The United States Agency for International Development (USAID) funded the publication of this document under USAID contract 674-C-00-02-00007-00. MIIU with the assistance of Planning and Development Collaborative International (PADCO), an AECOM Company, and Public Service Utilities International (PSU) prepared the report. Valuable input was also received from Business Connexion, Communication and Development Consultants cc, Debtpack, IEPS-Utility Management Services, Alliance to Save Energy, and WRP (Pty) Ltd.

The views expressed in this document do not necessarily reflect the views of USAID or the United States Government.
# Table of Contents

**Introduction** ........................................................................................................................ 1

**Overview** .......................................................................................................................... 2
1. Communication strategy ................................................................................................ 3
2. Provision of metered services ......................................................................................... 3
3. Accurate billing .............................................................................................................. 4
4. Revenue collection ......................................................................................................... 4
5. Implementation of a revenue enhancement project ......................................................... 4

**Effective communication** .................................................................................................. 7
1. Why is effective communication important to revenue enhancement? ................. 7
2. What is effective communication? .................................................................................. 7
3. What is needed to design an effective communication strategy? .................................... 7
4. Communication support for the financial aspects of revenue enhancement .......... 11

**Billing** ................................................................................................................................ 14
1. Why is accurate billing essential? ................................................................................. 14
2. Legislative requirements .............................................................................................. 14
3. Critical elements of successful billing .......................................................................... 14
4. Billing processes .......................................................................................................... 15

**Data extract and analysis model** ......................................................................................... 18
1. What is a data extract and analysis model?................................................................... 18
2. Why is a data extract and analysis model required?...................................................... 18
3. Some reasons why people do not pay for their services ................................................ 18
4. Legislative requirements .............................................................................................. 19
5. The scope of the data extract and analysis model.......................................................... 19
6. Strategic Analysis ........................................................................................................ 22
7. Case Examples .............................................................................................................. 22

**Debt collection** .................................................................................................................... 24
1. Why is debt collection essential? .................................................................................. 24
2. Legislative requirements .............................................................................................. 24
3. Why is there a huge debt problem in local government?............................................... 24
4. Delivery options ........................................................................................................... 24
5. Important elements of the debt collection process......................................................... 25
6. Case studies .................................................................................................................. 27

**Credit control** .................................................................................................................... 31
1. Why is municipal credit control essential? .................................................................... 31
2. Effective credit control is a process .......................................................................... 31
3. Legislative requirements .............................................................................................. 31
4. The benefits of effective credit control ...................................................................... 32
5. Credit control actions ................................................................................................. 32
6. Operational issues ....................................................................................................... 34
7. Case study .................................................................................................................... 35
Introduction

The South African constitutional framework created a multi-sphere system of government. Each sphere is distinct, with legislative and executive autonomy entrenched by the Constitution, yet these spheres are interdependent and interrelated. It is not a federal system, but a unitary decentralised system. There is division of political power as well as administrative accountability and fiscal responsibility. The intergovernmental fiscal system is based on “revenue-sharing”. National and provincial spheres received the bulk of nationally collected revenues, as these spheres are responsible for providing the bulk of public goods and subsidised services, such as education, defence, security, justice, welfare, transport and roads. Local government should only be partially dependent on transfers from the national sphere, as it delivers a mix of public goods (parks, cemeteries, access road) and user services (water, sanitation, electricity, refuse), and has fiscal power to raise property taxes and user charges.

Whilst decentralisation can enhance efficiency and promote more accountability and responsive governance, there are real limitations. In many developing countries, including South Africa, the capacity of local government to give effect to its fiscal power is a serious limitation. In South Africa this problem is compounded by the integration of previously disadvantaged communities to into municipal boundaries, a culture of non-payment, and poor administrative systems, all of which has manifested itself as staggeringly high levels of debt. On paper the solutions are easy: increase revenue; reduce expenditure; or do a combination of both. However, in reality the challenge is more complex and multi-faceted – there are political and socio-economic facets as well as institutional aspects, including shortages of skills, performance-orientation of staff and adequate physical resources.

This guide is based on the premise that local government has a legal right to impose property taxes, fees and user charges in accordance with its assigned fiscal power, and that is should recover adequate revenues to cover spending responsibilities. The guide does not seek to address issues of vertical allocation of nationally collected revenues or the pricing of rates and user charges. It assumes that these have been factors have been determined on a rational basis with due cognisance of affordability and allocative efficiency. This guide recognises that addressing the consumer debt problem is a mammoth task; it does not trivialise the problem by offering half-baked theories, but rather presents a few tools developed and tested through direct experience in South African municipalities. In addition to implementing its fiscal power through better administration and collection of incomes owed to municipalities, this guide also touches on select cost cutting measures in particular the reduction of water losses.

The guide is not a substitute for basic revenue management competencies and skills. It is intended to supplement competency and demonstrate innovative approaches.

The guide is structured as follows. The next section provides an overview of the revenue management process. Subsequent sections follow up by presenting packaged programmes for each revenue management sub-process, namely: communication; data extract and analysis model, debt collection, credit control; indigent management; customer information audit; data cleaning; customer care; and reduction of water losses. Lastly, the guide closes with a section on critical factors for success and crucial learning experiences extracted from on the ground intervention in South African municipalities.
Overview

Over the past decade many municipalities have become less sustainable as they are confronted escalating uncollectible consumer debt and service delivery backlogs. Figure 1 below from Municipal Viability Indaba shows how total debt has more than tripled in the four years between 1998 and 2002. The challenge facing municipalities is to successfully turn around the current declining position and to build sustainable municipalities for the future, revenue enhancement is one of the arsenal of “turn around strategies” that can and should be used to address the challenge.

Implementing a revenue enhancement turn around strategy can only be achieved by critically reviewing the current revenue management business models and processes being applied within the various municipalities.

To effectively deal with the current challenges, municipalities must plan and implement effective and integrated revenue enhancement strategies. Revenue enhancement is a process focused on the holistic improvement of municipal business model. To improve on the current business model it is important to identify all the critical elements that currently affect municipal revenue performance. This review process will provide a sound platform for effective planning.

The need for an integrated approach should not be taken lightly. Isolated projects that focus on symptoms like debt and access to services, rather than root cause further compound the current crisis. For example, increasing service coverage into poor areas results in the further accumulation of debt from increased billing and non-payment as well as increased operational costs. In addition, debt collection in poor communities has not been successful because of the economic status of the individual debtors and the political implications of aggressive debt collection in these areas.

Municipal Sustainability is based on the following critical elements:

- Communication Strategy
- Provision of Metered Services
Accurate Billing
Revenue Collection (Debt and Credit Management)

The municipal revenue business models need to focus on maximising revenue collection, reducing inefficiency and costs, and reducing uncollectible debt. A holistic approach to local government sustainability is crucial to ensuring that all the above mentioned critical elements are simultaneously addressed.

The following business model seems simple but has proved to be a difficult challenge for municipalities to implement. The diverse, political nature and social-economic status of municipal customers has made financial sustainability a challenging objective.

Figure 2: Revenue Enhancement Model

Each of the above highlighted performance areas will contribute to the implementation of a successful Revenue Enhancement Strategy. Neglecting of the above elements will negatively impact the successful implementation of A Revenue Enhancement project.

1 Communication strategy

A sound communication strategy is a critical element to building local government long term sustainability. It is only through communication that customer and municipal expectations can be clearly articulated and understood by all relevant parties. Communication is a two-way process and involves community participation, which is enshrined in our constitution and municipal systems act. The communication process should facilitate alignment between municipal goals and community expectations. Furthermore, is also only through communication that the relationship between the municipality and its customer can be enhanced.

Effective communications is a cross cutting critical success factor in building sustainable local government. This aspect is further dealt with in the chapter headed Effective Communications.

2 Provision of metered services

The technical component is predominantly focussed on the efficient deliver of services to customers and meeting customer expectations. The benefits of managing this aspect of service delivery are the reduction of wastage and pilferage of water and electricity.

The guide deals with technical efficiency in two distinct categories, demand management and meter management. Demand management focuses on the technical losses incurred in the supply network through leakages. Meter management address the supply loses incurred through the service meter and includes illegal connections and faulty meters. Accurate consumption information is the key to reducing service delivery losses. Further examples and detail of this technical component can be viewed in the chapter on Water Loss Management.
3 Accurate billing

Accurate billing for services is a critical element of the municipal revenue management business model. Due to poor billing and revenue collection municipalities are becoming increasingly dependant on intergovernmental funding to balance their budget. This component specifically focuses on billing integrity as the basis of municipal revenue. The phrase “garbage in, garbage out” does apply in this instance.

If the customer information and billing information is incorrect the municipality has no basis to effectively collect revenue. The key billing programs in this guide document are as follows:

- Billing
- Customer Information Auditing
- Data Cleaning

4 Revenue collection

Revenue collection is on the integrity of the above two components Metered Service Delivery and Billing. This critical element includes collection of revenue, customer management, debt & credit management and indigent registration & management. A large portion of municipal customers are indigent and therefore can not afford to pay for services this has to be factored into financial planning and strategy development.

It is critical for the municipality to understand its customer profile and to differentiate between those customers who can pay and who can’t pay. It is based on this customer profile that one can start planning strategies for free basic services implementation, indigent subsidisation, LED, indigent management, service delivery and services rollout, billing and revenue collection strategies and debt collection. All these aspects will affect the municipal budget and the budgeting process.

The key revenue collection programs in the guide are as follows:

- Debt Collection
- Credit Control
- Indigent Management
- Customer Care and Management

5 Implementation of a revenue enhancement project

Successful revenue enhancement program implementation is dependant on a structured planning and management implementation processes.

The implementation process should take the Municipality through a simple but detailed strategic process.

- Understanding the problem
- Defining the desired outcome and objectives
- Documenting the plan on how it will be achieved
- Managing the implementation
- Managing performance

The following diagram illustrates a typical four phased approach to planning and implementation of successful projects. The four phases should be followed consecutively, as each phase is dependant on the output of the previous phase.
All of the programs highlighted in this revenue enhancement guide must go through all four of the consecutive phases. No program or project must be implemented without a detailed status-quo analysis, institutional goal alignment, and effective strategic planning.

5.1 Phase 1: Data Extract and Analysis (Status Quo)

One of the biggest municipal challenges is converting their data into accurate and useful information. Most local government planning is based on inaccurate and incomplete information.

Phase 1 is focused on understanding the current performance status of the municipality by converting the municipal data into meaningful information. This is a fundamental phase of the process as it provides the status quo platform on which accurate planning can take place. Once the municipality has performed a Data Extract and Analysis it will be in a position to understanding the problems that negatively affect the municipality cash flow.

A clear and concise understanding of the current status and an accurate problem statement is an important step to rehabilitating and improving municipal performance.

All project elements must be analysed and assessed to establish an accurate starting point for successful implementation. Further detail regarding the data extract model can be viewed in the chapter headed Data Extract Model.

5.2 Phase 2: Strategy Development

The intention of a strategy document is to ensure the sustainability as an organisation. The strategy will ensure that the municipality’s future is not at risk, but viable as matter of choice and not chance.

Strategy development is a secondary process using the accurate assessment performed and problem statement in phase 1 as a planning platform. The key to this phase is to record the real functional
problems affecting municipal performance and to develop a vision and mission statement. This will lead to the setting of short term, medium term and long term revenue enhancement goals. Once these goals have been determined the municipality can proceed with the strategy or a road map of how these goals can be achieved.

It is necessary for the municipality to indicate the order in which the programmes should be implemented, possibly giving attention to programmes that might have the greatest impact on financial aspects first, followed by the socially oriented programmes. The status-quo assessment and the strategy will highlight the recommended order of priority.

5.3 Phase 3: strategy implementation

Phase 3 is the process of planning for the implementation of projects. It is important for implementation that detailed project planning take place. Some of the critical planning elements that need to be performed are as follows:

- Tender Documentation if necessary (Terms of Reference)
  - Background
  - Scope of Work Definition
  - Project Objectives
  - Expected outcomes

- Documented Detailed Scope of Work
  - Detailed Project Plan
  - Resource plan
  - Budget

One of the key elements to this implementation phase is project management skills that can measure performance and perform quality control checks. It is this phase of work that will determine the quality and effectiveness of the project. The lack of detailed and documented planning will impact on the quality of the deliverable.

5.4 Phase 4: operational

The operation phase of a project is to focus on the operation and maintenance of the implementation standard achieved in phase 3. Emphasis must be given to performance management and long term sustainability. It is only during this phase that municipalities can achieve sustainable service delivery. Critical issues to consider during this phase are the human recourses financial resources allocated to the operations and maintenance program. Insufficient resources will jeopardise the sustainability of the service delivery. It is during this phase that key performance areas and indicators (KPA’s and KPI’s) need to be determined, measured and regally evaluated.
Effective communication

1 Why is effective communication important to revenue enhancement?

Effective communication plays a key role in promoting awareness — among the diverse communities living within a municipality’s area of jurisdiction — of the need for municipal revenue enhancement, and an understanding of the implications and benefits deriving from such revenue enhancement for the people living there.

The importance of communication within local and national governance is enshrined in the Constitution of the Republic of South Africa and is given legal basis in Section 18 of the Municipal Systems Act.

2 What is effective communication?

Effective communication is a process of conveying the right message to the right person or people in the right manner and at the right time. While this definition may seem simplistic there are many complexities hidden within its simplicity.

The right message implies that accurate research has been done to determine what should be said and what should not be said. It is pointless sending a message that the target audience is unable to understand. Communication construction must therefore be considered carefully.

The right person or people implies knowing who should receive the message. It is a total waste of time and often counter-productive to send a message to the wrong person or people. Target audience identification depends on detailed research.

The right manner requires knowledge of how the message should be communicated so that it is understandable and relevant to the target audience. For example, it is of no use communicating in writing if the target audience is illiterate. Medium selection is critically important.

There is a right time to communicate. There is little point informing your target audience too early, when they are not yet ready to receive or react to the message, or too late, when the opportunity to react has already passed. The right timing is essential to good communication.

3 What is needed to design an effective communication strategy?

3.1 Principal factors for a successful communication strategy

The principal factors on which a successful communication strategy should be based include the following.

- **Sound Policies.** A communication strategy must be built on sound, forward-looking programmes, projects, and policies. No communication strategy can convert poor programmes into good ones.
- **Credibility.** Frankness and honesty are essential. Good news and bad news have equal value. The manner in which communication is delivered and the ‘messenger’ must also be credible.
- **Proven Principles.** People will generally not accept things that they do not understand and in which they do not believe. It is therefore vitally important that management should construct policies, programmes, and projects in terms that are understandable to the general public, and they must be properly communicated to the respective target audiences. It is relevant to note that this is not intended to mean that only those principles that are immediately understandable to the general public should be adopted, since with effective communication even obtuse principles can be explained and can become acceptable.
- **Strategic Planning.** Communication does not take place in a vacuum; it has to be managed within a predetermined strategic plan in terms of which target audiences are identified and a strategy must be devised on how best to reach those audiences.

- **Use of Appropriate Communication Methodology.** Methods of communication, timing, and choice of media must be judiciously selected in order to achieve desired results.

- **The Need to be Indigenous.** Most biologists take a dim view of exotics; so do good communicators. To be effective a good communication programme should be ‘native, inherent, and natural’ — in other words at home in the environment in which the development programme is to take place or for which it is planned. Put another way, the communication programme must be relevant, recognisable, and easy for the audience to identify with.

- **Simplicity Is Essential.** The communication strategy must take into account the levels of understanding in the target audiences. Communication will fail if members of the target audience do not understand what is being communicated.

- **Getting around Gatekeepers.** In many instances, and in particular in developing communities where the channels of both inward and outward communication are frequently restricted, a ‘gate’ may be closed either intentionally or unintentionally by a person or persons in order to prevent or to control the flow of communication. This could either stop or totally negate the communication intention. A sound communication strategy should therefore take into account potential gatekeepers and identify a methodology for getting around closed ‘gates’.

### 3.2 Relevant communication media

**Information comics**

Both practical experience and international research have shown that realistic comic stories, expressed in colloquial dialogue and reinforced by authentic, accessible visuals, are a highly effective way of communicating a basic framework of ideas and core concepts. Story-based information comics offer a number of unique communication advantages, as follows.

- They mirror the way in which people naturally exchange information and attempt to make meaning of their environment, utilising the most ancient and tested communication technique: storytelling.
- The message is delivered in simple language and is reinforced pictorially.
- They entertain and emotionally engage the reader.
- Being story-based and using a dialogic format, it is easy for comics to reflect the complexity of issues and give voice to the many different and conflicting points of view.
- They provide essential information and depict the development of practical skills within recognisable community-based structures and social environments. This enhances familiarity and common identity, thereby making it easier to empower the reader to engage in constructive action.
- Being such a transparent medium, they encourage critical evaluation.
- Comics are relatively inexpensive to produce and therefore can be printed in large volumes and given out free, making them easily accessible to poor communities.

**Audiovisual/video presentations**

It has been said that ‘a picture is worth a thousand words’. Audiovisuals are a powerful form of communication, since they are made up of a sequel of pictures arranged in logical order that are reinforced by a supportive text and appropriate music and sound effects. Audiovisual communications has become very popular because they provide a relatively inexpensive way of communicating with large audiences, the message is consistent, and presentation does not depend on a high level of skill. Audiovisual presentations can be made using either photographic transparencies or digital images. Their principal advantage is the dynamic support they can offer to a multimedia communication programme. As ‘stand-alones’, they have limited application.
**Pamphlets**

Pamphlets have the advantage of being relatively inexpensive to produce and easy to distribute. However, market research done in the commercial sector has shown that ideally a pamphlet should have little copy and maximum use should be made of graphics and illustrations. Therefore, for pamphlets to be effective, the reader should have some prior knowledge or a felt need for knowledge on the subject. In view of the complex perceptions people have toward water management, conservation, delivery, and payment, it is recommended that this communication medium be used only once a reasonably high level of awareness of the issues involved has been attained. Pamphlets would then provide an appropriate medium for reinforcing positive messages and for supplementing knowledge where certain identifiable gaps may exist.

**Posters**

The ideal use of posters is to remind people of something that they already know, or to heighten their interest in something about which they have some knowledge. For example, posters have been used to good effect in promoting safety in industry — something that most workers have some understanding of or feeling for. Workers are familiar with their work situation and therefore a poster depicting a careless action is something that they can identify with and the message will be understood. A poster reminding workers to wear protective clothing will have relevance if that is what the workers have been trained in and are required to do. It is unlikely that the posters will have the same result if the workers are unfamiliar with unseen dangers and company requirements regarding safety and productivity. Therefore, use of posters to effect behaviour change should be restricted to reinforcing what is already known.

**Community theatre**

The use of drama to confront and offer solutions to social problems and to motivate changing attitudes and patterns of behaviour is not new. But it is only over the last 25 years or so that community theatre has been consciously used as a communication tool for popular education, community organisation, and development. Experience throughout the developing world has demonstrated the effectiveness of community drama as a communication medium. However, there are not many professional practitioners in this field in South Africa and this could limit its practical use.

**Workshops**

Workshops are important forms of communication when properly facilitated and managed. They allow for challenge and discussion and, if well attended and properly promoted, are able to stimulate awareness quickly and cost-effectively. Indeed, at the commencement of any programme of social intervention, workshops involving the community and its structures are an indispensable communication tool.

However, workshops do suffer from a number of limitations. Below are some of the most important.

- **The communication chain is easily broken.** Only a limited number of people are able to attend the workshops, and participants may not pass the message on to their constituents or friends, either by default or on purpose.

- **Messages may become distorted, intentionally or unintentionally.** People attending a workshop may not like what they hear or alternatively they may not understand the message or they may misinterpret it as a result of their personal emotions, limitations, or hidden agendas. As a consequence, there is a possibility that they may pass on distorted messages.

