities are encouraged to maintain tariff increases at levels that reflect an appropriate balance between the affordability to poorer households and other customers while ensuring the financial sustainability of the municipality.
- Municipalities are also urged to examine the cost structure of providing municipal services and to apply to NERSA for electricity tariff increases that reflect the total cost of providing the service so that they work towards achieving fully cost-reflective tariffs that will help them achieve financial sustainability.

Upon analysis of the municipalities in the Eastern Cape. There is a huge prevalence of external revenue management challenges in the province due to its rural nature, which will result in high tariffs if cost recovery is implemented. It is thus recommended that a phase in approach of cost recovery tariffs be applied over the long term in line with economic growth, to counter for the external revenue management challenges that are caused by unemployment and slow economic growth.

## **5.6 CONCLUSION**

Municipalities are the custodians of public funds, whether raised from their own revenues or received through intergovernmental grants. They are tasked with using these resources to respond to the needs of their communities for infrastructure, local services such as water, electricity, and refuse removal, and the enabling and guiding of the spatial development of their localities. The main sources of revenue for municipalities are user charges and funds generated by the sale of water and electricity. In most cases, the local authority enters into a contract to supply goods and services and then bills the beneficiary based on the conditions of the contract.

If the ability to pay is more important than willingness to pay, then no amount of moralising or threatening is going to alleviate the payment crisis in municipalities. One cannot squeeze blood from a stone; if people cannot afford to pay, they simply cannot afford it not because of a culture of non-payment as other researchers have argued. It appears that the central problem of non-payment stems from deepening poverty among those not paying: this is an inability to pay problem rather than a culture of non-payment.

In the light of this research, it is crucial for essential services to be made more affordable to poor households if the promise of services access for all is to be met. Also, there is a need for major debt relief for service arrears due to the unconstitutional practices of household evictions and water and electricity cut-offs which are simply not sustainable either socially, morally, or economically.

If the problem of non-payment persists, the government will be faced with a situation in which all major public utilities are likely to incur large and possibly unsustainable losses. People should bear in mind that if the current trend of non-payment for services continues in the future, financial unsustainability would cause an inevitable collapse in service delivery.

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## **APPENDICES**

### **Appendix A: Covering Letter to municipalities**

## Appendix B: Employer Consent letter

## Appendix C: Municipal Questionnaire