

**PUBLIC PARTICIPATION AS A MECHANISM FOR PROMOTING
SUSTAINABLE WASTE MANAGEMENT SERVICE DELIVERY IN SEDIBENG
DISTRICT MUNICIPALITY**

by

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DECLARATION

I, the undersigned, declare that “Public participation as a mechanism for promoting sustainable waste management service delivery in Sedibeng District Municipality” is my own work and that all sources I have quoted have been indicated and acknowledged by means of complete references; and that I have not previously submitted the thesis for a degree at another university.



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23. 04. 2013
DATE

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ABSTRACT

The purpose of this research is to determine the extent of public participation in waste management, willingness of the community to assist the municipality in waste management and how the officials involve the community as partners in waste management. Waste management has become a big environmental challenge in Sedibeng District Municipality due to rural- urban drift leading to population increase in the region. In cities and towns where there is population increase there is excessive generation of waste which demands new methods of waste management including public engagement and participation. This can be achieved through education and awareness campaigns in all municipality Wards to capacitate residents to minimize waste at household level. Community participation in waste collection, prevention of waste generation, recycling methods and assistance of waste management departments is one of the recommended methods and solution to waste collection challenges. The challenge in waste management is how to identify the informal sector stakeholders that can be involved in sorting of recyclable waste material that has been separated at source. Another challenge is how private sector can be approached to participate in household refuse collection to reduce backlog of un-serviced areas in the three local municipalities of Sedibeng District Municipality.

The objectives of the research are: firstly, to determine the status quo of the household waste collection in the three local municipalities comprising Sedibeng District Municipality. Secondly, it is to determine the extent of backlogs emanating from the un-serviced households in Emfuleni; Midvaal and Lesedi local municipalities. Thirdly, it is to determine how local communities, informal sector and private sector can be involved in waste solutions. Fourthly, it is aimed to identify limitations; constraints and challenges that confront municipalities in engaging stakeholders in waste management solutions. The responses were from the officials of the three local municipalities, relevant supporting departments and stakeholders. Qualitative research and data was collected through questionnaires and interviews.

Findings of the research indicated, among others, that:

- Though sustainable household collection services are rendered in the three local municipalities, there is a backlog of 10 000 houses at Emfuleni, 270 at Midvaal and 6 000 at Lesedi local municipalities
- There are no other stakeholders rendering waste management services in the region except for the operations of the landfill sites
- Only 35% of householders recycle at source. The residents are prepared to participate but lack knowledge
- The study revealed that in public participation, the community, Office of the Speaker, officials and Executive Mayor are the most important stakeholders to promote sustainable waste management services. They should ensure that public participation policies and strategies are implemented in the region.

The study recommends, among others, that municipalities must support the community in the form of education and awareness campaigns, recycling at source, establish infrastructure for recyclable and separated goods, how to establish co-operatives and public-private-partnerships in waste management. New approaches such as composting of organic waste, proper disposal of electronic, medical and hazardous waste need to be communicated to the public.

The study ends with recommendations for further research to be pursued in the following fields of study:

- The role of the private sector in a municipality.
- Integrated Waste Management Plans as tools to promote public participation in the Sedibeng District Municipality
- Education and awareness to the public as a strategy to promote sustainable development in waste management in the Sedibeng District Municipality
- The impact of waste storage containers in the prevention of illegal dumping in local municipalities
- The role of environmental committees within a municipality in waste management and public participation

LIST OF ABBREVIATIONS

BKB	Bontle-ke- Botho
CWP	Community Work Program
DEA	Department of Environmental Affairs
DLG	Gauteng Department of Local Government
ECA	Environment Conservation Act 1989 (No.73 of 1989)
ELM	Emfuleni Local Municipality
EPOA	Environment Programme of Action
EPWP	Expanded Public Works Programme
GDS	Gauteng Development Strategy
GHG	Green House Gas
GSDS	Gauteng Social Development Strategy
IDP	Integrated Development Plan
IP& WM	Integrated Pollution and Waste Management (policy)
IWMP	Integrated Waste Management Plan
LLM	Lesedi Local Municipality
MLM	Midvaal Local Municipality
MOU	Memorandum of Understanding
NEMWA	National Environmental Management: Waste Act 2008 (Act No 59 of 2008)
NWMS	National Waste Management Strategy (2000) amended and launched 2012
PPP	Public- Private –Partnership
PSC	Public Service Commission
SDM	Sedibeng District Municipality