- **Due to the physical limitations imposed by the number of meetings that can be reasonably held and the size of the target communities involved, workshops may be unable to reach deep into the four corners of community consciousness;** thus, their scope may be limited. Also, people excluded from the workshops may feel ostracised and not consulted, which could result in adverse consequences for the communication process.
Public meetings

Public meetings are best suited for disseminating information, in other words for providing one-way communication and they therefore fulfil a very limited role in development communications, which require a free two-way flow of information. Other limitations include the following.

- Public meetings are easily ‘hijacked’ by dissident elements.
- Public meetings allow for limited debate only and can easily get out of hand.
- Divergent views may not be expressed because people are often reluctant to voice their concerns or their views in public for fear of criticism or ostracism.
- Many people do not like or are too shy to speak in public and so their views are never aired.
- Public meetings are largely impersonal and therefore it is difficult to ensure personal commitment to any particular course of action.
- Public meetings suffer from the same disadvantages of workshops, which are intended for broad communication purposes.

Radio

Radio is ubiquitous and yet it is personal; this is its great strength. However, unless there is a popular local radio station aimed at a local listenership, its use will be very limited, as radio is best suited for more general communication at regional, provincial, and national levels.

3.3  Empirical research: communication must be based on fact, not fantasies

South African municipal environments are not only highly stratified culturally, socially, and economically, they are also largely segmented into spatially separate communities as a result of previous apartheid legislation. It would thus be quite wrong to assume that a single communication strategy will be able to serve all segments of South African municipal society. Target audience identification is absolutely essential. Proper empirical research must be done to establish the following.

Who is the target audience? The ability to pay for services makes a difference

Due to different levels of social and economic development within municipal areas in South Africa, the ability to pay for services varies from one area or community to another. We need to know who can and cannot pay for their services and why they can or cannot pay.

- **Why do we need to know this?** For the simple reason that while purely administrative and technical revenue enhancement measures are likely to enhance debt repayment and revenue collection in more affluent areas (because ratepayers in these areas are able to pay and can be held accountable for their arrears), they are unlikely to have any real effect in those areas where people are unemployed and are too poor to be able to pay for their services other than, perhaps, on a nominal basis. Therefore, for effective communication, target stratification is essential to ensure that the right message gets to the right people in a manner that they understand and can react to.

- **How do we categorise target audiences?** First, socio-economic profiles need to be compiled for the various communities in the municipal area. This will enable identification of target market segmentation by correlating repayments with socio-economic circumstances. Second, attitude and perception studies related to municipal services, service delivery, and payment for those services should be done in key target areas to identify and understand perceptions and attitudes, as well as misconceptions, prejudices, and community priorities.

**Socio-economic profiles: The need to know the socio-economic circumstances of the different communities (suburbs) in the municipal area**

From information obtained in the status quo assessment, as well as municipal reports, income surveys, social surveys, and debtor records, socio-economic profiles should be drawn up so that target markets can be identified according to those profiles. This information should then be used to design audience-specific communication strategies. In sum, socio-economic profiles are useful tools for identifying who should receive what communication message.
Attitude and perception analysis: How do people think and feel about municipal service delivery?

To be effective, all communication and developmental interventions by municipalities must take into account the contemporary perceptions and attitudes of the community. To ignore what the communities think and feel is both short-sighted and dangerous. It is important to know, for example, to what extent the culture of entitlement, implicit in supply-driven governance, still persists in communities today. These and other aspects need to be researched and brought into the design of the attitude and perception study so that the right information can be elicited on which to build an effective overall communication strategy with appropriate target community stratification. In sum, failure to address the contemporary attitudes and perceptions of the people within identified target markets is likely to result in communication failure.

Using the socio-economic profiles referred to earlier, a questionnaire should be compiled that would be used to determine, inter alia, the perceptions and attitudes of target communities in the following areas.

- To what extent do target communities identify poor service delivery and inadequate municipal infrastructure as a government problem to which they have no input?
- Why should people pay for a service when it was previously supplied free or at a nominal rate?
- To what extent do recipients understand the correlation between the supply and standard of services and payment for those services?
- How prevalent is the culture of entitlement in the target communities?
- What do respondents feel is a reasonable charge for services (there is often a discrepancy between what respondents feel is reasonable and what a municipality has to charge to remain financially viable)?
- What are respondents’ attitudes toward non-payment for services rendered?
- What action do respondents feel would be appropriate for the municipality to take against defaulters?
- Do people know what they are paying for? Are accounts fully understandable? Would a better understanding of how accounts are made up enhance payment?
- What do respondents consider to be the most important community needs?
- How effective are ward committees?

The questionnaire must be designed in such a way that there are checks and balances on the information obtained from respondents. The fieldwork must be done under careful supervision by qualified fieldworkers, after which it should be statistically analysed in order to quantify and qualify the information obtained. From these results it is possible to identify key messages. These messages form the benchmarks on which the municipality’s communication strategy should be structured. (See Annexure 1 for an example of a typical Attitude and Perception Study Questionnaire used recently in Mogale City Local Municipality, Gauteng Province.)

With the information obtained from the socio-economic profiles and the attitude and perception analysis, it is possible to design an effective communication strategy that will promote an awareness of the need for revenue enhancement, at a grassroots level, among the diverse communities living within the municipal area.

4 Communication support for the financial aspects of revenue enhancement

Appropriate communication programmes should be developed to promote an understanding of the financial and technical aspects of revenue enhancement. These programmes can only be done once the status quo assessments have been done and recovery plans are put in place in respect of both aspects. However, typically, the following communication programmes are likely to be needed in respect of the financial aspects of revenue enhancement.
4.1 **Indigent policy**

Once a municipality has decided on its indigent grant policy and procedures, it is recommended that an information pamphlet be produced in English and the predominant local vernacular language(s). The information pamphlet should cover the following:

- What is the purpose of the indigent grant?
- Who is eligible?
- What do people need to do to apply?
- Where can application be made?
- What information and documentation should the applicant supply?
- How long does the grant last?
- How much is the grant worth?
- What conditions apply?

The pamphlet should be distributed in conjunction with the promotion of a better understanding of service accounts (see Billing System below).

Care must be taken to ensure that being a recipient of an indigent grant does not stigmatise the beneficiary and his/her family. Ways and means should be investigated of couching the grant in some form of job creation function so as not only to avoid the possibility of social stigma, but also to ensure that there is a mechanism in place to sustain income should the grant fall away. Furthermore, normally, earning an income, as opposed to relying on a grant, enhances self-esteem and promotes a sense of dignity.

Training should be provided to ward committee members on all aspects of the indigent grant policy and procedures and material for members should be supplied to continue the awareness campaign with their community constituents.

Lastly, the information pamphlet should be published in community newspapers, if available.

4.2 **The billing system**

If the billing system is to be revised, the following suggested communication strategy could be employed.

- Research customer account layouts with a view to simplifying them, if necessary.
- Redesign them, if necessary.
- Launch a drive to inform the community on the billing system using an illustrated information pamphlet written in English and appropriate vernacular language(s). Advice should also be included on recommended conservation measures to help individual households reduce consumption and cost of services.
- Provide training to ward committee members on all aspects of the billing system, including the compilation and layout of accounts. Supply committee members with sufficient copies of the pamphlets so that they are available for further distribution if and when necessary.
- Publish the information pamphlet in community newspapers, if available.
- Combine the above awareness campaign with the promotion of the indigent grant policy (see above).

4.3 **Credit control and debt collection policy**

The design of an effective credit control and debt collection policy is an important part of debt management and revenue enhancement, and solutions to the various problems identified in the status quo assessments need to be found. From the communication point of view, the following factors must be taken into account.

- **A defaulter may or may not be able to pay.** Consideration must be given to what action the municipality can take in the event of a defaulter — due to, for example, genuine poverty or unemployment — being unable to react to the municipality’s request for payment. Unless
enforceable action can be taken against a defaulter, the exercise is likely to be futile or seriously counter-productive. Recent research has revealed that, at present, community sympathy is likely to rest with the defaulter, and hostile community solidarity could be catalyzed through adverse reaction to the municipality’s action.

- Notwithstanding the relatively high acceptance of the need for individuals to pay for their services, a culture of entitlement exists in many townships in South Africa. Where this attitude exists, it is normally deeply entrenched and will take time before it can be modified.
- **Equity in action taken by the municipality is essential.** Inequity or perceived unfairness is likely to be counter-productive.
- **Ward councillor and ward committee support is essential,** and, therefore, they must participate in the process.

### 4.4 Communication support for the technical aspects of revenue enhancement

#### Installation of water and electricity meters
Factors to be taken into account in the design of relevant communication programmes include the following.

- Meters amount to prepayment. This may suit those who are committed payers, but may not suit those who are not. How should this be addressed?
- It is easy to intimidate installation contractors.
- It is easy to vandalise installed meters.
- Community support and ‘buy-in’ is essential, and this is only really viable and sustainable within the bigger picture offered through developmental local governance.

### 4.5 Communication support for councillors and officials on revenue enhancement and the importance and need for developmental local governance

Appropriate communication materials, as well as allied capacity building and training programmes, are required to communicate, educate, and train municipal officials and ward councillors on all aspects of revenue enhancement and the need for developmental local governance. Important aspects to be covered include the following:

- Understanding the implications of the paradigm shift in local government from supply-driven local government to demand-responsive developmental local governance
- Understanding the institutional arrangements required in terms of the Municipal Structures Act with specific reference to the ward councillor system:
  - The strengths, weaknesses, opportunities, and threats inherent in the system
    - Community entitlement and responsibilities
    - Ward councillor responsibilities
    - Municipal responsibilities
- Implementing the municipality’s overall communication strategy and specifically targeted communication strategies
- Understanding the principles underlying effective communication and the development of relevant communication materials
Billing

1 Why is accurate billing essential?
A substantial portion of any local municipality’s revenue is derived from the delivery of services. To facilitate this revenue generation, the municipality needs to bill its customers on a regular basis. It is imperative that the billing is done accurately, as invoices that do not reflect the true nature and quantity of services delivered will probably result in non-payment.

The billing function is the principal mechanism that drives all cash flow, the main source of customer information, and critically fundamental to the success of any municipality.

2 Legislative requirements
Section 96 of the Municipal Systems Act requires that municipalities collect all money that is due and payable and, for this purpose, must adopt and maintain a debt collection policy of which billing is an integral part.

3 Critical elements of successful billing
A successful billing process is a function of both technology and accurate input.

The technology (in the form of financial software) must have the required financial integrity to process transactions accurately. Most financial software available on the market has this financial integrity.

Successful billing is therefore mostly a function of the accuracy of the data input into the system. For this reason, it is important that relevant controls are put into place that to ensure complete and accurate billing.

- Billing allows properties to be seamlessly tied to a service connection within a property to an individual, the customer. The customer is then responsible for the payment of the said bill.
- It is critical that the property base of any municipality is accurate; without this accuracy, a customer cannot be billed and services cannot be connected. Services are billed according to the services provided to a property.

The key to successful billing relies on the software being able to provide reliable and accurate information on:

- accurate property information;
- accurate customer information: all customers sign contracts with the municipality for services to be delivered to the property on which they are registering the services for connection;
- accurate tariffs associated to the properties, which can be done through various variables, including land usage, debtor type, land zonage, and service type;
- accurate ward information per property; and
- flexibility to meet the municipality’s reporting needs

Billing integrity
The integrity of billing can be enhanced by the following controls:

- Preventative Controls
- Detective Controls

Preventative Controls
Preventative controls are controls that relate to the system processes and are by definition designed to prevent errors occurring. They are vitally important to an efficient billing process, as preventing errors...
before they occur is less time consuming than making errors and then having to go back and fix them. If fewer mistakes need to be rectified, fewer staff are required. Below are four types of preventative controls:

- Access control to certain functionality on the software system
- Password protection
- Authority levels on opening and closing accounts or changing account status
- User tailoring

**Detective Controls**

Detective controls are controls that are put into place to identify potential errors. Before a final billing is processed, detective controls allow the overall results to be analysed before significant time, effort, and paper are expended.

These detective controls mainly focus on exception reporting:

- Accounts not billed
- Accounts with no valuations
- Abnormal consumptions
- Abnormal billings

4 Billing processes

There are a number of system processes that need to be adhered to with regard to the finalisation of each billing cycle:

- Capturing of all receipts
- Capturing of all meter readings
- Importing of any data files
- Third party files
- EFTs from financial institutions
- Journals and credit notes

The following IT processes need to be followed:

- Pre-billing reports
- Variance reports
- Backups
- Bill
- Produce audit reports
- Verifying reports
- Prepare file for bill print
- Roll over to next period

**Billing periods**

Billing periods/cycles need to be understood for each service.

In some municipalities, there are daily billing cycles; in others, there will be only one cycle. Cycles are normally associated with areas/suburbs.

In addition the services billing cycles can vary.

- Assessment rates can be billed annually or monthly.
- Water and electricity are normally billed monthly, based on either actual readings or interim readings and quarterly actual readings.

It is imperative that there is a degree of consistency in the cycles to ensure that customers are billed approximately the same amount each month (provided usage is consistent).
Billing formulas
Billing can simplistically be broken down into three separate components:
- Customer
- Tariff
- Usage

Each one of these components — independently or interrelated — is fundamental to accurate billing.

Customer
The customer is the key component to billing, i.e., no customer results in no billing.

The following attributes relating to a customer are key to accurate billing:
- Name
- Physical and postal addresses
- ID/company registration/CC/trust/number
- Classification
- Owner/tenant

If any of these is incorrect then the collection of the debt is impaired.

In addition to getting these attributes, the processes must be corrected around:
- creating a new customer; and
- closing a customer.

Tariff
A tariff is basically a rate that the customer gets charged for the service delivered.

The tariff:
- is based on land usage/zone;
- varies per each service;
- varies per customer classification;
- can be stepped based on increased consumption; and
- is normally reviewed each financial year.

If a customer is incorrectly classified, the wrong tariff could be used, which may result in incorrect billing.

Usage
The usage varies depending on the service that is billed.

The usage per service is:
- Water and electricity: consumption
- Sewerage: consumption or land value or number of toilets
- Assessment rates: valuations
- Refuse: land usage and/or bins
- Sundries: normally fixed rates

The usage is the component that probably causes the biggest problems to billing integrity.

Common problems are:
- wrong readings;
- finger problems in capturing data;
- rollovers on the meters; and
- no valuations: site or improvements or both.
Services
The billing system needs to accommodate all the various attributes associated with the different services that are to be billed:
- Electricity
- Water
- Assessment rates
- Sewerage
- Refuse
- VAT
- Interest
- Credit Notes
- Sundries

Credit control
Credit control is an integral part of any successful administrative function. The passing of credit notes is effectively a negative bill (and must therefore be seen in the context of negative revenue). The controls surrounding the processing of credit notes should be as stringent as those relating to the issuing of cheques.
Data extract and analysis model

1 What is a data extract and analysis model?

The Debt Extract Model is a snapshot of a municipality’s debtor situation at a specific point in time. The extract can then be studied in detail to determine the relevance and role each item in debt management plays in the composition of the municipality’s financial situation.

The importance of customer information accuracy, billing accuracy, debt management, and revenue management must be viewed against the reality that as much as 60 percent of a municipality’s income derives from the charges made for services provided by the municipality. It is therefore obvious that if the municipality does not manage its debt, in other words manage the flow of money owed to it by the people to whom it has provided services and rates assessments, that municipality is likely to run into severe financial difficulties. To manage its debt properly, the municipality therefore needs effective debt management tools, one of which is a Debt Extract Model.

2 Why is a data extract and analysis model required?

The need to have effective revenue debt management tools is borne out by the fact that in most municipalities neither billing nor revenue collection for services are fully understood. Most municipal financial management systems do not have the ability to provide a proper overview of billing and payment trends; hence the general acknowledgement by most chief financial officers that the municipality has a growing debtor’s book, with very little explanation as to what constitutes this debt and why it should be so.

Escalating debt, that is non-payment for municipal services, has become the primary challenge facing most municipalities. Debt remains a symptom of deeper problems. Non-payment has begun to severely affect cash flows and the municipalities’ ability to deliver services. A vicious circle is developing. As the financial position of municipalities deteriorates so the ability of municipalities to deliver services deteriorates. Consequently, on the back of poor service delivery, consumers are increasingly withholding payment for any services provided. In turn, municipalities often respond by simply clamping down on defaulting customers through a range of debt collection initiatives without fully understanding the underlying problems. The result is often growing frustration and anger at a community level.

One of the most effective customer data, revenue management, and debt management tools available to municipalities is the Data Extract and Analysis Model. The model takes a detailed extract at a fixed point in time from the municipality’s financial database. The model provides a comprehensive overview of a municipality’s customer data and financial performance as of the date of the data extract. This overview not only provides a unique perspective on consumer information, debt, and services but also has the ability to reveal underlying systemic causes for the growing debt. Through focused interaction with users and the interrogation of data, the model facilitates a better understanding of a municipality’s debt situation and provides pointers for strategic interventions.

3 Some reasons why people do not pay for their services

Escalating debt is a key indicator of non-performance. There are two main sets of reasons why consumers do not pay for their services: administrative reasons and socio-economic reasons.

3.1 Administrative reasons

Non-payment can often be blamed on a number of issues related to internal administrative processes, including the following.

- Incorrect billings due to poor data input or incorrect consumption readings
Poor implementation of credit control measures
- Corrupt static data, such as customer names and addresses
- Inadequate staff training and poor performance in key functions affecting revenue collection
- General lack of capacity to handle customer complaints
- Poor service delivery
- Growing debt of indigent consumers, related to poor credit control measures
- Combination of all the above

3.2 Socio-economic reasons
Socio-economic reasons relate to the inability of consumers to pay for services due to endemic poverty. These reasons are partially addressed through the provision of indigent and other social grants. But the problems of poverty are far deeper than these grants alone can address. Therefore, in terms of their developmental local governance responsibilities, municipalities must also implement socio-economic development programmes that will facilitate local economic development and thereby enhance consumers’ ability to pay for services and improve their quality of life. These issues fall outside the scope of the Data Extract and Analysis Model and therefore will not be dealt with here.

4 Legislative requirements
The imperative that municipalities collect all revenues due for the services it provides and to implement credit control measures to govern the process of collection are covered in several pieces of legislation, as follows.
- Section 96 of the Municipal Systems Act requires all municipalities to collect all outstanding debts.
- The Municipal Finance Management Act regulates in Sections 62(1), 64(1), and 96(b), the collection and management of municipal revenue.

5 The scope of the data extract and analysis model
The scope of the Data Extract and Analysis Model is to show the make-up of the debt, the accuracy of customer information linked to the indigent register of a municipality, with a special focus on the following data aspects:
- Ageing of debt and prescriptive debt over 1000 days
- Credit notes
- Active/inactive accounts
- Interest and impact on ability to collect debt
- Indigent debt, based on system indicator or property valuation range

Once a detailed understanding of the debtors book is obtained, a series of detailed programmes can be proposed with the aim of:
- cleaning up debtor and property classifications;
- cleaning up static consumer data;
- cleaning up inactive accounts;
- highlighting indigent accounts and controlling their access to services; and
- targeting easily recovered debt to improve cash flows in the short term.

The detailed understanding gained from this analysis will assist municipalities in reviewing their budgets for the current year and will improve their cash flow projections based on improved revenue collection strategies.

The data that is requested for the Data Extract and Analysis Model include the following components:
- Total debtors – aged as far as possible
- Total debtors by service type
- Total debtors by debtor or zone type
- Total debtors by ward
Total debtors by indigent indicator
- Total debtors by active and inactive indicator
- Total debtors by suburb down to stand number
- Total debtors by valuations – both land and improvements
- Payments for the last 12 months

These key debt classifications are discussed in more detail below.

5.1 Total debt

Total debt provides a municipality with an overall indication of the size of the debt and how the debt is aged. The ageing of the debt is critical particularly as the debt gets older. Most municipalities can only show their older debt as 120+ days or 360+ days. In many municipalities, as much as 80 percent of the outstanding debt is aged in the oldest age groupings, which affects debt collection initiatives.