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CHAPTER 1

Key Words: Public Participation, Sustainable Waste Management, Service Delivery, public- private-partnership, co-operatives, Sedibeng District Municipality, Emfuleni Local Municipality, Midvaal Local Municipality, Lesedi Local Municipality.

1.1 ORIENTATION AND BACKGROUND TO THE STUDY

There is a plethora of research work on public participation as a concept in Public Management. Ababio (2007:16-29), and also Nzimakwe and Reddy (2008:667-679) for example, analyze the role of ward committees as participants in local government development; Kakumba and Nsingo (2008:107-123), and Ile and Mapuva (2008:124-140) wrote on citizen participation in rural development in Uganda and in Zimbabwe respectively; Maphunye and Mafunisa (2008:452-460) describe the relationship between community participation and the integrated development planning; while Bekker's (1996) edited book deals with various facets of public participation. Other research works are those of Keyter (2008:210-225) on solid waste management in the city of Windhoek; and by van der Merwe and Steyl (2005:295-313) on rural solid waste management as a planning strategy for higher density agricultural regions. A study on public participation in waste management in Sedibeng is therefore worthwhile for some reasons. Firstly, such study adds to the existing body of knowledge in public participation as a general topic and more importantly, the research findings will help fill the gaps in the less explored area of waste management as specific topic.

Public participation as concept is defined by Phago and Hanyane (2007: 95) as a constitutional mandate that involves exchange in information between the public at the grass roots level and the legitimate government structures. The authors believe that communities are stakeholders in the government sphere and should therefore be encouraged to participate in matters of local government to sustain waste management service delivery.

Nzimakhwe and Reddy (2008: 669), quoting Craythen (2003:263), explain that public participation is a legal requirement wherein “a municipality must encourage and create conditions for the local community to participate in the affairs of the municipality including”:

- Planning, implementing and reviewing its IDP as stipulated in the Municipal Systems Act (32 of 2000)
- Establishing, implementing and reviewing its performance management system in order to improve work procedures and resource allocation.
- Monitoring and reviewing its performance, including the outcomes and impacts of such performance so as to improve customer satisfaction.
- Preparing its budget annually to allocate reasonable funds equally so as to be able to meet the community needs
- Implement strategic decisions relating to the provision of municipal services.

The authors advocate that municipalities must commit to building capacity of the local community so that the community can participate in a municipality’s development programmes. Such efforts will help capacitate councilors and staff to nurture community participation in the endeavour to utilize resources efficiently and effectively through adequate allocation of the annual budget (Nzimakhwe and Reddy 2008: 669).

The Public Service Commission (2008:1) points out that “public participation is a mechanism for entrenching democracy and it promotes social cohesion between the government and the citizen; particularly in the provision of quality and sustainable service”. The Commission further points out the importance of public participation in the enhancement of sustainable service delivery including waste management issues. If there was sufficient and continuous public participation in the Sedibeng District Municipality, there would be no visible excessive illegal dumping caused by communities, polluting the environment thus violating their own constitutional right and of the rest of the citizen as enshrined in Section 24 of the 1996 Constitution. The Public Service Commission (December 2008) published a Report on the Assessment of Public Participation Practices in the public service to inform the three spheres of government about the importance of public participation in a democratic state. The chairperson of the Public Service

Commission, Professor S. S. Sangweni, indicated that participation deepens democracy, promotes good governance and that public involvement informs the government on their needs and means to address the identified needs. The study presented by the Public Service Commission, discovered that public participation practices considerably differed from one department to another due to the fact that some departments had public participation guidelines whilst others did not. Chapter 10 of the Constitution of Republic of South Africa 1996, subsection 195 (1)(d)(e), guides Public Administration in that services must be provided impartially, fairly, equitable and without bias. In addition, people's needs must be responded to and the public must be encouraged to participate in policy making.

Smith and Vawda (2003: 26) point out that public participation is a key strategy for building democracy. The authors maintain that the scope of public participation should be widened to determine distribution and allocation of resources to improve the quality of lives of the poor. The authors advocate that by capacitating people to participate in public issues, the public will be developed to engage in the community matters. According to Tsenoli (2010: 4) it is of vital importance to improve and encourage public participation, especially in government policy formulation and implementation. The role of Sedibeng District Municipality should be to raise awareness of the rights and obligations so that the public is able to play an active role in municipal affairs.

Nzimakwe and Reddy (2008: 667) identified specific stakeholders within the community, because these various types of groups contribute meaningfully to waste management as generators of waste themselves and therefore need to be involved in processes of promoting successful waste services in their areas. For instance, community forums can be initiated within or outside local government to give opportunity to organized formations to design policies and influence policy formulation including participation in monitoring and evaluation of activities. Structured stakeholders that are involved in council committees play a role in the shaping of programmes and projects that the council approve and announce in the IDP. The IDP approval is also influenced by the forums for participatory budgeting that were created with the aim of linking community priorities

with capital investment and programs such as operation of landfill sites and transfer stations. In the community there should be focus groups that are involved in participatory action research as they give detailed information about a wide range of specific needs and values. Scheinberg (2008: 8) supports the objectives of the National Environmental Management: Waste Act 2008 (Act No 59 of 2008) and developed a waste minimization and public participation model in an effort to modernize waste management in a city. The model diverts the mindset of the citizens to move away from routine household collection to household waste recycling, re-use and reduction of waste generation.

Public participation is a process that cannot be ignored. Kroukamp (2000: 52) states that if the public is offered an opportunity to participate in municipality's services such as waste management, they become responsible, find meaning in what they do and the municipality is able to mobilize financial and material resources to service the community better. Khoso (2000: 26) maintains that public participation is a prerequisite in waste management infrastructure such as mini-recycling facilities, buy back centres and mini dump transfer stations. A municipality that involves the public develops partnership with stakeholders and acknowledges that public participation is a cornerstone of a democratic country that benefits politicians, officials and public itself. The needs of the public become known through their involvement (Kroukamp: 2000: 54).

The Waste Act defines waste management as "any activity listed in Schedule 1 or published by notice in Gazette under Section 19 and includes the importation and exportation of waste, the generation of waste including the undertaking of any activity or process that is likely to result in the generation of waste". According to Scheinberg (2008: 9) the process and activity in waste management "give priority to waste prevention and recovery, shifting the destination of materials away from land disposal to formal and informal re-use, recycling and composting". The unwanted waste is managed separately; transported, transferred and disposed at the disposal site.

Kakumba and Nsingo (2008: 107) examined the extent to which public participation in local programmes in Uganda has enhanced the process of rural development. The authors

discovered that the structures and processes remain weak and do not support a realistic participatory system. This needs political and administrative reform of organizational structures, streamline management processes, develop essential skills and elevate knowledge of officials so that the management of public service delivery can be improved. This can be accomplished through development of public participation and representation in governance so as to break the hierarchies of communication channels associated with the local bureaucracies especially in waste management. The process undertaken in Uganda to determine the level of public participation is not observable in Sedibeng District Municipality in that the three local municipalities comprising the District are not integrated in their waste management services.