One purpose of a debt extract is to assess the opportunity to collect outstanding debt. Debt older than 1000 days will prescribe (potentially legally non-recoverable) debt and is most probably not collectable. Depending on the financial management systems in use, detailed ageing beyond the standard ageing classifications (e.g., 120+ days or 360+ days) may require a separate extract report for which the software service provider may have to write an extraction programme.

A further use of the debt extract is to determine the monthly rolling debt of a municipality — how much debt is rolled over monthly into the next month — which gives an indication of how much debt is accumulated over a 12-month period. This is particularly useful to determine the provision for bad debt in the annual budget.

5.2 Total debt by service

Total debt by service provides an overview of the composition of the debt in relation to its services. This presentation identifies services that are most susceptible to the accumulation of debt. Generally, water services and assessment rates carry most debt.

The breakdown of the debt by service is crucial, since the service type can greatly affect the subsequent collection of debt. For instance:
- electricity can be disconnected to encourage payments;
- water cannot be disconnected to residential consumers in line with the free basic services policy; and
- assessment rates are linked to a property that can be sold to recover debt.

In addition to services, the debt per service perspective usually includes the following classifications.
- **Interest.** This is the interest that has been charged on all outstanding balances for services. This figure is important, especially in instances where billing has been incorrect (e.g., through incorrect tariffs or calculations), in which case these amounts are difficult to recover.
- **Credit Notes.** In most financial management systems credit notes are not aged, that is, they remain as current balances on the account. These credits are obscured when looking at total debt figures only and require a further level of analysis through the debt-by-service overview. Credit notes can have substantial impact on the total debt, and a review of these is essential before any cleaning of the debtor’s book is done.
- **Arrangements.** This category describes when a debtor has negotiated a payment plan for all outstanding debt and for future debt with the municipality. In most instances, the total debt on such accounts is re-aged to current and interest levies are terminated. Arrangements are a very effective method of debt collection so long as the process is properly administered. However, when this is poorly managed, it can easily become a mechanism by which customers avoid the accumulation of interest on their outstanding balances while the debt remains outstanding.
5.3 **Total debt by debtor or zone type**

The total debt by debtor or zone type allows a municipality to view the total debt by different debtor or zone types to determine which type of debtor has the highest debt. There are five main debtor types:
- Business
- Residential
- Government
- Municipal
- Other

These classifications are critical to determining a debt collection process. For example, business debt is easier to collect than residential debt, and government debt is recoverable through petitions to the National Treasury.

5.4 **Total debt by ward**

The breakdown of debt by ward becomes important when a municipality wants to involve councillors in the debt collection processes.

5.5 **Total debt by indigent indicator**

Indigent status and the associated indigent debt has become a key focus in most municipalities. Indigent debt is generally regarded as non-collectable and should be excluded from debt collection processes.

Indigent debt management is a relatively new concept that is best integrated with a municipality’s credit control procedures. Most municipalities do not have an indigent indicator on their financial management system, with the result that indigent debt is not identifiable (see also discussion on valuations). Each system handles this indicator differently — for instance, through the tariff parameter. An indigent indicator should be developed and implemented depending on the system capability.

5.6 **Total debt by active and inactive indicator**

The active/inactive indicator shows the debt that is classed as active or inactive. Inactive debt is usually old debt (in terms of its ageing) and not collectable. However, an analysis of this overview must verify the account classifications because it is possible that these accounts are still being billed (meaning that debt is accumulating when the account should be closed).

5.7 **Total debt by suburb down to stand number**

This indicator breaks the debt down into the various suburbs within the municipal area of jurisdiction. The Debt Extract Model allows further analysis of debt for each suburb down to a property, debtors linked to the property and account number. This is particularly useful for a targeted debt collection process confined to a particular suburb.

5.8 **Total debt by valuations**

As mentioned under the indigent debt section, municipalities must determine potential indigent debt before embarking on any debt collection process. Where the financial management system has only limited or no indigent debt indicators, land valuations can be used to identify potential indigent debt. For instance, some of the larger metro areas have defined their indigent range based on land valuations between R0 and R20 000, while smaller municipalities use a land valuation range of R 0–R 2000.

In line with the Local Government: Property Rates Act, most municipalities have embarked on or completed valuations for all properties in its jurisdiction. The date for this particular extract could be
based on land valuations or the valuation of improvements or a combination. When using data from a municipality’s valuation roll, it is important to be cognisant of the date of last valuation, as this will affect the valuation ranges that are selected for the identification of indigent debtors.

The purpose of the use of land (or improvement) valuations in the Debt Extract Model is to compare individual (account) debt with property valuations (or in combination with other aspects discussed above) to determine the potential for debt collection. Debt that is indicated as indigent is unlikely to be recovered.

5.9 Payments for the last 12 months

Payments are the last but probably the most important part of the extract, as they will show for each debtor his/her payment history for the last 12 months.

It will show debtors:
- who are paying consistently;
- who are paying irregularly;
- who were paying before, but have stopped in recent months; and
- who have never paid before.

Each of the payment scenarios may necessitate further review to arrive at an explanation of the payment trend. Various reasons are offered for non-payment at any point in time, for instance, that a debtor has moved or a debtor has an unresolved query on the account.

6 Strategic Analysis

The Data Extract and Analysis Model provides at the highest level of detail a consolidated overview of a municipality’s debt. By adding a range of classifications to the model, the debt can be viewed in more detail, facilitating the analysis and interrogation of the data. Based on these analyses, debt collection and data cleaning plans can be generated that will assist a municipality in improving their financial management systems and in collecting recoverable debt. The strength of the model lies in its ability to provide the necessary detail to carry out an efficient and targeted plan. For example, if debt collection is the primary focus:
- business debt can be targeted first;
- business debt can be viewed per suburb, and the suburb with the biggest business debt can be selected; and
- business debt can be further viewed by service, and a particular service can be targeted.

In addition, the ‘Top-100’ debtors (the first 100 debtors with the highest amount of debt) can be extracted for review by their total debt or by:
- Service (e.g., water, assessment rates);
- debtor types (e.g., business, government);
- active/inactive status;
- suburb; and
- indigent status.

A targeted debt collection approach is a better-managed approach, based on reliable information, and ensures an efficient deployment of (scarce) resources to focus areas where the potential returns are highest.

7 Case Examples

The Data Extract and Analysis Model has been completed for the following sites:
- All 6 Metros and Buffalo City
- 12 Project Consolidate Sites
- 15 Other Municipalities
All these sites have gained valuable understanding of their service debt situation and used the analysis for a range of interventions, including:

- targeting large debtors;
- implementing debtor classification cleanups;
- determining doubtful debt provisions; and
- completing year-end audits.

Most municipalities have requested subsequent data extracts in order to view the results of their interventions and adjust their strategic focus to further areas of concern.
Debt collection

1 Why is debt collection essential?
Debt collection and service delivery are the two greatest challenges facing local government in South Africa. Consumers owe local government billions of rand and the figure keeps growing at an alarming rate. The fact that not only household consumers but also businesses and the government itself are in arrears demonstrates that debt collection practices are inadequate and that the factors that underlie the reasons for and consequences of non-payment are not fully understood and have not been sufficiently addressed in a disciplined manner.

The high level of outstanding debt not only is having serious negative consequences on the cash flow of most municipalities, but also holds a much greater threat. Since the bulk of municipal income comes from payment for services, municipal incomes are becoming increasingly depleted. This means that municipalities are becoming increasingly unable to either sustain actual service delivery or maintain the existing service infrastructure, let alone undertake new development work to meet the needs of the poor. Thus, if the pattern of non-payment persists and discipline in the form of regular payments is not restored, municipalities will not be able to deliver on national developmental priorities on a sustainable basis and the consequences will jeopardise the very livelihood of the communities they are supposed to serve.

2 Legislative requirements
Section 96 of the Municipal Systems Act states that a municipality must collect all money that is due and payable to it and, for this purpose, must adopt, maintain, and implement a credit control and debt collection policy that is consistent with its rates and tariff policies.

3 Why is there a huge debt problem in local government?
The reasons for municipalities not collecting their debts are numerous and varied. Research and the collective practical information gained from the implementation of various debt collection projects and programmes undertaken throughout South Africa indicates that the main reasons for poor debt collection include the following:

■ lack of political will to enforce credit control measures, due to:
  - the lack of accurate data on which credit control measures can be taken;
  - credit control measures being taken on indigent households; and
  - councillors influencing the operations of officials;

■ lack of skills and capacity to manage the collection of outstanding debt;

■ lack of adequate debt collection administration systems;

■ lack of integration and co-ordination among the financial management, credit control, and debt collection systems within municipalities; and

■ incorrect interpretation of legislation pertaining to credit control and debt collection procedures.

4 Delivery options
Municipalities have several options on how to address debt collection. The following are the most common.

■ An ‘in-house’ approach. Using this approach, the municipality physically undertakes debt collection itself. In the long term, this is probably the most cost-efficient and sustainable solution. Rapid rising municipal debt arrears — as a result of a current lack of capacity within most municipalities throughout South Africa — and a foreseeable absence of trained personnel, experience, and appropriate debt collection systems remain a serious challenge.
A ‘co-sourcing’ approach. With this approach, the municipality is assisted by outsourcing certain aspects of the debt collection process. A major benefit is the transfer of skills, thus enabling the municipality to build up a sustainable debt collection capacity in the longer term.

A ‘full-outsourcing’ approach. Here the municipality appoints a firm of professional debt collectors, who should be registered members of the Council for Debt Collectors, to undertake all debt collection. The main advantages of this approach are that it is short term, low cost, and low risk to the municipality, since the debt collector is only paid a commission on the monies that are collected. However, the full-outsourcing approach could be adjusted over time to a co-sourcing approach. With the experience gained through this process, together with skills transfer, an in-house approach could be developed and integrated within the municipality’s own accounting and management systems.

It is essential, however, that the debt collection process is integrated with the credit control and indigent grant management processes.

5 Important elements of the debt collection process

The intention of debt collection is twofold: to collect monies due to the municipality and to rehabilitate the debtor to ensure that the municipality reaps the benefit of the annuity cash flow going forward. The value of regular payments outstrips the value of part collections.

Many municipalities engage in aggressive debt collection exercises with very little impact because of poor data. This process is both costly and time consuming for the municipality and could result in poor community council relations.

The ability to collect debt remains dependent on the accuracy of the debtor information. Inaccurate debt information results in poor debt collection. The following information is critical to the collection process:

- Is the customer information correct?
- Is the account information correct?
- Have the correct tariffs been applied?
- Is the outstanding amount correct?
- Is the usage correct?
  - Meter readings
  - Property valuations
- Have all outstanding credits been passed?
- Does the customer still exist?
- Is the customer indigent?

It is only once this information is correct that municipalities can implement action to collect the debt and communicate with the debtor. Debt collection without accurate information may result in partial collections, if any, and a debtor that is not fully rehabilitated could continue to default.

It is only once the debtor information has been cleaned and it is established that the customer does exist and can pay that the municipality can effectively implement a credit control policy and debt collection process.

5.1 Debt collection process

The services that the debt collection department/service provider must be able to render include the following:

- Pre-legal debt collection – production and delivery of all required notices:
  - Overdue notice
  - Cut-off notice
  - Telephone call
- Indigent assessment
- Query resolution
- Final legal demand
- Legal collections – from summons to warrant of execution:
  - Summons according to council policy
  - Communication with sheriffs
  - Communication with courts
  - Application for Judgement
  - Notification of Judgement
  - Warrant of Execution
  - Sale in Execution
- Electronic and physical tracing:
  - Inspection of household
  - Physical tracing
  - Tracing via credit bureaus
- Administration of Acknowledgements (AOA) of Debts and Promises to Pay (PTP):
  - Preparation of AODs and PTPs
  - Signature of AODs and PTPs
  - Monitoring of payment commitments
- Administration of Emolument Attachment Orders (EAOs):
  - Preparation of EAOs
  - Signature of EAOs
  - Liaison with employers
  - Monitoring of payment commitments

5.2 **Key requirements for success**

Essential to the success of the debt collection are the following:
- Full support from the municipality in resolving queries
- A partnership relationship with an external service provider
- Familiarity with the local municipal environment on the part of the service provider
- Education of constituents on the importance of paying for services (to be conducted by ward councillors), ward councillors informed of the debt situation in their wards, and assistance by ward councillors to the debt collection service provider when required

5.3 **Monthly reports**

The debt collection department or service provider must provide the following monthly reports:
- the number of debts handed over, debts collected, arrangements, promises to pay, acknowledgments of debts, and debts subject to legal process;
- debts identified as having prescribed or need to be written off, plus justification;
- accounts requiring reconciliation or investigation;
- progress reports on tracing actions;
- assistance with the identification of indigents from within the arrears database;
- all financial aspects of debt collection, including detailed commission reports; and
- proposed action plans for the following month.

5.4 **Debt collection protocol**

Within the debt collection industry, a ‘protocol’ (set of requirements) has been developed that ensures best practice. There are three aspects to the debt collection protocol:
- Information supply
- People and processes
- Technology
Information

Debt collecting agents, both internal and external, can perform only according to the quality of information supplied to them. The better the quality of information supplied by the municipality, the better the chance of collecting the outstanding debts. At a minimum, the information should include:

- complete debtor’s information: name, physical address, postal address, and erf and telephone number; and
- full financial information regarding the arrears account: value outstanding, period to which the account relates, category of service to which the debt relates, and details supporting metered services.

People and processes

Even though external suppliers may be engaged by the council, the municipality has an obligation to ensure that:

- the debt collecting agents act according to the agreed Service Level Agreement;
- the debt collecting agents report to the municipality in a manner that will give its officials full information on the accounts handed over for collection;
- all queries raised by debt collection agents are attended to and resolved in a timely fashion; and
- all amounts recommended for adjustment and write-off are considered and activated.

Technology

The debt collection department or service provider must be technically equipped to, at a minimum:

- provide a full history of actions taken by the debt collector;
- provide an accounting for payments and adjustments to the debtor’s account;
- enable the debt collector to manage and account for actions by other third parties, such as tracing agents, sheriffs, etc.;
- provide a comprehensive suite of reports that enable municipal officials to monitor and account for the assets entrusted to the debtor;
- deal with volumes of accounts in an efficient and effective manner; and
- be flexible to enable the management of different categories of debt and therefore different collection protocols and report accordingly.

In turn, the municipality should be technically equipped to, at a minimum:

- identify and flag accounts handed over to debt collectors;
- accept payments and correctly allocate payments on accounts already handed over;
- deal with and activate corrective action on debtors queries;
- perform electronic extraction of information required by the agent; and
- in the case of an in-house application, ensure that its internal IT capacity is of sufficient quality and capacity to drive an in-house debt collection system and that it provides proper management and support of the system.

6 Case studies

6.1 Municipality one

In terms of the Municipal Assistance Programme initiated by the KwaZulu-Natal Provincial Government, a 6-month contract was entered into between an assisted municipality and an outsourced debt collection service provider, with the following objectives:

- Identify all accounts in arrears and establish the total amounts owing
- Develop a debt collection strategy for the municipality
- Review and revise the municipality’s credit control policy
- Collect outstanding amounts identified

At the commencement of the project, the status quo was as follows.
No credit control and debt collection infrastructure existed within the municipality and therefore no credit control and debt collection actions were being performed.

A council resolution existed that prohibited the collection of arrear accounts in two of the three towns.

The municipality had an overall outstanding debt book of R36 million.

A firm of attorneys had been appointed to collect payments in arrears.

The following project successes were achieved as a consequence of the 6-month contract entered into with the out-sourced debt collection service provider.

- Credit control and debt collection infrastructure was created and skills transferred to the municipality to enable it to continue with in-house debt collection after the out-sourced contract had been completed.
- The municipality resolution to prohibit debt collection in two of the three towns was revoked. This enabled the debt collection team to proceed with collection actions in these towns.
- A new credit control policy was recommended and incorporated into the municipality’s accounting system.
- An appropriate debt collection strategy was developed and approved by council.
- The arrears book decreased from R36 million to R28 million within the 6-month period.

*During the period, the council was rewarded with an award by iLGM for its ability to turn itself around and improve on service delivery!*  

*The CFO also commented that it was the first time that the municipality did not experience cash flow problems at the financial year end.*
6.2 Municipality two

Figure 1 is a collections success graph over a 31-month period, from February 2003 to August 2005. Over this period, the average collection rate in debtor arrears amounted to 80 percent, and, as the trend line indicates, the average collection rate is increasing every month.

6.3 Municipality three

A small local municipality situated in the North-West Province consisted of 8 wards with 15 municipal councillors. The consumer profile of this municipality was characterised by a strong resistance to payment by consumers and is also characterised by a high indigency level.

The project started two years ago. The service provider assisted in establishing a co-sourced credit control and debt collection department. The collection rate on current accounts increased from 42 percent to 62 percent.

A formal indigent process and register was also implemented.
Figure 5. Illustrating Increase in Collections over a 12-Month Period
Credit control

1 Why is municipal credit control essential?

The most important sources of income for any municipality in South Africa are revenues from households, businesses, and industries for rendered services and revenues from property taxes. However, many municipalities face severe budget constraints as a result of increased expenditures and costs on one hand and decreasing levels of payment for services provided on the other. Indeed, the debt burden is threatening the very existence of most municipalities in South Africa. This makes effective credit control imperative.

2 Effective credit control is a process

Effective credit control is a disciplined process aimed at obtaining payment from consumers for services rendered by the municipality. The key steps in the process are ensuring that:

- all municipal accounting data is correct and ‘clean’ (see Data Cleansing);
- municipalities have current and accurate records of who their customers are (see Customer Information Audits);
- appropriate and correct tariffs are in place (see Tariff Determination);
- all billings are accurate (see Debt Extract Model and Debt Collection);
- debt collection processes have been implemented (see Debt Collection); and
- the correct processes for the final stage — services cut-offs — are in place (see below).

3 Legislative requirements

The Local Government Municipal Systems Act requires municipalities to be financially sustainable based on budgeted income from the sale of services and receipts from grants and subsidies. Together, they should be sufficient to cover the costs of the initial capital expenditure required for the delivery of services; the operating costs of each service; and maintaining, repairing, and replacing physical assets used in the provision of each service.

According to Section 64 of the Municipal Finance Management Act, the municipal manager, being the accounting officer of a municipality, is responsible for the management of the municipality’s revenue. It is therefore his/her responsibility to ensure that all reasonable steps are taken to collect all revenue due to the municipality (Section 78 of the Municipal Finance Management Act).

Consistent with this requirement, the municipality must adopt, maintain, and implement a credit control and debt collection policy that is consistent with its rates and tariff policies (Section 96 of the Municipal Systems Act). A credit control and debt collection policy must provide for the following:

- Credit control procedures and mechanisms
- Debt collection procedures and mechanisms
- Provision for indigent debtors that is consistent with the municipality’s rates and tariff policies and any national policy on indigents
- Realistic targets that are consistent with generally recognised accounting practices and collection ratios and estimates of income set in the budget less than acceptable provision for bad debts
- Interest on arrears, where appropriate
- Extensions of time for payment of accounts
- Termination of services or restriction of the provision of services when payments are in arrears
- Matters relating to unauthorised consumption of services, theft, and damages (Section 97(1) of the Municipal Systems Act)

A credit control and debt collection policy may differentiate among different categories of ratepayers, service users, debtors, taxes, services, service standards, and other matters as long as the differentiation does not amount to unfair discrimination (Section 97(2) of the Municipal Systems Act).
Termination of services must take into account the requirements of Section 27(1) of the Constitution of the Republic of South Africa, which provides that everyone has the right of access to sufficient food and water. In the case of water services, the procedures for the limitation or discontinuation of water services must comply with the following.

- They must be fair and equitable.
- They must provide for reasonable notice of intention to limit or discontinue water services and for an opportunity to make representations, unless other consumers would be prejudiced or there is an emergency situation or the consumer has interfered with a limited or discontinued service.
- They may not result in a person being denied access to basic water services for non-payment, where that person proves to the satisfaction of the relevant water services authority that he or she is unable to pay for basic services.
- The affected person has a right to be heard.

4 The benefits of effective credit control

4.1 Main benefits

Some of the benefits that will accrue to a municipality with effective credit control include the following.

- When credit control is outsourced, it will have an immediate improvement on credit control and debt collection capacity, with consequent improved revenues accruing to the municipality. This will also increase capacity of the debt management staff, allowing for more strategic management and improved strategies.
- With greater revenue certainty, budgeting can become more accurate and ambitious.
- With more visible action against defaulters, the more conscientious consumers will become better about paying for their services.
- There will be better municipal debtor information systems.
- Direct contact with consumers and even defaulters brings municipal management closer to the people.
- Progress and performance reporting will be possible and more meaningful.
- Municipal key performance indicators will be more closely adhered to.
- Capacity building of municipal staff will improve through more constructive focus.

4.2 Supplementary benefits

In the course of the credit control process, a considerable amount of field data can be captured as a normal part of the process. Examples of the types of information that can be collected and managed include:

- Consumers’ reaction to credit control
- Attitudes toward municipal service delivery
- Technical reporting on status of infrastructure networks
- Identifying instances where loss control could improve revenue
- Management information on condition of electricity networks
- Improved communication between Finance Departments and Services Departments
- Data cleansing on technical installations
- Capacity building

5 Credit control actions

The credit control programme typically involves a number of actions, structured in such a way as to progressively convince or persuade the customer to pay for the services consumed. These actions involve following normal debt management procedures. However, should none of these convince the customer to pay, more drastic actions should be applied.

Various credit control actions that can be undertaken are explained below.
5.1 Disconnections

- **Final Demand Notice.** The Final Demand Notice is a legal notice that informs the consumer that payments are in arrears and a final demand for the payment of all outstanding amounts is made, with notification that if the demand is not met or an arrangement made with the municipality, normally within seven days, the supply of that service will be disconnected.

- **Electricity Disconnection – Level One.** A first-level electricity disconnection is a disconnection action that will be undertaken, normally by simply switching off the electricity in a lockable distribution box situated remotely from where the consumption takes place. Should the Final Demand Notice be ignored and payment not made within the prescribed time, the first-level electricity disconnection should normally be effected immediately.

- **Water Restriction – Level One.** A first-level water restricting device is normally a gadget, such as an orifice washer or similar water restricting device, installed on the incoming side of the water meter to restrict the supply to a consumer’s home. The restricted quantity should provide the consumer with at least the basic minimum quantity of water he/she is entitled to in accordance with the free basic services policy of the municipality. Should payment not be received after the restriction of electricity, a first-level water restriction is normally executed.

- **Illegal Consumption Inspection.** Should payment still not be received, chances are that the services have been illegally reconnected, and therefore an on-site inspection should be conducted to determine whether the services have been illegally reconnected. If illegal reconnections or tampering is detected, the consumer becomes subject to a much stricter disconnection/restriction process, which may involve either a bylaw process (see below) or a specialised debt collection process.

- **Electricity Disconnection – Level Two.** A second-level electricity disconnection is normally removal of the circuit breaker. A second-level electricity disconnection normally follows within two days of an illegal consumption inspection has established that an illegal electricity connection has been made.

- **Remove Installation Permanently.** Should illegal consumption continue, the consumer’s account is referred to a special committee for ‘remove installation permanently’ (RIP) action, with recommendations that the supply installations be permanently removed.

5.2 Reconnection

- **Reconnection of Electricity.** Once a customer has paid, or special arrangements are made, the customer needs to be reconnected. There are also special circumstances where instruction could come manually (not through the billing system) from various sources within the municipality for a reconnection to be made.

  The reconnection is normally executed within three hours of the instruction being issued by the Finance Department, except in the case of RIP reconnections, where a different procedure is followed due to the extent of the task involved in the re-installation of the services.

- **Reconnection of Water.** Once a consumer has paid, their supply must be normalised. The restriction device must be removed and the installation tested.

5.3 The bylaw process

If illegal consumption continues, legal action should be taken against the consumer. This involves evidence collection of which there are two principal components: confirmation that the credit control process was implemented in accordance with the municipality’s credit control policy and attesting that the technical disconnection/restriction action has been executed correctly. This information is required for evidence to be used in court.
6 Operational issues

6.1 Principles and processes to establish a sound credit control policy

In terms of implementing the credit control policy, the municipality should develop appropriate processes and procedures to support the effective operational management of credit control and debt collection. It should be based on the following principles:

- No unfair discrimination
- Transparency
- Consistency
- Empathy
- Professionalism
- Legacy
- Controlled project risks
- Performance management

A municipality can charge the following levies in terms of the credit control process:

- Reminder fees
- Disconnection fees
- Disconnection investigation fees
- Reconnection fees

The different actions are discussed under the section dealing with the Programme Scope.

6.2 Managing credit control subcontractors

Due to capacity challenges, municipalities in many cases prefer that the main service provider manage the entire credit control process. This involves managing credit control subcontractors that will perform physical credit control field actions. A proper management system needs to be implemented, involving both contractual and operational issues. Frequent meetings to discuss progress, operational problems, and contractual issues need to be held. In addition to this, strict quality control needs to be implemented.

6.3 Occupational health and safety

Compliance with the Occupational Health and Safety Act is one of the cornerstones of a credit control project, as the technical actions are sometimes performed in a dangerous environment (e.g., live electricity, high water pressure). This includes awareness and precautionary actions to safeguard credit control subcontractors and their technical staff.

6.4 The importance of effective communication

Municipalities are finding themselves in an environment where service delivery is the key differentiator. Managing client expectations can be seen as one of the pillars of customer service. This is emphasised due to credit control actions that are implemented on customers not paying for their services. Client expectations can be realised with proper management of communication and public participation/capacity building.

For any integrated communication strategy to be successful it needs to comprise both an external and an internal communication drive that complement each other.

- **Internal Communication and Training/Capacity Building.** Internal communication and training/capacity building relates to the facilitation of information within the participating structures (normally financial and technical sections) of the service provider, with a focus on efficient and cost-effective service delivery.

- **External Communication and Training/Capacity Building.** External participation relates to the facilitation of information to the affected communities or customers, communicating a wide
variety of aspects on credit control, i.e., the credit control process, the process to remedy non-payment issues, with the focus of empowering the communities or customers.

6.5 Software to manage credit control processes

The saying ‘horses for courses’ is very valid in terms of software systems for the credit control process. It is crucial to have dedicated management software through which all credit control processes are managed. Experience has shown that it is very difficult to manage credit control from a municipality’s billing/debtor database, mainly due to the difference in functionality of a credit control system and that of a billing system.

A key requirement of a credit control process is that the management software incorporate a link between the debtor system and the management software. The link secures the download of such files as payment files and data files with details of consumers/defaulters and also secures the upload of data in terms of reconnections, disconnections, and other related files. Once downloaded, the credit control management software controls every aspect of the credit control process. The linkages should happen on a daily basis to ensure that both systems are synchronised.

6.6 Stores and stock management

Due to the fact that credit control involves stock (restriction devices, electrical fuses, cables, etc.), it necessitates management and control of the stock.

Consideration should be given to the fact that there will be stores needed to store the stock and a software system to manage the stock. The system should, inter alia, make provision that:
- each stock item can be broken down into separate components and captured as such;
- items can be issued/received as individual items;
- the system can keep track of both new and refurbished stock items;
- there are reports in terms of quantities of each stock item;
- allowance are made for items to be issued to a client specified depot (stores, manufacturer for refurbishing, etc.);
- real-time reconciliations of the quantities of each item can be made; and
- there is a full history in terms of items issued and received, dates of issue and receipt, and individuals to whom stock was issued or received from.

7 Case study

7.1 Background

During 2004, a Gauteng Local Municipality identified financial enhancement strategies to ensure its financial viability. The effective management of credit control and debt management had been identified as key performance areas for the municipality. Credit control was not functioning optimally, and there was a need for proper management and control, including implementation of innovative management and operational systems and procedures. As credit control affects consumer’s rights, it was mandatory that data-enabling interventions and records substantiating the delivery thereof be fully traceable and verifiable.

In terms of the management of credit control, the local municipality called for quotations from suitable, qualified service providers to address the following scope of work:
- Reconnection of water and/or electricity supply to consumers at the appointed address
- Reduction of water flow to consumers
- Execution of quality control inspections at premises where service(s) had been disconnected
- Execution and co-ordination of illegal consumption audits
7.2 Financial performance

The graph below depicts the income generated from the implementation of the integrated credit control management project for the period August 2005–January 2006. The amounts indicated exclude arrangements made by the customers.

![Cash collection due to credit control actions](image)

Figure 6 Income per Credit Control Action

Table 1 depicts the cash income per action type for the months of December 2005 and January 2006. Again, the amounts indicated exclude arrangements made by the customers as a result of the project. It is clear from Table 1 that the Final Demand Notice is a cost-effective and efficient method to stimulate response from consumers.

<table>
<thead>
<tr>
<th>Action Type</th>
<th>Cash Received by the Local Municipality (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>December 2005</td>
</tr>
<tr>
<td>Final Demand Notice</td>
<td>352 475</td>
</tr>
<tr>
<td>Electricity Level One</td>
<td>197 748</td>
</tr>
<tr>
<td>Electricity Level Two</td>
<td>105 235</td>
</tr>
<tr>
<td>Water Restrictions</td>
<td>43 594</td>
</tr>
<tr>
<td>RIP*</td>
<td>4 500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>703 552</strong></td>
</tr>
</tbody>
</table>

*Note that the RIP process was still in its beginning stages and very few actions have been executed. This is normally the final step in the process and most of the customers should have been ‘persuaded’ to pay for their services.

The project proved to be a huge success, so much so that the local municipality has extended the appointment of the service provider with the mandate to further optimise the credit control process. New actions that are being considered by the municipality include:

- Level-two water restrictions
- Enforcement of the bylaw process
- Implementation of a communication/capacity building programme to complement and further inform the existing credit control project
**Indigent management**

1  **Why indigent management and grants are necessary**

South Africa has two economies — one affluent and First World in orientation and the other poor and Third World in orientation. The same policy prescriptions and revenue enhancement procedures are unlikely to be successful in both economies.

In the first economy, municipal revenue enhancement (debt collection and the reduction of wastage through inadequate infrastructure and poor management) is a matter of maximising administrative, financial, legal, and technical efficiencies. But in the second economy, improved debt collection procedures are of little help because unemployment rates are high and poverty is endemic. This is evidenced by the high percentage of outstanding debt in previously disadvantaged communities. Therefore, financial support is necessary through indigent and other social grants. While these grants are no panacea for addressing all the problems of poverty, they do nevertheless help lift the burden and therefore they have an important place in our transforming society.

It is important that Indigent Management is implemented in parallel with the Debt Collection and with Credit Control programmes. Persons receiving an indigent grant services are not subjected to cut-off of services, as he is only receiving a basic level of service, or be subjected to collection of outstanding debt.

A further requirement for managing indigents is that many people that can pay services simply do not pay claiming that they are indigent. This is normally picked up through the indigent registration process.

2  **Legislative requirements**

In terms of Section 74 of the Municipal Systems Act, municipal councils are required to adopt and implement a tariff policy. In Sections 74(i) and 74(ii)c, each municipality is required to take into account the subsidisation of poor households. To do so an indigent grant support policy must be put in place.

3  **The challenges**

In terms of the legal requirements referred to above, municipalities are obligated to implement strategies, policies, and procedures to give effect to the requirements of law. The main challenges to implementation include:

- budgetary constraints;
- capacity shortages;
- inconsistent application of evaluation criteria when evaluating applications;
- no verification of the correctness of information supplied;
- role confusion relating to the different aspects of the process, e.g., debates between Finance and Health Departments on the responsibility of handling certain portions of the process;
- large and growing number of backlogs of applications;
- high potential for fraud as no audit trail is in place to track applications, approvals, and payments;
- non-reusable format for information gathered from applications and on-site assessments; and
- poor utilisation of the information obtained for the formulation of local economic development initiatives and other strategies.
4 How indigent grants should be managed

Since a number of departments in the municipality are involved in different aspects of indigence, indigent grants should be managed as part of a holistic approach to the problem so that maximum coordination and sharing of information can be achieved.

There are three important aspects to the management of indigent grants.

- **Acquisition and Management of All Relevant Information.** In consultation with all the departments of the municipality involved in indigent management, agreement must be reached on the detail and types of information required. The required information should be a combination of the standard categories of information normally obtained for statistical purposes as well as service-related information. During the indigent registration and re-registration process, the municipalities are provided with an ideal opportunity to obtain all relevant information on those households that require attention from the municipality in terms of subsidies, services, and support. It is important that this information is stored in reusable form for future use.

- **Practices and Processes.** There are two current practices that should be reviewed to speed up processing of indigent grants. First, many municipalities currently review indigent grant re-registrations during June and/or July. Since this is often the year-end period for municipalities, extra burden is placed on all municipal departments involved, but especially on the Finance Department. Second, in many instances the annual review is being handled as a new application each year. This burdensome process could be sped up if better use was made of the information supplied during the previous application.

Municipalities should also consider the management of indigent grants as a continuous process that could be integrated into the normal day-to-day operations of the municipality. This would optimise the use of current staff. Two ways in which this should be achieved would be to:

- utilise staff currently responsible for credit control measures to also handle indigent grant applications while in the field; and
- utilise leadership structures within the community to communicate the availability of indigent grants and the appropriate application procedure.

Municipalities have several options on how to manage the indigent grant process.

- **In-house.** Under this option, the municipality physically undertakes the full management of the indigent grant process.

- **Co-sourcing.** With this option, the municipality is assisted by outsourcing certain aspects of the indigent grant management process.

- **Full outsourcing.** Here, the municipality appoints an outside service provider to manage the entire indigent grant management process.

- **Technology.** Full use should be made of available computer technology to capture, process, review, evaluate, and store information. This information should be used to facilitate re-registrations, achieve better control, and offer broader application through integration into other systems, such as financial management and credit control.

5 Recommended specification for a successful co-sourced indigent programme

This recommendation is based on an extract taken from the specification for a recent tender for an indigent management programme to be implemented by a municipality in Gauteng. The purpose for its inclusion here is to give the reader an indication of the parameters to be covered in an indigent management programme.

5.1 Indigent grant program objectives

The objective of the tender is to implement an indigent register to assist the municipality in:

- finalising its indigent grant management policy and procedures;
- registering, verifying, screening, and approving indigents;
- establishing and maintaining an indigent grant register;
communicating the indigent grant management processes and procedures to all stakeholders;
providing technical support and assistance in maintaining the municipality’s indigent grant register;
conducting quality control and monitoring; and
conducting capacity building and training of municipal staff to manage the indigent grant management process.

5.2 Process specification for indigent grant management

The following process specification was taken from the approved indigent management policy of the municipality.

Figure 7. Graphic Representation of the Process and Flow of Information for the Required Indigent Grant Management System

Linkage to the municipality’s financial management system

The service provider’s indigent management system was required to interface with the municipality’s financial system to allow the service provider to determine whether or not an applicant was already registered in the system. It assisted the service provider in determining dates when these existing applicants should be monitored.
Data capture
The municipality must normally provide a pro-forma application form indicating what information is required from all applicants.

The indigent grant registration process could consist of the following two processes:
- walk-in application process; and
- once-off audit of specific households in wards identified by council.

The once-off audit is sometimes used to undertake a socio-economic audit to assist with the planning for local economic development initiatives.

Whichever registration process is used, the initial indigent grant registration data must then be captured in an indigent management grant system as per the application forms. The record must then be flagged in the system as being an ‘application in progress’.

Verification – site visit
In terms of the Indigent Management System, a verification officer must be assigned to each applicant. The officer is responsible for conducting the on-site verification of all applicants assigned to him/her. He/she is responsible for verifying the accuracy of the information contained in the registration application and must complete a questionnaire.

The applicant must countersign the completed questionnaire. The verification officer must assess the completed application and questionnaire and recommends either for or against the applicant being considered for further investigation (using an external scan; see Verification – External Scans below).

The site verification information must be entered into the indigent grant management register within 48 hours of receiving the information from the verification officer.

Verification – external scans
An external scan of applicants recommended to receive an indigent grant must be conducted with the Unemployment Insurance Fund, the Department of Welfare, and the Credit Bureau. The information received from the external scan must then also be captured in the Indigent Grant Management System.

The external scan must immediately follow the capture of information from the site visit. The external scan must be done separately from the site visit verification procedure.

Recommendation
Once verification has been completed, the Indigent Management System must generate a recommendation based on the information captured in the database, which could be valued using a point system. Those applications that are above the minimum points required for approval are then referred to the Indigent Grant Committee for final approval.

Indigent committee
The Indigent Committee should consist of various stakeholders, including the ward committee chairperson, ward committee members, representative of the Finance Department, the Indigent Management Programme Officer, and verification officer(s).

The Indigent Committee must meet at least once a month. For each recommended application, the committee members must assess the application in terms of their personal knowledge of the applicant and any other knowledge or information that members may have with regard to the application.
The recommended application must then be captured in the Indigent Management System. The date that the record was submitted to the Indigent Committee must be noted in the system and used to track the status of the application in the approval process.

If an application is declined, that information must be captured in the Indigent Management System. The application must be flagged accordingly and a letter must be sent to the applicant informing him/her of their rejection.

In the event of a successful application, the indigent management register should be updated to reflect this and the system flagged accordingly. The successful applicant must also be notified in writing.

Re-evaluation
Site visits to registered indigents must be undertaken by verification officers according to a predetermined schedule. A full report is required for each grantee, which must then be evaluated as if it were a new applicant. This is important since the life circumstances of grantees may change, thereby disqualifying them from receiving an indigent grant. All changes must be noted when the report is submitted to the Indigent Grant Committee for further approval.

Economic Profile Register and Local Economic Development
A critical output of an indigent register is the detailed information that is fed into the Local Economic Development (LED) program. To effectively implement an LED program a municipality must extend the indigent register beyond the owner or tenant responsible for services payment but to all unemployed members of a community. This can only happen through the development of a comprehensive Economic Profile Register (EPR). Municipalities can only effectively address unemployment if they know who needs assistance, where they live and what their skills are. It is this database that will guide the LED strategy development process. Once again we see that accurate information is a prerequisite to effective planning.
Customer information audit

1 Why are customer information audits important?

Sustainable local government is based on several inter-linked activities. One such activity is the customer information audit — the process of establishing exactly who the municipality’s customers are and what they are entitled to receive in terms of the municipality’s commitment to service delivery. Customers can be categorised as residential and non-residential. Residential customers receive services (at least a basic level) based on fundamental rights enshrined in our Constitution. Non-residential customers are entitled to services based on the economic goods they produce.

Without an accurate record of who a municipality’s customers are, service delivery to customers becomes an arbitrary process, literally a matter of ‘hit-and-run’ — hoping that all receive what they were promised — for which potentially very little revenue is received in return. Customer information audits are, therefore, important to ensure that a municipality has the means to charge all its customers for the services it delivers and for which the municipality is entitled to receive payment. Payment for services is a municipality’s primary source of revenue, and without this income municipalities will not be able to deliver services and fulfil the socio-economic role that is expected from them in terms of law.

Municipalities face many challenges. Some challenges are the result of the ongoing transformation of local government and the consolidation of municipal boundaries that has led to the amalgamation of various administrations into a single municipal administration. Another challenge relates to municipalities not having the necessary procedures in place to maintain the integrity of their customer information; they soon face the effects of outdated, or even obsolete, information. Customer information audits are, therefore, necessary for at least two reasons:

- to ensure that a municipality keeps essential information on all customers in its area of jurisdiction; and
- to ensure that this information is a true reflection of its customer profile.