The White Paper on Integrated Pollution and Waste Management Policy for South Africa (1999) is a statement of intent by the government on minimization and management of waste stream so that inhabitants enjoy the environment that is politically, socially and economically sustainable. The policy approach is to prevent pollution, promote waste minimization at source through efficient reuse; recycling and proper disposal of unwanted waste. This needs absolute participation of the community as they need to separate waste in their household. In terms of the National Environmental Management: Waste Act 2008 (Act No 59 of 2009), the municipality is a custodian of waste management.

1.2 PROBLEM STATEMENT

Sedibeng District Municipality has diverse communities with varying needs. Their social characteristics range from affluent to poor socio-economic status. Poor service quality of refuse collection affects the quality of lives of the people in these communities. Poor refuse collection services limit business and industries in an area and deprive the community of job opportunities. If people are consulted about service levels, problems and proposals for new services, irrespective of their socio-economic status, they will see no need to protest about poor service delivery because they have been informed and may contribute to solution of problems. For instance, the community should know why refuse

removal tariffs are increased annually in July at the beginning of the financial year of the Municipality.

Sedibeng District Municipality and its local municipalities need to come up with a strategy to standardize community participation and recognize the community as stakeholders in local government services including waste management. Some factors contributing to slow public participation in waste management in Sedibeng District Municipality are:

- There seems to be much public ignorance on the relationship between active public participation in waste management and healthy environment due to lack of involvement of community in waste management in Sedibeng District Municipality
- Other weaknesses affecting public participation in waste management services are increase in population leading to excessive waste generation in the region.

Based on the above preceding scenario the problem statement can be stated as follows:

Although legislation exists that calls for public participation in waste management, the practice is hardly activated in Sedibeng District Municipality. The focus of this study is to determine the extent of community involvement in waste management processes in SDM. That way, the gaps in public policy implementation in waste management would be highlighted for management action.

1.3 VALUE OF THE STUDY

The study seeks to evaluate the extent of public participation with specific focus on engagement of public – private – partnership and establishment of co-operatives in waste management at the Sedibeng District Municipality. Public private partnership and cooperatives are relatively new concepts in both international and national local governments. For instance Ishengoma (2010:1) referred to municipalities that have long

been unable to satisfy the growing need for waste management services and involved community based groups in waste services in order to increase both service and income in their areas. The study will contribute to the improved waste collection services at Sedibeng. Various mechanisms employed to involve the community will be explored and gaps identified as to why public participation is almost lacking in the municipality. According to van der Waldt et al (2007: 148) quoting Craythorne (2006;158-159) there are services that can be provided through internal or external mechanisms that can be levied in respect of those eservices.

Authors maintain that to effect improvements, upgrade and extend the service standards there is a need for involvement of external stakeholders such as implementation of public- private- partnerships and cooperatives. After the completion of the study the results will be made available to relevant local municipalities. Copies of research will be distributed to libraries of Sedibeng District Municipality. Extracts from the research will be published in accredited and recognized journals in different spheres of government. Research findings will be utilized in the promotion of public participation processes in Sedibeng District Municipality.

1.4 RESEARCH QUESTIONS

Emanating from the problem statement above, the study will endeavor to find answers to the following questions:

- What is the extent of literature and knowledge on public participation and waste management that exist globally?
- What do we know about public participation and waste management in South Africa?
- What are the gaps in knowledge and how would a study of Sedibeng case add new information?
- What are the indicators of success and failures of public participation in waste management in Sedibeng District Municipality?
- What recommendations can be offered to stimulate Sedibeng District Municipality to implement public participation and partnerships in waste management?

1.5 RESEARCH OBJECTIVES

Consequent to the research questions outlined above the research objectives are highlighted below:

- To give a global exposition of concepts of public participation and Sustainable Waste Management Service Delivery.
- To explore the literature and theories on public participation and waste management in South Africa
- To assess the relationships between public participation and sustainable waste management service delivery at Sedibeng District Municipality.
- To explore international best practices in public participation in waste management
- To analyze strategies supporting public participation through public-private-partnership at Sedibeng at Sedibeng District Municipality.
- To conduct research study on the extent of public- private- partnerships as a strategy for public participation and waste management.
- To offer recommendations on how Sedibeng District Municipality can promote public participation to sustain waste management service delivery based on the findings of the research.