2 Legislative requirements

The Water Services Act makes provision for the determination of tariffs for water services and specifies that consumers must pay reasonable charges for water services (Section 11(2)(d)).

The Municipal Systems Act requires that a municipality must ‘…establish a sound customer management system…’ (Section 95 (a)).

The Municipal Finance Management Act refers to the establishment and maintenance of a ‘management and information system’, recognises revenue raised, and accounts for debtors and receipts.

The Municipal Property Rates Act provides, *inter alia*, for the classification of properties according to their use and the establishment of a valuation roll.

3 Why municipal information systems currently lack integrity?

Unequal access to services in the past resulted in the majority of citizens receiving services without an obligation to pay, or for which payment was hard to enforce. In most instances, services were delivered to communities through communal infrastructure. Individual households, therefore, had no service identity and non-payment was often a collective, ‘communal’ response to this impersonalised service. Households resisted the communal approach to service delivery, demanding recognition of the household as the primary unit to which services should be delivered.
The amalgamation of municipal administrations — the consolidation of the service delivery environment — as well as the constitutional imperative of equitable service delivery has brought to light the vast disparities in customer information systems. While service delivery could be improved relatively easily through the upgrading and expansion of services infrastructure, the management of these services and, more importantly, the sustainable delivery of such services through the collection of charges to a substantially larger customer base proved to be far more complex than initially imagined. As a result, gaps in base information have become evident and projected revenue streams based on extended billing failed to flow into municipal coffers.

**4 The challenges that must be met**

Customer information is dynamic. Changes to the data must be identified and captured in time in order to maintain the integrity of the billing system. Incorrect data results in undelivered municipal accounts or incorrectly addressed and, therefore, rejected municipal accounts. This results in unpaid accounts, triggered either by the consumer not receiving the account or the consumer becoming unwilling to pay due to incorrect information reflected on the account.

The fundamental challenge that the customer information audit needs to address is, therefore, the growing municipal services debt burden that is exacerbated by the gradual decline in the integrity of the customer data system underlying the billing process. This in turn encourages payment avoidance and widespread service delivery dissatisfaction leading to the likelihood of collective resistance to payment for services and the development of a ‘culture of non-payment’, which is already prevalent in a number of communities in South Africa.

Many municipalities have substantial debtor books in excess of 90 days. With the increasingly alarming situation that is developing, many municipalities have responded with a knee-jerk reaction, reasoning that a tough, blanket debt collection drive is the only way to collect the outstanding amounts. Results in these instances have been largely disappointing, since municipalities failed to understand that in our highly complex society debt collection should be based on a multi-facetted strategy that commences with a review of customer information to ensure that the basis for billing is sound.

**5 What a customer information audit seeks to achieve?**

A customer information audit seeks to establish a sound basis for the billing of service charges, which, in turn, facilitates the collection of revenue. More specifically, it seeks to:

- verify and rectify customer information for purposes of accurate billing; and
- collect additional information about consumer households that could improve customer service, for instance, the determination of consumer households’ indigent status to facilitate services subsidies.

The ultimate objective of a customer information audit is to achieve customer satisfaction through the rendering of municipal services to consumers.

**6 Programme scope**

Against the background of legislative requirements and the importance of reliable customer information for a wide range of purposes, it is imperative that municipalities design appropriate data collection and maintenance procedures that meet basic legal and functional requirements. To achieve this, the customer information audit is divided into three distinct, complementary parts (see Appendix 1 for sample audit forms). Depending on the data needs of a municipality, the data collection process could integrate all three parts into a single programme.

- **Part A** is aimed at collecting basic customer information, as well as information on land use. This part also includes a service evaluation that could be used to assess consumer perceptions about the customer care function in the municipality. In addition, a service meter audit may be
added to this part to check the accessibility and functionality of measuring various devices, such as water meters.

- **Part B** is designed to develop an economic profile of each consumer household with the primary aim to derive at an indigent indicator, hence the focus on questions around income and expenditure and asset ownership.
- **Part C** is aimed at identifying skills within households that could be useful during the implementation of municipal works (capital projects, etc.). The primary aim of this part is to establish a basis for poverty alleviation programmes through job creation and local economic development initiatives.

Data collection is costly, and it is advisable to collect as much information as possible when a municipality decides to engage in a customer information audit. The following items should be collected as a minimum requirement:

- stand data, including primary land use for purposes of classifying properties as residential or non-residential, as well as a ward number;
- customer data, such as first names or initials and surname, contact telephone numbers, and ID number (the last is particularly important when verifying customer credit standing and other information that may determine a person’s creditworthiness);
- household data, such as combined household income (e.g., by using income brackets that would identify a household as indigent), primary sources of income, including pensions and other social grants; and
- consumption measuring devices, conventional and pre-paid, for such services as water and electricity, especially unique serial numbers from each installed device and an audit of their condition.

One cannot be prescriptive on the implementation process. However, there are a number of key components to the process that should not be overlooked when embarking on a customer information audit. The following steps are essential to ensure a successful customer information audit.

- **Establish programme support.** Of critical importance is a common understanding of the purpose of the audit among key role players in the municipality’s administration and among the political leadership. Apart from ensuring that all are informed of the objectives and the broad programme of action, the formation of a steering committee will assist in providing guidance to the process.

- **Public notification.** Especially in areas where service billing has not been fully implemented, informing the public about the audit and its implications with regard to revenue collection is essential. Such notifications could take a number of forms, including radio announcements, radio broadcast of panel discussions on the matter, public ward meetings, and pamphlet distribution. It is important that the public is told of the purpose of the audit and the form it will take (for instance, door-to-door visits by registration officers) and the type of information that will be collected (so that the public can prepare themselves for the interviews).

- **Selection and training.** Data collection is an ideal opportunity for the employment of local temporary registration officers. However, such appointments should be based on a selection process that recognises prior experience, minimum skill requirements, and personal attributes. The emphasis is on the ability to work neatly and accurately and to interact socially with the municipality’s customer base. (People should, therefore, be acceptable by the community.) Comprehensive training manuals are available for the three parts of the audit process that provide the rationale behind customer information audits and explain in detail each data item that appears on the audit forms. Training must focus on ensuring common understanding of key terms and concepts and a uniform data collection approach to avoid confusion and to facilitate consistency during capturing of the collected data.

- **Fieldwork and quality control.** Depending on the area, a daily individual audit target of between 15 and 25 stands is attainable. The emphasis should be on data quality rather than quantity of completed properties. A quality control manual must be made available to ensure that critical data items are completed correctly and to ensure that responses are consistent throughout the different parts of the audit process. It is the quality of the new data that will improve the
current data on the billing system, hence the emphasis on the completeness of the audit forms and the importance of verifying key data items (e.g., ID number, names, and surname must be copied from the ID document; account numbers must be taken from the municipal account where applicable). In addition to data integrity, the quality control process should ensure that full coverage of the area is achieved. This refers to the marking of audited properties on a map of the area to ensure that all properties have been visited.

- **Data capture.** Most billing systems are capable of handling electronic data transfers from a data file external to the system. Collected data could be captured directly onto the billing system, but the preference is for the development of a separate database in which the data is entered. This allows for the development of a data capture screen that reflects the layout of the audit forms — for instance, a separate screen for each section or part — for ease of capturing. This database can then be transported into the billing system with assistance from the system support personnel. (This may require the writing of a small programme that facilitates the transfer of data from one file to another.)

- **Data transfer.** Key to the customer information audit is the manner in which the data is ultimately taken into the municipality’s billing system. Planning of the data transfer is often neglected, with the result that the collected data remains outside the billing system and is of no benefit to the municipality. The manner in which the data is transferred is largely dependent on the billing system in use. A few pointers in this regard may be useful.
  - Ensure that the billing system is able to accept data from an ‘outside’ file by means of an electronic data transfer. If this is not possible, it is recommended that the collected data is captured directly into the billing system’s customer information database.
  - Ensure that the format of the data fields (e.g., the ‘surname’ field or the ‘ID’ field) on the database in which the data is captured are set up in the same format as the billing system to avoid the rejection of certain data fields during the data transfer process.
  - Ensure that the billing system is prepared for the ‘acceptance’ of the data, for instance, by creating account numbers for new customers (data entries) before the data is transferred.
  - Ensure that the transfer of new data does not create duplicate accounts for the same customer. If there are customers already on the billing system, it is important to identify these before the data is permanently transferred. A decision may have to be taken whether to remove the ‘old’ customer information before loading the ‘new’ data. This decision may be dependent on the nature of historical transactions on the account.
  - Financial data should not be removed without having given full consideration to its effect on the integrity of the account history.
  - Equally, if a customer has been billed for consumption (water, electricity) in the past, then the reading history may have to be preserved either by means of a back-up file or by means of transferring the data onto the ‘new’ account. Preferably, when customer information has changed, the changes should be made onto the existing account to protect the underlying financial and other data.

Once the data has been transferred and its integrity has been checked and verified, the customer information system is ready for use as the basis for billing.

The implementation timeframe for a customer information audit is largely dependent on the preparation of the field work and the participation of the municipality in this process. In formalised (urban) areas, the actual data collection is likely to be easier than is the case in spread-out rural villages. The use of support tools, such as maps, is critical in informal rural areas but these are often not available. This hampers coverage checks and may result in incomplete customer information in certain areas.

### 7 Case study

The Dr JS Moroka Local Municipality has been billing customers in its formalised areas using flat rates. In an attempt to increase its revenues from service charges to ensure sustainable service delivery, the municipality decided to implement a billing regime based on consumption. Two challenges had to be overcome.
The customer information on their billing system had serious deficiencies, since part of the data originated from the district municipality to which new customers were added on an ad hoc basis. The billing system did not contain any information about water meters — a prerequisite for accurate and verifiable consumption billing.

A project steering committee was established with representatives from the administration and ward councillors. The councillors assisted with the identification of registration officers who were appointed after formal interviews and a training session. Each registration officer was furnished with a map of the area for which s/he was responsible, and the audit forms were thoroughly checked before submitting them to the data capturers. Actual data collection took about four weeks, and a similar amount of time was spent capturing the data into a central database. Compiling a detailed audit report, including an assessment of the revenue enhancement capabilities and opportunities and a set of maps reflecting the analysis of the socio-economic data that was collected, took six weeks.

The audit revealed that more than 95 percent of the properties were for residential use. The audit of the water meters revealed that a substantial number (between 15 percent and 20 percent) of water meters could not be checked due to defective meter boxes. The audit also found that many consumers in a particular section experienced water leaks beyond the point of the water meter (the municipality is responsible for the water supply infrastructure up to the water meter after which the property owner becomes responsible for maintenance) and they expected the municipality to repair these leaks for free. This led to a recommendation to implement a water meter repair programme and a once-off household water leak repair programme co-funded by the municipality.

Apart from the customer information that was collected, the audit also collected information on household size, income sources, and so on — information that proved extremely useful to the municipality’s internal infrastructure planning programme. In many cases, it was the first time that the municipality had access to such information. In the past, they were reliant on external sources, including census data.

The transfer of the customer data was the biggest challenge. Insufficient planning was done around the system capabilities to import customer information from an external file. Database structures were incompatible, and the nature of the original data made a comparative analysis of the ‘old’ with the ‘new’ data impossible. It was then decided to create a secondary customer database from which the consumer billing would be run. This data set would include an indigent indicator as a first step toward credit control to avoid the uncontrolled accumulation of debt on indigent accounts.

The ‘old’ customer information contained a substantial amount of consumer debt that could not be simply abandoned in favour of the secondary customer database. The challenge that remained after the project was completed was to correctly transfer individual consumer debt to the correct ‘new’ account in the secondary customer information system. Debt that was impossible to link to any customer on the secondary system will be dealt with separately — probably through a council resolution to write off the debt.
1  Why is data cleansing essential?

Urban municipalities derive approximately 60 percent of their revenues from payment for the services they provide, approximately 26 percent from property rates, and the remaining 14 percent from intergovernmental grants and other income. In rural municipalities, approximately 24 percent of their revenue is derived from service charges, 18 percent from property rates, and the remaining 58 percent from intergovernmental grants and other income.

It is a fact, however, that at present all municipalities in South Africa have a high and growing outstanding debtor’s book. This is a cause for great concern since the principal source of municipal revenue is becoming increasingly threatened, and the financial viability of some municipalities is consequently being seriously questioned. At the same time, the cry for improved infrastructural services, faster housing delivery, and the need to improve social services is becoming ever louder. The responsibility for providing these services lies within the realm of local government, but if municipalities do not receive their rightful revenues they will not be able to meet these challenges.

Something has to be done; revenue has to be enhanced! Data cleansing is an important link in the redemptive process. It is the function of ensuring that the information on which the municipal billing system is based is accurate and up to date. Accurate and diligent billing is not only basic to sound accounting practice but is also absolutely essential to the financial well-being, and therefore viability, of all municipalities, since it achieves two critical objectives: the maximisation of revenue potential and the prevention of losses resulting from incorrect or inadequate information.

2  Legislative requirements

Due to the benefits of accurate billing resulting from data cleansing, municipalities are required by law to institute the process. The Municipal Systems Act requires municipalities to:

- ensure that people liable for payments receive regular and accurate accounts that indicate the basis for calculating the amounts due (Section 95(e)); and
- collect all money that is due and payable to it, subject to this Act, and any other applicable legislation (Section 96 (a)).

3  How data cleansing is done

The data cleansing process is divided into three stages:

- Desktop Data Cleansing
- Returned Mail Cleansing
- Physical Field Audit Surveys

3.1  Desktop cleansing

Desktop cleansing is the first activity in the data cleansing process. It comprises checking all billing data held by the municipality for inaccuracies and anomalies. The purpose is to see that all the information the municipality has in its billing system is accurate and correct. Where mistakes are detected, they are to be rectified immediately; where anomalies arise, they are to be recorded for further investigation in the field.

Each debtor must be checked against four criteria, as follows.

- Valuation rolls. The following pertinent information in respect of all properties owned within the municipality’s boundaries is recorded in the municipal valuation rolls:
  - Name of the registered owner
  - Current usage of the property
- How the property is zoned
- Size of the property
- Land and improvement value of the property

All of the above needs are to be checked for accuracy and their correct recording in the billing system must be confirmed. Two important results emanate from this.

- With the correct information, it becomes possible to ensure that the correct bill is sent to the correct customer at the correct address.
- By checking usage and zonage, the correct tariffs linked to each consumer are verified.

- **Debtor types.** It is important to understand that customers should be charged according to their debtor type and owner/tenant status. These categorisations should normally be taken from the application forms customers are required to complete when applying for services. However, many municipalities ignore this field, which means that they are not able to levy charges according to the correct debtor type and status. This could result in substantial potential revenue losses to the municipality, and, at the same time, existing revenues are not adequately protected.

Data cleansing of the debtor type and owner/tenant status requires:

- ascertaining how the municipality bases its tariffs in respect of land usage and land zonage; and
- assigning the appropriate debtor type to each customer according to this information.

This process will:

- correct and meaningful debtor types; and
- correct owner tenant information.

With this information, the correct charges can be determined for each customer.

- **Tariff analysis.** The next step is to compare the debtor type to the tariffs being charged. The purpose here is to highlight whether the following errors have occurred:
  - Owners of properties not being billed assessment rates and other owner-specific services
  - Tenants being charged owner-specific services
  - Business consumers being charged domestic tariffs
  - Domestic consumers being charged business tariffs
  - Free basic services not being applied
  - Free basic services being applied in areas where there should be no free services.

- **Services.** Once all the desktop cleansing items described above have been completed, the next step is to confirm that each customer is billed correctly for each service received. Within each municipality, there are established rules and procedures that determine the correct tariff for each debtor type. It is necessary to check that the correct tariffs are being applied to each customer and, if necessary, develop appropriate systems to ensure that this happens in future.

### 3.2 Returned mail

Non-delivery of accounts is a major problem in debt collection and has serious consequences for municipalities. It is therefore imperative that all returned mail be carefully analysed to determine why bills were not received by intended recipients. All returned mail should be split into the following categories.

- The customer is no longer residing at the given address.
- The postal address is incorrect.
- The physical address is wrong.
- The account is flagged inactive, while, in fact, it is active and therefore not being billed.
- The account is wrongly flagged ‘active’.

Once the reason for non-delivery has been established, contact should be made with the owner of the property. There are various ways in which this can be done.

- Check the system for telephone numbers and make contact telephonically to clarify details, if possible.
- If contact cannot be made telephonically, do a title deeds search to determine where the owner of the property is located.
Another method is to do a credit check on the customer through a credit bureau, which should reveal the customer’s latest physical and/or postal address and, possibly, telephone number.

All the correct details should be captured in the system once the customer has been located.

Should this desk research prove fruitless, it will then be necessary to physically visit the property concerned to interview the current occupier in the hope that s/he could provide a forwarding address or advise on the current whereabouts of the missing customer. (See below for further details on field work methodology.)

If an account is flagged ‘active’, it is important to check that no bills are sent out, as not only is this wrong, but it also distorts the outstanding debtor’s figure. It is equally necessary to check that if it is flagged ‘inactive’ services are nevertheless being provided and not charged for. This should be rectified immediately.

3.3 Data cleansing fieldwork

Where neither the billing system nor desk research is able to resolve the situation regarding anomalous accounts, fieldwork is necessary to determine what the situation is ‘on the ground’. This should not be done in an ad hoc manner. Instead, it must be carefully planned, to save on resources, to ensure that the data obtained from field research is captured in the billing system as quickly as possible, and to mitigate against the risk of further corruption.

The following fieldwork preparation is necessary.

- An appropriate fieldwork questionnaire should be designed to obtain the following information:
  - The customer’s correct name and postal and physical address
  - The correct owner/tenant situation
  - Whether the tariffs levied on the property are correctly related to the type of property, e.g., domestic residential, commercial, municipal, industrial, religious
  - Whether the classification of the debtor is correct or not
  - The correct stand number
  - Verification of meter numbers and their correspondence with those registered in the revenue system
  - Correct ward allocation
  - Indigent status of the customer
  - Confirmation of the services received by the customer
  - Nearest pay station to the customer

- Recruit fieldworkers who meet the following minimum qualifications:
  - Must be literate
  - Must be properly trained in interviewing techniques and be able to record accurately all the information obtained
  - Must be personable and be able to win the confidence of interviewees
  - Must be reliable, conscientious, and able to work independently of close supervision

- Fieldwork management:
  - A regular reporting system must be instituted to ensure consistency and reliability.
  - Spot checks must be done on a systematic, but unpredictable basis.
  - Debriefings should be done from time to time to share experiences and enhance collective wisdom.
  - Teamwork should be encouraged and motivation sustained.
  - Information must be regularly checked and comparisons made so that anomalies may be identified and explanations found.
4 Case studies

4.1 Municipality one

In one district municipality in KwaZulu-Natal Province, a desktop data cleansing exercise found that more than 31 000 properties were incorrectly zoned and their usages were wrongly allocated. Rectification of these errors enabled the correct tariffs to be applied, resulting in increased revenue in excess of R300 000 per month accruing to the municipality.

4.2 Municipality two

In another municipality, after six months, a desktop data cleansing exercise achieved the following.

<table>
<thead>
<tr>
<th>March 2005</th>
<th>September 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Account per Zone Group</strong></td>
<td><strong>Total accounts per Zone Group</strong></td>
</tr>
<tr>
<td>Business</td>
<td>1 123</td>
</tr>
<tr>
<td>Government</td>
<td>9</td>
</tr>
<tr>
<td>Municipal</td>
<td>125</td>
</tr>
<tr>
<td>Residential</td>
<td>20 798</td>
</tr>
<tr>
<td>New Zonage</td>
<td></td>
</tr>
<tr>
<td>New Zonage</td>
<td></td>
</tr>
<tr>
<td>New Zonage</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>66 613</td>
</tr>
<tr>
<td>Car Park</td>
<td>4</td>
</tr>
<tr>
<td>Fictitious Lots</td>
<td>180</td>
</tr>
<tr>
<td>Institutional</td>
<td>58</td>
</tr>
<tr>
<td>Mixed Zone</td>
<td>33</td>
</tr>
<tr>
<td>Vacant Land</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total per Zonage</strong></td>
<td><strong>88 668</strong></td>
</tr>
</tbody>
</table>

An analysis of the results reveals the following.

- Of the 66 613 accounts in the ‘unknown’ zone category, 15 097 properties were able to be allocated to the correct zones.
- The balance of the 51 516 zone groups are those accounts that are not linked to services on a property, therefore could not allocate a zone to a particular property.
- ‘Government’ accounts increased from 9 to 329 accounts.
- ‘Municipal’ accounts increased by 181 accounts.
- 5 843 rural properties were identified that had not been zoned previously.
- ‘Residential’ properties increased by 8 691 properties.
- Outstanding debt in the ‘unknown’ zone group decreased by R19 115 263 by allocating the correct zonage to the properties.
- ‘Rural’ debt is now reflected separately at R3,8 million, which previously could not be isolated within the total outstanding debt figure.
- ‘Municipal’ debt has increased from a low figure of R354 617 to a more appropriate figure of R2 212 062.

Prior to the electronic corrections of the service tariffs in the system, manual processes were established and the following were isolated.

- Of 22 000 domestic consumer accounts, 667 were being billed on a domestic tariff. Due to the data cleaning project, the zones were rectified, resulting in these domestic properties being correctly reflected as ‘Business’. This adjustment alone enhanced the billing considerably.
Of 1 280 accounts manually investigated, it was found that 360 ‘Domestic’ accounts were being charged an ‘Industrial’ tariff. Although this would have a negative effect on the debt, the data would be clean and correct.

5 276 accounts had tariff changes, which resulted in the correct tariff rating being applied.

The municipality found the above-mentioned results of the desktop data cleaning project beneficial and have decided to extend the project in order to maintain the integrity of their data.
Customer care and management

1 Batho pele – people first

The principle that people must come first is fundamental to our democracy. It is enshrined in Chapter 7 of the Constitution, which states various objectives of local government, including the injunction ‘to encourage the involvement of communities and community organisations in the matters of local government’. In fulfilment of this commitment, government has adopted eight Batho Pele principles (White Paper on Transforming Public Service Delivery, 1997).

Those relevant to customer relations include the following.

- **Consultation (Principle 1).** Citizens should be consulted about the level and quality of the public services they receive and, whenever possible, should be given a choice about the services that are offered.

- **Service standards (Principle 2).** Citizens should be told what level and quality of public services they will receive so that they are aware of what to expect.

- **Information (Principle 5).** Citizens should be given full, accurate information about the public service they are entitled to receive.

- **Redress (Principle 7).** If the promised standard of service is not delivered, citizens should be offered an apology, a full explanation, and a speedy and effective remedy, and when complaints are made, citizens should receive a sympathetic, positive response.

- **Value for money (Principle 8).** Public services should be provided economically and efficiently in order to give citizens the best possible value for money.

2 Definitions

In order to have a common understanding of what customer care and management entails within the parameters of local government, the following definitions are provided.

- **Customer:** The individual or collective consumer or user of municipal services for domestic, commercial, or industrial and related purposes. Customer, consumer, and user are synonymous in meaning and used interchangeably.

- **Customer care:** The effort made by the service provider (e.g., a municipality) to provide a service that satisfies its customers. This includes aspects like information dissemination, communication, and education.

- **Customer management:** The measures and actions taken by a municipality to achieve a sustainable service relationship with its customers that fulfils its obligations in terms of the Batho Pele principles, while at the same time ensures that the customers’ obligations to the municipality are equally met.

- **Municipal services:** The provision or supply of a public need by a local government institution. In this document, the service context is generally limited to water supply, unless otherwise stated.

- **Policy:** A statement of intent with respect to a municipal service or function or an aspect of the service or function. Some policies are required by law to be converted into municipal bylaws.

- **Procedure:** A documented description of a process that ought to be adhered to by operational staff in order to achieve service delivery objectives contained in a policy or bylaw.

3 The challenge that must be met

If the interface between a municipality and its customers is not carefully managed, customer disappointment and disillusionment with service delivery develops easily. This inevitably results in customers perceiving the services for which they are being charged as being inadequate. The ultimate outcome is poor payment for municipal services and a gradual decrease in service quality due to insufficient funds. This gives rise to more dissatisfaction, and a vicious and destructive cycle of discontent begins to escalate. To break that cycle is the great challenge facing local government in South Africa today.
4 Legislative requirements

Concern for customers’ needs has been widely adopted as a fundamental right and principle in various legislated frameworks. Of particular importance is Chapter 9 (Section 95) of the Municipal Systems Act, in which no fewer than eight specific procedural requirements are stipulated. The Water Services Act refers in Section 11 to the obligations and responsibilities of water services authorities and the need to deal with defaulting customers in a reasonable manner. The Department of Water Affairs and Forestry has as a consequence promulgated various customer care regulations, which have been gazetted in Sections 9 and 10 of the Regulations to the Act. The Strategic Framework for Water Services of the Department of Water Affairs and Forestry addresses customer management in some detail with specific reference to a Customer Charter. It places customer care and management primarily on the service provider.

5 What must be done

The key success factor for a customer care function is communication. Consumers have a right to know what they can reasonably expect in terms of service delivery. They also have a right to know when and how changes, either temporary or permanent, will be implemented and how these changes will affect them. These rights are entrenched in the Constitution. Dissemination of information therefore is a must. Furthermore, it must be done in a manner that facilitates understanding and transforms consumers into knowledgeable service users.

Communication in this context is two-sided. Mutual rights and obligations must be clarified so that there is no ambiguity around roles and responsibilities. For instance, consumers have a right to a reliable and consistent service, but forfeit this right when they neglect their responsibility to pay for the services they use.

To discharge its constitutional obligations, local government must establish its authority in the delivery of municipal services by developing an organisational and operational environment that reflects order and system, competence, and adherence to procedure. Without these fundamentals in place and the required supporting resources and infrastructure, customer care becomes a frustrating experience from the perspective of both the consumer and the service provider. To meet its obligations a municipality requires:

- an information system that accurately stores the details of consumers;
- a billing system that is accurate and that produces detailed bills that are easy to read and understand;
- a customer relationship management capability that monitors satisfaction levels in relation to the delivered services; and
- a physical environment that is presentable and convenient — that reflects order and system — and enhances consumers’ confidence in the municipality’s capability.

Periodic assessment of performance of the customer care function in a municipality is a regulated requirement. Meeting customer expectation is the targeted objective, but exceeding expectations creates a strategic advantage from a service provider perspective. The extent to which targets are met and exceeded is measured by means of a service quality assessment that measures three key areas of customer care.

- Communicating with customers on issues they need to know
- Addressing customer concerns in a manner that seeks to resolve the matter promptly
- Appraising the municipality’s customer care performance regularly

Each of these points is discussed below.
5.1 Communication with customers

The dissemination of information to consumers must be guided by the relevant policies adopted by a municipal council. Information relating to service levels and quality may be communicated to consumers by means of a Consumer Charter — an approach that is promoted in the Strategic Framework for Water Services. As a minimum requirement, the following must be communicated to consumers.

- **Service standards.** The standard of service delivery that the municipality has adopted in line with regulation principles, such as maximum interruption delays in consumption-based services, i.e., water and electricity. These service standards should be defined in several of the municipality’s services policies.

- **Service tariffs and charges.** The standard charges and costs associated with a service and the additional costs for extraordinary services, such as reconnection fees and meter testing charges. Service charges generally escalate annually with the rate of inflation and such adjustments must be communicated in a timely fashion to consumers.

- **Appropriation of revenue.** The intended allocation and use of the monies received for services, including the explanation of cross-subsidisation of services where applicable. The income and expenditure budgets as well as the cash flow generated from services are reported during the annual budgeting process. The linkage between service payments and revenue allocation must always be emphasised in the communication process.

- **Terms and conditions of payment.** Consumers must be informed of the payment requirements and exceptional arrangements that are permitted under certain conditions. The ‘user pays’ principle must be explained, placing the onus of payment primarily on the user of the services and not on the owner of the serviced site (where the user is a tenant or occupier other than the registered owner).

- **Special conditions and restrictions.** During periods of drought and water shortages a municipality may impose certain water usage quota restrictions and additional penalties, which must be communicated to consumers in advance. The type of restriction, the period for which the restrictions are implemented, and the manner in which restrictions will be lifted should form part of this communication. In addition, during routine maintenance and repairs, consumers must be informed about the time, nature, and duration of service interruptions with advice about measures to ensure minimum inconvenience.

- **User obligations.** It is the consumer’s obligation to inform a municipality of changes to personal and other details. This includes the notification of closing of an account by the consumer. In addition, consumers are obliged to inform the municipality of any leaks to council infrastructure (e.g., pipe bursts and meter leakages). Customers are responsible for all repairs and maintenance of all plumbing beyond the water meter. Access by municipal staff to a site for control and maintenance purposes may not be unreasonably denied.

Suitable communication media should be identified and could entail more than one option. However, it is advisable to ensure that all formal communication is summarised in writing and sent to each consumer. While officials may prepare the content of the information that is to be disseminated, councillors remain the primary conduit through which information should be relayed to consumers.

5.2 Addressing customer queries

The service delivery context is defined by two operational areas:

- technical aspects relating to the physical supply of services; and
- administrative aspects relating to the charges and payment for the services provided.

Queries can emanate from any of these two areas of intervention. The handling of queries has two facets: resolving the reason for the query, and identifying problem areas and monitoring their resolution. **The ultimate goal should be to improve the operational efficiency to the extent that the number of queries is reduced to a minimum.**
Efficient handling of customer queries requires a standard procedure for the logging of a complaint, referring the matter to the correct department and/or individual for action, and receiving feedback on the status of the complaint. Various software applications are available to record and monitor the processing of complaints. However, the critical success factor is not just the procedure for logging complaints, but prompt and empathetic action in resolving it. This is the hallmark of municipal excellence and good customer relations.

Customer care targets should be included as key performance indicators in the job descriptions of all relevant staff, as well as service units. Individuals in the organisations must be made accountable for achieving municipal objectives.

5.3 Municipal appraisals

Consumers should be invited to give feedback on the municipality’s performance in relation to service delivery and customer satisfaction. This could be done by means of questionnaires, but, unless they are taken seriously by council, it could become counter-productive. Customer care compliance is one of several aspects that need to be measured. Several other performance measurement opportunities exist, including the annual municipal performance evaluation linked to the IDP process.

For a municipal performance appraisal to have any impact on future performance, it must be credible from a consumer perspective and should focus on consumer experience. The aim of an appraisal should be to improve service delivery quality (in a broad sense), and the findings of the survey must be communicated to consumers, along with an indication of corrective measures that will be taken to improve performance deficiencies.
1 Why is water loss reduction vital to municipalities?

In South Africa, water resources are limited. The situation is worsened by the occurrence of droughts and the increasing demand associated with population growth and a developing economy. The country is fast approaching the full utilisation of its available water resources, and further water augmentation schemes, such as the Lesotho Highlands Water Project, are extremely costly to construct and to operate and maintain.

In 2003, the country’s annual water demand for urban use was estimated at approximately 2 900 million cubic metres. This represents approximately 23 percent of the country’s total water requirement. It is further estimated that the current water loss or unaccounted-for water (UFW) represents approximately 30 percent, which equates to approximately 870 million cubic metres. If multiplied by an average purchase price of R2.50 per kilolitre, this loss amounts to approximately R2.42 billion per annum. As clean water is the most significant resource for reducing water-borne diseases and improving the quality of life of the poor, the elimination of these losses would go a long way toward alleviating the plight of the many people presently living in unserviced communities.

The need to address the problems of poverty makes water loss reduction strategies essential for the effective management of water systems. The strategies developed around water loss reduction have the potential to extend the life of the country’s existing water resources significantly. An added benefit is the enormous savings in water purchases and the consequent improvement in the cash flow of municipalities. However, municipalities are currently faced with severe capacity problems and consequently have insufficient skilled technical staff to repair, operate, and maintain present municipal water services infrastructure.

The immediate task is to find ways and means of overcoming this challenge. In this regard, it is widely recognised that at present the private sector is in a position to assist, since it is able to define a role for itself in the financing and management of programmes to optimise water service delivery and to reduce water wastage. What is also very attractive for municipalities is that these programmes have a high potential to be self-funding and therefore able to save municipalities millions of Rand.

2 Programme objective

The various technical programmes described in this report are to assist municipalities in implementing measures to conserve water and to reduce water wastage. These measures, together with the implementation of the required management systems, have the potential to achieve the overall programme objective namely:

- to use water services more efficiently;
- to make water services more affordable;
- to ensure that the water services institutions remain viable; and
- to provide sustainable access to water services for all water services customers.

These objectives are also in line with the requirement of Section 11(1) of the Water Services Act, which states:

*Every Water Services Authority has a duty to all consumers or potential consumers within its area of jurisdiction to ensure efficient, affordable, economical and sustainable access to water services.*
3 Legislative requirements

The White Paper on a National Water Policy for South Africa provided the basis for a new legislative dispensation in the water sector. The National Water Act was subsequently enacted.

In terms of Sections 9(1) and 73(1)(j) of the Water Services Act, the Minister of Water Affairs and Forestry has promulgated regulations related to the Compulsory National Standards and Measures to Conserve Water. The objectives of the regulations are to protect consumers, municipalities, and water services institutions and, most importantly, to ensure the application of sound management principles in the water services sector.

An important requirement of the Act is the preparation of a Water Services Development Plan. In terms of this plan, water loss management initiatives must be reviewed annually and reported on in respect to the following:
- the results of the water balance as set out in Regulation 11;
- the total quantity of water unaccounted for;
- the demand management activities undertaken; and
- the progress made with the installation of water-efficient devices.

The above reporting requirements have resulted in the development of various programmes aimed at assisting municipalities to reduce their water wastage problems.

4 Water loss management components

Water loss management consists of two components. The first component is referred to as water demand management (WDM). It relates to savings that can be achieved by reducing the bulk quantity of water purchased from the bulk water supplier. Typically, WDM initiatives would therefore have an influence on the bulk purchase.

The second water loss component is referred to as water meter management (WMM). It relates to the amount of water that could or should pass through a water meter and on which an invoice can be generated. WMM strategies will therefore affect the sales.

Figure 8 below illustrates how WDM and WMM measures instituted in 2003/2004 bring the top line, which is the bulk purchase, and the bottom line, which is the water sold, closer to each other.
5 Water demand management

Below are the main steps to be followed in WDM (refer to the ‘Water Demand Management Initiatives Undertaken in Mogale City Local Municipality’ case study for an illustration of these steps):

- Subdivide the entire municipal area into smaller manageable water supply zones.
- Install and/or refurbish zone bulk meters and pressure reducing valves (PRVs) in each water supply zone.
- Undertake an analysis of the potential losses of each water supply zone by logging the flows and pressures in each zone and calculating the excess minimum night flows (MNFs); an excess MNF calculation gives a theoretical quantification of water losses within a water supply zone.
- Identify problem areas and rank the zones from highest excess MNFs to the lowest.
- Reduce high pressures within each water supply zone, starting with the highest ranked water supply zones first, thereby immediately reducing excessive leakages (refer to the ‘Sebokeng-Evaton Leakage Reduction Project’ case study regarding the benefits that accrued from a pressure reduction programme).
- Undertake a systematic leak detection and repair programme on the water reticulation system, also starting with the highest ranked zones first to initially have a major impact at reducing water leakages.
- Implement measures to regularly perform a water balance, including the following:
  - Measure the bulk quantity of water provided to each water supply zone; and
  - Determine the quantity of UFW by comparing the measured quantity of water provided to each water supply zone with the total measured quantity of water provided to all authorised user connections within a water supply zone.

A water balance basically compares the water that goes into a water reticulation network with what is being used or consumed in the same network. The difference is UFW and is a direct loss to the municipality. By doing a water balance and determining UFW, it is possible to determine the extent and locations of water wastage and to enable the municipality to plan measures to reduce losses. To highlight the impact of UFW, it is also advisable to reflect it in terms of financial losses.

6 Water meter management

The objective with the installation of a water meter is to monitor and control the provision of water services and to improve the efficiency of billing. Therefore, WMM mainly consist of measures to reduce water wastage as a result of the following four elements:

- Illegal water connections
- Unmetered water connections
- Faulty water meters
- Internal plumbing leaks

It is clear that, if not properly controlled, the first three elements will have a significant influence on water billing. The fourth element — internal plumbing leaks — has a major influence on private properties in a previously disadvantaged community where payment levels are low and wastages are high. (Refer to the ‘Munsieville Leak Repair Project on Private Properties’ case study.)

For the best results, water meter management should preferably be undertaken in parallel with a WDM programme, especially in those water supply zones for which a water balance exercise has already been undertaken. The main steps to be followed in a WMM programme are as follows:

- Undertake a water balance for each separate water supply zone and calculating its UFW percentage.
- Ranking the water supply zones from highest UFW percentage to lowest.
- Establishing payment levels for each zone. The total amount outstanding per zone should be divided by the total number of water connections within the zone. This ‘unit payment’ amount outstanding should also be ranked from highest to lowest.
The above exercise should be followed with a water meter audit, starting with the highest ranked UFW and ‘unit payment’ zones first; in parallel with the water meter audit, a maintenance team should be prepared to immediately fix any visible leaks, clean meter boxes, cut off any illegal water connections, and install meters where appropriate.

Following the audit, there should be a systematic programme of testing and replacing water meters in the problem identified problematic zones. The latest development in prepayment water meters allows for remote and automatic water meter reading, which has the potential to automate the UFW calculations on a continuous basis, thereby controlling the water supply network more efficiently.

In Soweto, a R450 million project, which included the refurbishment of secondary water mains, new yard connections, once-off leak repairs to all households plumbing, installation of prepaid water meters, and an effective communication campaign, motivated purely on savings in bulk water purchases.

7 Water demand management in Mogale City case study

This case study illustrates the various steps undertaken in a typical WDM programme.

7.1 Unaccounted-for water calculation

The first step of any water loss reduction programme is to assess the magnitude of the problem and then to decide on strategies to be used to address the problem.

Table 2 is an example of the UFW calculation. Mogale City Local Municipality commenced with their WDM programme in December 2003. From the figures given below, it is evident that the UFW has decreased from 30 percent in 2003/2004 financial year to 26 percent in the 2004/2005 financial year.

The historical figures were also available, and this enabled the municipality to project the estimated figures for 2005/2006 financial year for budget purposes.

<table>
<thead>
<tr>
<th>Description</th>
<th>Financial Year</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Projected 2005/2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units bought (kl)</td>
<td>18,214,429</td>
<td>20,217,195</td>
<td>22,039,913</td>
<td>24,078,849</td>
<td>23,553,478</td>
<td>25,494,395</td>
</tr>
<tr>
<td>Rand Value: units bought (Rand)</td>
<td>38,346,267</td>
<td>42,839,329</td>
<td>49,481,246</td>
<td>61,538,660</td>
<td>62,676,450</td>
<td>75,250,900</td>
</tr>
<tr>
<td>Average cost per unit bought (R/kl)</td>
<td>2,105.3</td>
<td>2,118.9</td>
<td>2,245.5</td>
<td>2,555.7</td>
<td>2,659.9</td>
<td>2,931.7</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units sold (kl)</td>
<td>13,942,343</td>
<td>14,921,906</td>
<td>16,152,703</td>
<td>16,857,882</td>
<td>17,444,462</td>
<td>18,412,450</td>
</tr>
<tr>
<td>Rand Value: units sold (Rand)</td>
<td>56,220,531</td>
<td>60,739,694</td>
<td>72,335,406</td>
<td>81,174,923</td>
<td>93,121,832</td>
<td>107,901,978</td>
</tr>
<tr>
<td>Average cost per unit sold (R/kl)</td>
<td>4,039.5</td>
<td>4,070.5</td>
<td>4,478.2</td>
<td>4,815.3</td>
<td>5,338.8</td>
<td>5,860.3</td>
</tr>
<tr>
<td><strong>Unaccounted-for Water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UFW (kl)</td>
<td>4,272,086</td>
<td>5,295,289</td>
<td>5,887,210</td>
<td>7,220,967</td>
<td>6,119,016</td>
<td>7,081,855</td>
</tr>
<tr>
<td>UFW percentage (%)</td>
<td>23.5%</td>
<td>26.2%</td>
<td>26.7%</td>
<td>30.0%</td>
<td>26.0%</td>
<td>27.8%</td>
</tr>
</tbody>
</table>

7.2 Estimated wdm loss

The water supply area of the municipality was initially subdivided into 35 water supply zones. Table 3 shows the excess MNFs, ranked from highest to lowest.
The total of the excess MNFs was the best estimate of the WDM component of water losses for the entire municipality at the time. Also provided in the table is a calculation of the average water demand per connection per month in each zone. This is an important indicator that shows zones with potentially high water losses.

According to Table 3, the WDM loss in year 2003/2004 financial year came to approximately 5.1 million kilolitre per annum, or 71 percent of the total UFW percentage.

### Table 3. Zone Information
(rank from highest to lowest priority according to excess MNF)

<table>
<thead>
<tr>
<th>Sub-Zone</th>
<th>Sub-Zone Number</th>
<th>Number of properties/connections</th>
<th><strong>Average logged flow per zone (m³/hr)</strong> (b)</th>
<th>*Excess Minimum Night Flow (m³/hr) (a)</th>
<th>Expected average flow per zone (m³/hr) (b) - (a)</th>
<th>Expected avg consumption/ connection/ month (m³/month)</th>
<th>Potential WDM saving (Rand/annum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boltina</td>
<td>10</td>
<td>332</td>
<td>149.3</td>
<td>117.8</td>
<td>31.5</td>
<td>69</td>
<td>R 2,5557</td>
</tr>
<tr>
<td>Rant-en-Dal</td>
<td>12</td>
<td>744</td>
<td>108.6</td>
<td>86.6</td>
<td>22.0</td>
<td>22</td>
<td>R 1,938,806</td>
</tr>
<tr>
<td>Chamdor</td>
<td>23</td>
<td>227</td>
<td>103.6</td>
<td>63.3</td>
<td>40.3</td>
<td>130</td>
<td>R 1,417,164</td>
</tr>
<tr>
<td>Kenmare Tower/Kenmare</td>
<td>3</td>
<td>977</td>
<td>197.3</td>
<td>59.0</td>
<td>138.3</td>
<td>103</td>
<td>R 1,320,895</td>
</tr>
<tr>
<td>Azaadville Reservoir</td>
<td>21</td>
<td>334</td>
<td>77.2</td>
<td>48.3</td>
<td>28.9</td>
<td>63</td>
<td>R 1,081,343</td>
</tr>
<tr>
<td>Rietvallei</td>
<td>25</td>
<td>2,295</td>
<td>82.7</td>
<td>46.6</td>
<td>36.1</td>
<td>11</td>
<td>R 1,043,283</td>
</tr>
<tr>
<td>Krugersdorp</td>
<td>8</td>
<td>1,406</td>
<td>72.7</td>
<td>25.3</td>
<td>47.4</td>
<td>25</td>
<td>R 566,418</td>
</tr>
<tr>
<td>Muldersdrif</td>
<td>20</td>
<td>1,144</td>
<td>101.3</td>
<td>24.8</td>
<td>76.5</td>
<td>49</td>
<td>R 555,224</td>
</tr>
<tr>
<td>Factoria Tower</td>
<td>1</td>
<td>754</td>
<td>46.8</td>
<td>22.3</td>
<td>24.5</td>
<td>24</td>
<td>R 499,254</td>
</tr>
<tr>
<td>Mindalore</td>
<td>24</td>
<td>1,263</td>
<td>48.0</td>
<td>21.9</td>
<td>26.1</td>
<td>15</td>
<td>R 492,298</td>
</tr>
<tr>
<td>Rietvallei East</td>
<td>26</td>
<td>4,870</td>
<td>178.9</td>
<td>17.4</td>
<td>159.5</td>
<td>24</td>
<td>R 389,552</td>
</tr>
<tr>
<td>Kagiso South</td>
<td>28/29/32</td>
<td>3,525</td>
<td>55.8</td>
<td>17.4</td>
<td>38.4</td>
<td>8</td>
<td>R 389,552</td>
</tr>
<tr>
<td>Eeufees Dam</td>
<td>9</td>
<td>560</td>
<td>57.7</td>
<td>13.3</td>
<td>44.4</td>
<td>58</td>
<td>R 297,761</td>
</tr>
<tr>
<td>Azaadville Tower</td>
<td>22</td>
<td>913</td>
<td>59.5</td>
<td>12.2</td>
<td>47.3</td>
<td>38</td>
<td>R 273,134</td>
</tr>
<tr>
<td>Kenmare Tower/Monument</td>
<td>2</td>
<td>564</td>
<td>55.8</td>
<td>7.8</td>
<td>48.0</td>
<td>62</td>
<td>R 174,627</td>
</tr>
<tr>
<td>Paardekraal/Monument</td>
<td>7</td>
<td>374</td>
<td>41.7</td>
<td>6.7</td>
<td>35.0</td>
<td>68</td>
<td>R 150,000</td>
</tr>
<tr>
<td>Noordheuwel</td>
<td>6</td>
<td>832</td>
<td>44.4</td>
<td>3.9</td>
<td>40.5</td>
<td>31</td>
<td>R 118,657</td>
</tr>
<tr>
<td>Krugersdorp North</td>
<td>13</td>
<td>1,553</td>
<td>68.3</td>
<td>4.4</td>
<td>63.9</td>
<td>30</td>
<td>R 98,507</td>
</tr>
<tr>
<td>Silverfields/Breananda</td>
<td>4</td>
<td>1,459</td>
<td>71.7</td>
<td>3.4</td>
<td>68.3</td>
<td>34</td>
<td>R 76,119</td>
</tr>
<tr>
<td>Becked AH</td>
<td>31</td>
<td>189</td>
<td>5.0</td>
<td>1.3</td>
<td>3.7</td>
<td>14</td>
<td>R 29,104</td>
</tr>
<tr>
<td>Dan Pienaar Tower</td>
<td>14</td>
<td>574</td>
<td>20.3</td>
<td>0.6</td>
<td>19.7</td>
<td>25</td>
<td>R 13,433</td>
</tr>
<tr>
<td>West Rand</td>
<td>30</td>
<td>401</td>
<td>12.6</td>
<td>-0.3</td>
<td>12.9</td>
<td>23</td>
<td>R (6,716)</td>
</tr>
<tr>
<td>Protea Ridge</td>
<td>15</td>
<td>766</td>
<td>30.8</td>
<td>-1.0</td>
<td>31.8</td>
<td>31</td>
<td>R (22,388)</td>
</tr>
<tr>
<td>Kagiso</td>
<td>27</td>
<td>13,389</td>
<td>140.6</td>
<td>-5.4</td>
<td>146.0</td>
<td>8</td>
<td>R (120,896)</td>
</tr>
<tr>
<td>Krugersdorp West/Oatlands</td>
<td>11</td>
<td>2,130</td>
<td>58.9</td>
<td>-5.7</td>
<td>64.6</td>
<td>22</td>
<td>R (127,612)</td>
</tr>
<tr>
<td>Munsville</td>
<td>35</td>
<td>4,279</td>
<td>66.2</td>
<td>-9.3</td>
<td>75.5</td>
<td>13</td>
<td>R (208,209)</td>
</tr>
<tr>
<td>Wentworth Park</td>
<td>5</td>
<td>576</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>R 29104</td>
</tr>
<tr>
<td>Noordheuwel Tower</td>
<td>16</td>
<td>72</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>R 13,433</td>
</tr>
<tr>
<td>Noordheuwel/Kenmare</td>
<td>17</td>
<td>546</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>R 13,433</td>
</tr>
<tr>
<td>Kenmare</td>
<td>18</td>
<td>408</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>R 13,433</td>
</tr>
<tr>
<td>Noordheuwel North</td>
<td>19</td>
<td>501</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>R 13,433</td>
</tr>
<tr>
<td>Noordheuwel</td>
<td>33</td>
<td>339</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>R 13,433</td>
</tr>
<tr>
<td>Range View X4</td>
<td>34</td>
<td>1,025</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>R 13,433</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>51,940</strong></td>
<td><strong>1953.7</strong></td>
<td><strong>584.0</strong></td>
<td><strong>445.9</strong></td>
<td></td>
<td></td>
<td>R 13,074,626</td>
</tr>
<tr>
<td><strong>SAVINGS/ANNUM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R 13,074,626</td>
</tr>
</tbody>
</table>

The total of the excess MNFs was the best estimate of the WDM component of water losses for the entire municipality at the time. Also provided in the table is a calculation of the average water demand per connection per month in each zone. This is an important indicator that shows zones with potentially high water losses.

According to Table 3, the WDM loss in year 2003/2004 financial year came to approximately 5.1 million kilolitre per annum, or 71 percent of the total UFW percentage.
Figure 10. Flow and Pressure Logging Results for Zone 1

Figure 11 above is an example of the logging of flows and pressures in Zone 1 — the Factoria Tower zone — to establish the ranking of the zone. MNF, the water loss indicator for the zone, is divided in two parts, namely an ‘Excess MNF’ and an ‘Expected MNF’. Excess MNF is the quantity that will be the targeted saving within a particular zone. The table is further ranked, from highest to lowest, according to Excess MNF.

The calculated WDM water loss component of UFW for the entire municipality is shown in Table 4. This indicates that the WDM water loss component came to approximately R13,1 million per annum.

<table>
<thead>
<tr>
<th>Description</th>
<th>Financial Year</th>
<th>Projected 2005/2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Purchases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units bought (kl)</td>
<td>24 078 849</td>
<td>23 563 478</td>
</tr>
<tr>
<td>Rand Value: units bought (Rand)</td>
<td>R 61 538 660</td>
<td>R 62 676 450</td>
</tr>
<tr>
<td>Average cost per unit bought (R/kl)</td>
<td>R 2,5557</td>
<td>R 2,6599</td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units sold (kl)</td>
<td>16 857 882</td>
<td>17 444 462</td>
</tr>
<tr>
<td>Rand Value: units sold (Rand)</td>
<td>R 81 174 923</td>
<td>R 93 131 832</td>
</tr>
<tr>
<td>Average cost per unit sold (R/kl)</td>
<td>R 4,8153</td>
<td>R 5,3388</td>
</tr>
<tr>
<td>Unaccounted-for Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UFW (kl)</td>
<td>7 220 967</td>
<td>6 119 016</td>
</tr>
<tr>
<td>UFW percentage (%)</td>
<td>30,0%</td>
<td>26,0%</td>
</tr>
<tr>
<td>Estimated WDM Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDM Component (estimated @ 71%) (kl)</td>
<td>R 5 115 840</td>
<td>R 2 925 428</td>
</tr>
<tr>
<td>Estimated Rand Value of WDM (Rand)</td>
<td>R 13 074 626</td>
<td>R 7 781 341</td>
</tr>
</tbody>
</table>

The same WDM percentage was also used to calculate the WDM financial losses for subsequent years.
7.3 WDM phase one results

Table 5 below shows the results at the completion of Phase One as of December 2004, which included the WDM strategy undertaken in the first five zones. The results indicate a water saving of approximately 2.2 million kilolitres and a monetary saving of approximately R 5.6 million per annum, which represents a saving of 43 percent in the total estimated UFW percentage.

<table>
<thead>
<tr>
<th>Sub-Zone</th>
<th>Sub-Zone Number</th>
<th>Number of properties/ connections</th>
<th>Average logged flow per zone (m³/hr) (b)</th>
<th>Excess Minimum Night Flow (m³/hr) (a)</th>
<th>Potential saving (Rand/annum) @</th>
<th>Actual saving (m³/hr) (compare with (a))</th>
<th>Re-logged average flows (m³/hr)</th>
<th>Actual saving saving (Rand)</th>
<th>WDM saving (Rand/annum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolina</td>
<td>10</td>
<td>332</td>
<td>148.3</td>
<td>117.8</td>
<td>R 2,637,313</td>
<td>119</td>
<td>119</td>
<td>R 2,665,522</td>
<td>R 2,566,677</td>
</tr>
<tr>
<td>Chandor</td>
<td>23</td>
<td>227</td>
<td>109.6</td>
<td>63.3</td>
<td>R 1,417,164</td>
<td>2</td>
<td>101.7</td>
<td>R 42,985</td>
<td>R 42,985</td>
</tr>
<tr>
<td>Azadville Reservoir</td>
<td>21</td>
<td>334</td>
<td>77.2</td>
<td>48.3</td>
<td>R 1,081,343</td>
<td>2</td>
<td>61.0</td>
<td>R 2,214,851</td>
<td>R 2,214,851</td>
</tr>
<tr>
<td>Rietvallei</td>
<td>25</td>
<td>2,295</td>
<td>82.7</td>
<td>46.6</td>
<td>R 1,043,289</td>
<td>99</td>
<td>99</td>
<td>R 2,214,851</td>
<td>R 2,214,851</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Azaadville Tower</td>
<td>22</td>
<td>913</td>
<td>59.5</td>
<td>12.2</td>
<td>R 273,134</td>
<td>30</td>
<td>29.4</td>
<td>R 674,709</td>
<td>R 674,709</td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAVINGS/ANNUM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8 Household leak repair case study

8.1 Background

This project is located in a suburb of the Mogale City Local Municipality (formerly Krugersdorp) and addresses properties located in the Munsieville Proper and Ext 1. The aim of the project is to reduce high levels of wastage by retrofitting and replacing plumbing fixtures (cisterns, taps, pipes, etc.) on private properties in a previously disadvantaged community while simultaneously addressing municipal cost recovery for the provision of the basic services.

The project will be followed by replacing conventional water meters with pre-payment water meters to further reduce water wastage and to improve payment for water.

The project is currently being implemented, therefore the final results are not yet available. However, the inclusion of the case study provides an excellent example of what can be done to improve water supply and reduce losses in previously disadvantaged communities.

8.2 Implementation process

Ring-fencing of the project area

At present there are two water supply pipelines feeding the entire Munsieville area. Steps are in place to sub-divide Munsieville into four water supply sub-zones, with the installation of new bulk meters and pressure reducing valves to each sub-zone. This will allow for the project area consumptions to be monitored separately.

Establishing existing water demand

An analysis was made of water demand in Munsieville, calculated on the basis of average demand per day in kilolitres, dating back to January 1999, which revealed the following.
Detailed consumption records per property for the past 16 months have also been analysed, and specific high water users will be targeted for intervention and monitoring.

**Payment records for the area**

An analysis of payments received against debits raised for the 2004/2005 financial year reveals a disturbingly low average payment of 10 percent.

**Table 6. Debits Raised Versus Payments Received**

<table>
<thead>
<tr>
<th>MUNSIVILLE EXTENSION NAME</th>
<th>DEBITS RAISED (Excl VAT)</th>
<th>PAYMENTS RECEIVED (Excl VAT)</th>
<th>NO OF CONVENTIONAL WATER METERS</th>
<th>Amounts Outstanding</th>
<th>Payment %</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUNSIVILLE</td>
<td>R 1,658,199.19</td>
<td>R 135,578.35</td>
<td>1,030</td>
<td>R 1,522,620.84</td>
<td>8.2%</td>
</tr>
<tr>
<td>MUNSIVILLE EXT 1</td>
<td>R 127,319.44</td>
<td>R 21,148.85</td>
<td>73</td>
<td>R 106,170.59</td>
<td>16.6%</td>
</tr>
<tr>
<td>MUNSIVILLE EXT 2</td>
<td>R 177,541.53</td>
<td>R 39,202.80</td>
<td>418</td>
<td>R 138,338.73</td>
<td>22.1%</td>
</tr>
<tr>
<td>MUNSIVILLE EXT 4</td>
<td>R 179.30</td>
<td>R -</td>
<td>0</td>
<td>R 179.30</td>
<td>0.0%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>R 1,963,239.46</td>
<td>R 195,930.00</td>
<td>1,522</td>
<td>R 1,767,309.46</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Payment patterns will be monitored on a monthly basis during and after the project to compare pre-intervention and post-intervention payment levels.

**Project management structure and staffing**

A project management structure was established and included a program manager, a project manager, an audit plumber, an education officer, and plumbing contractors together with learner-plumbers.

**Community meetings**

To commence the process, a meeting with the ward councillor was held. The purpose of this meeting was to brief the councillor on the background of the project and to obtain her support for the project. The meeting was also successful in identifying the local community leaders who need to be involved in the project.

The following were invited to a second meeting: local community leaders, prospective local plumbing contractors, prospective local plumbing material suppliers, and representatives of the Institute of Plumbing of South Africa (IOPSA) and the Department of Labour.

The purpose of the second meeting was to brief all stakeholders on the details of the project and to explain the proposed method of implementation. The meeting also assisted in helping identify local people who could be trained as learner-plumbers and who could serve as education officers.
Training
The empowerment of local, previously disadvantaged persons is one of the deliverables in this project and is receiving the necessary attention. From the outset, the IOPSA and the Construction, Education and Training Authority (CETA) have been closely involved in all decisions relating to training of learner-plumbers.

8.3 Pre-audit inspections

A critical activity of the programme is the pre-audit inspection of the private properties to ascertain the extent of the repairs required in the project. The following is an illustration of the typical pre-audit findings.

This cistern, despite having the ball valve raised to its fullest extent, leaked to such a degree that the owner actually switched off the water at the meter when the toilet was not being used.

This cistern had a continual flow of water through its flow valve, which, when measured, had an estimated flow of over 1 litre per minute, or an equivalent of 43 kl per month. This is more than five times the allowed minimum of the free allocation of 6 kl/month supplied by the municipality.

This flow valve had an estimated leak of 18 kl/month.

This leaking toilet services four families. While the owner preferred to leave the water off to stop wastage, the users constantly left the tap open, resulting in leakage estimated at 20 kl/month.
This stopcock on the property side of the meter leaked to the extent that the owner leaves the water switched off for as long as possible during the day.

Many taps were found, like the one pictured here, with slow leaks.

8.4 Housing types in the project area

The types of housing varied in the three zones that were pre-audited in the pilot inspection. The different levels of housing encountered are pictured below.
8.5 Bulk water monitoring

Bulk water meters were installed on two pipelines that supplied water to the township. The result of the monitoring show a minimum night flow of 22 kl/hour for one area and 23 kl/hour for the other, which equates to an average loss of approximately 1 080 m³/day. This means that the MNFs are almost the same as the average recorded water consumption, which indicates that almost half the amount of water entering Munsieville is being wasted.

8.6 Next steps

Now that the nature and scale of the problem is better understood, the project will proceed a community awareness program, the repair of plumbing fixtures, and installation of pre-paid meters.

9 Sebokeng-Evaton pressure reduction case study

9.1 Project background

Emfuleni Local Municipality is located some 50 km south of Johannesburg and incorporates, among others, the towns of Vereeniging, Vanderbijlpark, Sebokeng, and Evaton. The area has a long history of political and financial turmoil with the result that it has experienced severe cash flow problems at regular intervals over the past 20 years. This has resulted in low maintenance budgets and generally low levels of infrastructure investment.

The Sebokeng and Evaton area is one of the main industrial centres of South Africa and consists predominantly of low-income residential properties supporting a population of almost 500 000 people.
As a result of the low levels of maintenance and corresponding low payment levels for services, and high unemployment resulting in deterioration of internal plumbing fittings over many years, the water reticulation and internal plumbing systems experienced very high levels of leakage and wastage; the wastage was estimated to be in the order of 80 percent of the water supplied to the area. The high leakage levels led to an annual water bill to the municipality from the bulk water supplier of more than R100 million per year for Sebokeng and Evaton alone.

In 2004, the municipality requested proposals from suitably qualified teams through an open tender process to address their leakage/wastage problems. Several proposals were received and one of the successful proposals involved a small-scale public-private partnership in the Sebokeng and Evaton areas. Payment to the project team was based on risk-reward basis with no financial risk to the municipality.

The objective of the project was to reduce water leakage (and thereby also reduce pumping energy costs) and levels of wastage in the Sebokeng and Evaton water distribution systems. The project was one of the first of its type in South Africa where the project team took on 100 percent of the financial risk.

While the technical aspects of the project are clearly noteworthy (since it is currently the largest installation of its type in the world), the project is also unique in the manner in which it was managed and commissioned in just three months. The rapid implementation resulted in huge water savings, which are already providing massive financial benefits to the water supplier and local community.

### 9.2 The project

The leakage in the area is clearly evident from the high MNF of 2 800 m³/hr (Figure 11), which is one of the highest MNFs recorded anywhere in the world. It should be noted that since most of the leakage is inside household properties, the leaking water returns through the sewer network, and most of the sewers are also flowing at near full capacity during night-time when no residents are using water.

![Figure 11. Minimum Night Flow on Pipeline Entering the Sebokeng/Evaton Areas](image)

While it is accepted that the most effective method of addressing high internal household leakage is to replace the internal plumbing with high-quality pipes and fittings, this is often not possible due to the costs involved. In the case of Sebokeng and Evaton, the replacement of the internal plumbing fittings would have cost in excess of R200 million and taken several years to complete. An alternative approach, and the one adopted by the project team, was to reduce the leakage/wastage by first reducing the excess system pressure, after which the various other interventions could be considered.
The advantage of this approach is that the costs are minimal and the resulting savings tend to be very significant. The project therefore involved the design, construction, and commissioning of a large pressure management installation, which could be used to reduce system pressures during off-peak periods — a very simple but effective approach.

By controlling the pressures during the off-peak periods, it is possible to significantly reduce water losses without identifying or repairing a single leak. After the excessive pressures have been addressed, the other measures — such as repairing leaking pipes and/or retrofitting — can be tackled. The significance of water pressure on leakage is clearly highlighted in Figure 12.

**Figure 12. Typical Burst Water Main at Low and High Pressure**

### 9.3 Funding and payment

The funding for the project was provided by the project team through a normal bank loan. The size of the loan was R5 million.

While the key members of the project team funded the complete project (capital works and design fees), payment is made by the client on a monthly basis in accordance with the savings achieved. If no savings are achieved, the client has no financial obligation of any nature. In this particular case, the payments made to the project team are based on 20 percent of the savings achieved with an additional safeguard to the client of a monthly ‘cap’. The ‘cap’ is specified in the contract to ensure that the total payment to the project team does not exceed an agreed limit — in this case, the ‘cap’ was set at 20 percent of the total water usage. In other words, the maximum payment that can be made to the project team is 4 percent (i.e., 20 percent of 20 percent) of the total water bill. This formed the basis for the financial model that was considered both fair and equitable by both the client and the project team.

It should be noted that based on expected savings of approximately 15 percent, the installation will have an effective pay-back period of only four months — based on the total savings and the total costs. The pay-back to the project team will be between 15 months and 30 months, depending on the savings achieved, the maintenance costs, and prevailing interest rates. It is important to note that the project team must operate and maintain the installation for a period of five years and that the savings paid by the municipality will cease after the 5-year period has elapsed.

### 9.4 Results to date

The project started on 1 April 2005 and was operational by 30 June 2005 — only three months later. The actual construction was only finalised in September when the installation was officially opened.

The extremely short construction period was to some extent forced on the project team by a very stringent legal contract, which included severe financial penalties if the project was not operational by 1 July 2005. The municipality was very anxious to achieve savings at the earliest possible date. The
savings achieved in the initial 5-month period up to the end of November 2005 represent a reduction in water purchases by Emfuleni Municipality from their bulk water supplier of R8.5 million as audited by the independent auditor. It is anticipated that the annual savings will exceed R20 million once the installation has settled down and is functioning at maximum efficiency. The savings are graphically reflected in Figure 13.

Figure 13. Flow Logging Results
Lessons learned

This guide recognises that enhancing the capacity of local government to exercise its fiscal power, reduce wastage, and address the consumer debt problem is a mammoth task.

One obstacle in addressing these challenges is the lack of research and body of knowledge on what works and what doesn’t. This guide was developed with the specific intent to contribute to that body of knowledge with best practices, tools, and innovative approaches developed and tested through direct experience in South African municipalities, and to complement these with lessons learned.

The key lessons learned from past revenue enhancement projects are as follows.

- Planning must be strategic, integrated, and properly documented.
- Start small, develop the concept, and roll out effectively.
- Obtain political buy-in and institutional goal alignment.
- Municipal capacity and participation is critical for ownership.
- Progress must be measurable and reporting must be regular.

1 Strategic planning

To address the current financial predicament, municipalities need to be far more strategic and integrated in their approach; the focus must change from service delivery to sustainable service delivery. Every project or program must be strategically conceived and effectively implemented to achieve institutional sustainability goals. This process requires a clear problem statement based on accurate information, clear goal setting, detailed planning, and precise execution, followed by quality control to ensure long-term sustainability.

Isolated projects have limited impact on building long-term sustainability. Strategic initiatives must replace broad-brush approaches. Correct solutions must be found for specific problems. The roll-out of effective and successful targeted initiatives is more cost-effective with lasting success than broad-brush approaches. The focus must be on medium- and long-term sustainability and not quick-fix solutions. Municipalities must understand the integrated relationships and the cross-cutting impact of projects and decisions on various departments and communities.

For example, the roll-out of services using the MIG funding does not only provide services to the have-nots but also affects the following municipal performance areas.

- Increases in technical operation and maintenance budget without corresponding revenue streams.
- Increases in revenue management and customer care costs.
- Increases billing and bill distribution costs, no corresponding revenue.
- Increases debt as a result of non-payment and debt collection costs.
- Requires indigent registration and reallocation of already allocated equitable share.
- Requires new customer data collection and maintenance.
- Cost of free basic services, water and electricity purchase from bulk supplier.
- Are all the policies and bylaws in place to support the delivery and sustainability of service delivery?
- Are the community suitably informed and in agreement to the implementation?
- Are processes, procedures, and tools in place to facilitate business efficiency?
- What is the financial viability of the project; what is the annuity cost implication to the council?

All these aspects must be considered prior to implementation; municipalities are still paying the price of poor strategic planning. In the past, expensive customer audits have taken place only to find the audit sheet piled up in the corner of the council chamber and never finding their way into the municipal system.
2 Start small, develop the concept, and roll out effectively

Every municipality requires a unique solution and every unique solution requires testing and fine tuning to be effective and to gain credibility. The past has taught us to start with small, focused projects; create successful models; get buy-in to the process through results; and then to roll out effectively and efficiently with unequivocal political, official, and community support. This approach will ensure that projects are successful in achieving the desired results and meeting the expectations of the municipality.

3 Obtain political buy-in and institutional goal alignment

Communities and municipalities in South Africa are very politically orientated. The implementation of successful projects is dependent on the political buy-in from both the community and the politicians. Moreover, community consultation and participation is a basic right entrenched in the constitution. Buy-in is a function of understanding. The municipality must take the time to ensure that communities and politicians understand the project intentions, processes, and expected outcomes. Without this buy-in, projects are non-starters.

4 Municipal capacity and participation is critical for ownership

The successful implementation of projects is very dependent on the capacity of the municipality to control, understand, manage, and monitor project performance. All these elements encourage municipal ownership of project outcomes. Projects where the outcome is owned by a consultant will have limited impact, as it is not the consultant who has to live with the long-term outcomes. To encourage participation and ownership, all projects must be managed by municipal staff and, if necessary, external service providers must provide strong management support to transfer skills and to empower municipal officials. This capacity building may go beyond format tuition and include mentoring and in-service training.

In the past, consultants have not owned the sustainability outcome of projects; their performance was measured on the delivery of a pipe, a meter, a system, a manual, or a report. This must change; consultants must co-own the long-term sustainability of their projects with the municipality and must take responsibility to build municipal capacity in a manner that builds autonomous local government.

5 Progress must be measurable and reporting must be regular

To encourage ongoing support and to ensure that projects meet the expectations of the various stakeholders, one must report and communicate more often than usual. The more information people have, the more they can participate in the process. The more people understand and participate in the process, the more likely that the project will succeed and meet the municipal expectations. This will ensure that there are no surprises and that people remain part of the project implementation and continue to support the common outcome.

6 Conclusion

The success of revenue enhancement interventions is dependent on access to accurate information, good interpersonal relationships, and sound planning technique. Local government planning skills are limited and could be enhanced through partnerships, skills transfer programs, and management support. Local government must take the time to understand their problems, develop good plans, and implement them effectively. The days of quick wins and spontaneous knee-jerk solutions are over. Municipal turnaround is dependent on commitment to institutional alignment, political will, and commitment to a sound planning process.
Annexure 1

SAMPLE QUESTIONNAIRE
ATTITUDE AND PERCEPTION STUDY

PART A: RESPONDENT PROFILES

Please complete the following demographic details by placing a tick (✔) in the appropriate box

1. What is your age group?

|-------|-------|-------|-------|-------|-------|-------|-----------|

2. Gender:  Male  Female

3. What is your home language?

<table>
<thead>
<tr>
<th>Afrikaans</th>
<th>English</th>
<th>South Sotho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ndebele</td>
<td>North Sotho</td>
<td>Swazi</td>
</tr>
<tr>
<td>Tsonga</td>
<td>Tswana</td>
<td>Xhosa</td>
</tr>
<tr>
<td>Venda</td>
<td>Zulu</td>
<td></td>
</tr>
</tbody>
</table>

4. What is your highest level of qualification?

<table>
<thead>
<tr>
<th>Below standard 8</th>
<th>Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 8</td>
<td>Degree</td>
</tr>
<tr>
<td>Standard 10</td>
<td>Post-graduate</td>
</tr>
</tbody>
</table>

5. Employment data:
5.1 What is your status of employment:

<table>
<thead>
<tr>
<th>Public sector</th>
<th>Private sector</th>
<th>Self employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Sector</td>
<td>Business sector</td>
<td>Unemployed</td>
</tr>
</tbody>
</table>

If you are self employed, indicate whether you form part of the formal- or informal sector.

| Formal sector | Informal sector |

6. State whether you are the owner of this property or leasing it.

| Owner | Tenant |

7. Are you responsible for the payment of municipal accounts in respect of this property?

| Yes | No |

If your answer is “no” indicate who is……………………………………
PART B: QUESTIONNAIRE

1. Indicate which of the following levels of government you think is responsible for the provision of the following services:

1.1 Water:

<table>
<thead>
<tr>
<th>The national government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Provincial Government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Council</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
<td>Other</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

1.1.1 Do you think water should be provided free of charge to consumers?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

1.1.2 If you agree, who do you think should pay for the water you and your family use?

National Government | Provincial Government | Municipality | Other

1.1.3 In the case of ‘other’, please specify………………………………………………

1.1.4 Why do you think …………………(specified in 1.1.2) should pay for the water you consume? Is it because:

- It is their responsibility
- I do not earn enough to pay for the water we use
- I am unemployed and do not have any money to pay for water
- I am not the owner of the house
- Other

1.1.5 If ‘other’ please specify………………………………………………………………

1.2 Electricity

<table>
<thead>
<tr>
<th>The national government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Provincial Government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Council</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
<td>Other</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

1.2.1 Do you think electricity should be provided free of charge to consumers?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

1.2.2 If you agree, who do you think should pay for the electricity you and your family use?

National Government | Provincial Government | Mogale City Municipality | Other

1.2.3 If ‘other’, please specify………………………………………………………………

1.2.4 Why do you think …………………(specified in 1.2.2) should pay for the electricity you consume? Is it because:
1.3 Sanitation (Refuse removal, sewerage, drains etc)

1.3.1 Do you think sanitation services should be provided free of charge to consumers?

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Provincial Government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Government</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Other</td>
<td></td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Provincial Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Mogale City Municipality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

1.3.2 If you agree, who do you think should pay for the sanitation services you use?

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Government</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Other</td>
</tr>
<tr>
<td>Provincial Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mogale City Municipality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.3.3 Why do you think ...................(specified in 1.3.2) should pay for sanitation services? Is it because:

- It is their responsibility
- I do not earn enough to pay my rates
- I am unemployed and do not have any money to pay for rates
- I am not the owner of the house
- Other

1.4 Roads

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Government</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Other</td>
</tr>
<tr>
<td>Provincial Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mogale City Municipality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.4.1 Do you think roads in the township should be provided free of charge to the community?

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Government</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Other</td>
</tr>
<tr>
<td>Provincial Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mogale City Municipality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.4.2 If you agree, who do you think should pay for the roads in the township?

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Government</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Other</td>
</tr>
<tr>
<td>Provincial Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mogale City Municipality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.4.3 If ‘other’, please specify……………………………………………………………………

1.4.4 Why do you think ………………(specified in 1.4..2) should pay for the roads? Is it because:

- It is their responsibility
- I earn too little and cannot pay my rates
- I am unemployed and do not have any money to pay for rates
- I am not the owner of the house
- Other

1.4.5 If ‘other’ please specify……………………………………………………………

1.5 Clinics

<table>
<thead>
<tr>
<th>The national government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Provincial Government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Council</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
<td>Other</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

1.5.1 Do you think clinics should be provided free of charge to the community?

- Strongly agree
- Agree somewhat
- Not sure
- Disagree
- Strongly disagree

1.5.2 If you agree, who do you think should pay for the clinics in the township?

- National Government
- Provincial Government
- Mogale City Municipality
- Other

1.5.3 If ‘other’, please specify……………………………………………………………………

1.5.4 Why do you think ………………(specified in 1.5..2) should pay for clinics? Is it because:

- It is their responsibility
- I do not earn enough to pay towards clinics
- I am unemployed and do not have any money to pay towards clinics
- I am not the owner of the house
- Other

1.5.5 If ‘other’ please specify……………………………………………………………………

1.6 Community facilities

<table>
<thead>
<tr>
<th>The national government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Provincial Government</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Council</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
<td>Other</td>
<td>Strongly agree</td>
<td>Agree somewhat</td>
<td>Not sure</td>
<td>Disagree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

1.6.1 Do you think community facilities should be provided free of charge to consumers?

- Strongly agree
- Agree somewhat
- Not sure
- Disagree
- Strongly disagree

1.6.2 If you agree, who do you think should pay for the community facilities in the township?

- National Government
- Provincial Government
- Mogale City Municipality
- Other
1.6.3 If ‘other’, please specify……………………………………………………………………

1.6.4 Why do you think …………………(specified in 1.6.2) should pay for community facilities? Is it because:

- It is their responsibility
- I do not earn enough to pay towards community facilities
- I am unemployed and do not have any money to pay
- I am not the owner of the house
- Other

1.6.5 If ‘other’ please specify…………………………………………………………

2. If you agree that consumers should pay for the water and electricity they use as well as municipal rates, then what, in your opinion, are reasonable amounts to pay for the following:

2.1 Water consumption

<table>
<thead>
<tr>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>R5 – R10</td>
<td></td>
<td>R11 – R20</td>
<td></td>
<td>R21 - 30</td>
<td></td>
<td>R31 - 40</td>
<td></td>
</tr>
</tbody>
</table>

2.2 Electricity consumption

<table>
<thead>
<tr>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>R10 – R20</td>
<td></td>
<td>R21 – R40</td>
<td></td>
<td>R41 - 60</td>
<td></td>
<td>R61 - 80</td>
<td></td>
</tr>
</tbody>
</table>

2.3 Rates (Roads, sanitation, community facilities etc)

<table>
<thead>
<tr>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
<th>Amount</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>R10 – R20</td>
<td></td>
<td>R21 – R30</td>
<td></td>
<td>R31 - 50</td>
<td></td>
<td>R51 - 70</td>
<td></td>
</tr>
</tbody>
</table>

3. How often do you pay for the services provided to you by the Municipality?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

4. Do you pay for your municipal services because:

4.1 You believe it is the right thing to do?

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

4.2 You fear being penalised by the Municipality?

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

4.3 By paying your account you know you are helping the Municipality to provide a better service to the people?

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

5. If you are not up to date with your payments to the Municipality, is it because:
5.1 You do not receive an account from the Municipality

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

5.2 The municipal office in the township is not open on a regular basis

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

5.3 The people working at the municipal offices are not helpful

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

5.4 It is too expensive to get a taxi and go into town to make payment

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

5.5 You don’t see the need to pay your account since, in your opinion, the Municipality has plenty of money and can always find money from somewhere else if it needs to.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

5.6 You don’t see the need to pay your account since in your opinion the government (or Municipality) must provide all services, roads and community facilities in the township

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

6. If you are paying your account with THE Municipality, indicate how you feel towards those who do not pay in terms of the following statements.

6.1 They should be arrested and put in jail

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

6.2 Their belongings should be confiscated and sold and the money paid to the Municipality

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

6.3 Their houses should be confiscated and auctioned and the proceeds paid to the Municipality

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

6.4 The Municipality should stop providing them with services until their debts are paid off

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

6.5 Their debt should be written off by the Municipality

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>
6.6 Other. (please specify)

7. What do you think the Municipality should do with those people who have the money to pay their accounts, but do not bother to do so? Should they:

7.1 Be arrested and put in jail

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

7.2 Their belongings should be confiscated and sold and the money paid to the Municipality

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

7.3 Their houses should be confiscated and auctioned and the proceeds paid to the Council to pay for their arrears

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

7.3 Their debt should be written off.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

7.4 Other. (please specify)

8. When you receive your account from the Municipality, do you know what you are paying for?

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

9. If your answer to 8. above is negative, would you like to know exactly how much is for water, how much is for electricity and how much for rates?

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

10. If you know these amounts and how they are made up, would you be more prepared to pay your accounts?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

11. If you are old and do not have a pension or you have a disability or you are sick and are unable to work, are you aware that you can apply for a grant from government, which will help you obtain an income with which you can pay for your services?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

12. If you are aware of the (indigent) grant have you applied for it?
13. If your answer to question no. 12 is YES, do you receive a grant?

Yes  No

14. If your answer to question no. 13 is NO, indicate the reason/s why do you not receive a grant?

14.1 I don’t know where to apply

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

14.2 I have tried but the authorities did not help me

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

14.3 My application has been rejected

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

14.4 I am waiting for a reply from the authorities

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

14.5 I haven’t got around to applying

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

15. Are you satisfied with the following services you receive from the Municipality

15.1 Water

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

15.2 Electricity

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

15.3 Sanitation

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

15.4 Roads and storm water

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

15.5 Clinic

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree somewhat</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>
16. If not satisfied with the services you receive from the Municipality, what would you like to see changed or improved?

………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………

17. In your opinion, what are the major community needs in your ward/area? Please list them in order of priority.

………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………

18. Have you discussed these needs with your Ward Committee?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

18.1 If your answer is **YES**, what has happened as a result of your discussion?

<table>
<thead>
<tr>
<th>Nothing has happened</th>
<th>The matter is still under consideration</th>
<th>Action has taken place</th>
</tr>
</thead>
</table>

18.2 If your answer is **NO**, is this because:

| You have not been informed about Ward Committees | |
| No Ward Committee has been established in your area | |
| I don’t know who to contact | |
| I don’t have faith in the Ward Committee | |
| Other | |

18.3 If ‘other’, please specify………………………………………………………………………………………………

19. If the Ward Committee in your area is able to get the Municipality to address some of your needs, would you be much happier and more prepared to pay your monthly account.

| Strongly agree | Agree somewhat | Not sure | Disagree | Strongly disagree |