1.6 HYPOTHESIS

The following hypothesis is formulated to operationalize the study:

When public private partnership is implemented, waste management service delivery is likely to be a sustained process that the Sedibeng District Municipality has not fully activated.

1.7 RESEARCH METHOD

In order to conduct research, the study will comprise a literature study and empirical methodology. To explore the impact of public participation and partnerships, qualitative research will be used. Juliet and Strauss (2008:16) maintain that amongst many reasons for choosing qualitative research “is the desire to leap beyond the known and enter into the world of participants in order to see the world from their perspective and in doing so make discoveries that will contribute to the development of empirical knowledge”. Qualitative methodology refers to “research that produces descriptive data, generally the participant’s own written or spoken words pertaining to their experience or perception” (Brynard and Hanekom 2006: 37).

1.7.1 Literature study

The study will be conducted through comprehensive utilization of available literature. Books, journals and electronic sources on public participation in waste management in waste management service delivery will be analyzed. Relevant international, national and provincial policies will be consulted. Denscombe (2008:210) maintains that “literature review of previous research and previous theories provide the key to deciding which features of the situation warrant the focus of attention enabling the researcher to identify which things are worthy of inclusion and allow the researcher to prioritize those aspects of the situation to be observed”. Literature review should demonstrate how the reported study relates to previous research giving rise to particular issues; problems and ideas that the current research addresses (Denscombe 2008:210).

Special focus will be on the following documents:

- The Constitution of the Republic of South Africa Act 1996
- National Environmental Management: Waste Act 2008 (Act No 59 of 2008)
- Local Government Municipal Systems Act 2000 (Act No 32 of 2000)
- White Paper on Integrated Pollution and Waste Management for South Africa 1997
- Department of Environmental Affairs Draft Policy on Free Basic Refuse Removal Service 2009
- Emfuleni Local Municipality Policy on Public Participation 2010.
- Emfuleni Local Municipality Integrated Waste Management Strategy 2009
- Emfuleni Local Municipality IDP 2009/2012
- Sedibeng District Municipality Integrated Waste Management Plan 2005
- Journals and publications from South African Association of Professional Managers on public participation in waste management service delivery will be procured and analyzed
- Unpublished dissertations and theses on public participation in waste management.
- Internet search on partnerships implemented in other countries in the world as well as South Africa.

1.7.2 Empirical Study

According to Babbie (1995:225) a purposive sample means “the selection of sample on the basis of researcher’s own knowledge of the population, its elements and the nature of the research aims”. The researcher aims to use primary data which is first hand information in the study. The secondary data will be collected in the form of articles, magazines and academic work (Gibson and Brown 2009:66-67).

Sampling will consist of officials who are currently involved in waste management and those in support departments such as IDP, Communications, Finance and political offices at Sedibeng District Municipality. In this case, judgmental sampling will be applied. Data will be collected by means of questionnaires with closed and open- ended questions, personal observations and structured interviews. Survey questionnaires and structured interviews will be used to obtain information from the public and officials of Sedibeng

District Municipality. Categories, criteria for selection and description of the importance of participant in the study are highlighted below:

CRITERIA	DESCRIPTION
Public participation in IDP processes: Manager Hulisani Mukwevho	Is required to highlight methods used to increase public participation in IDP and budget analysis phase
Communication Manager: Paseka Rakosa	To be interviewed on systems used to reach community on issues of municipal waste management service delivery
Stake Holder Engagement Unit Gauteng Province: Andrew Mathabathe	To explain how Province reaches Sedibeng community as Gauteng Department of Agriculture and Rural Development developed Waste Collection Standards in 2008
Call Centre Manager: Evert van Helden	To be interviewed on the number of community calls that are received per month on waste collection problems and turnaround time in solving the problem.
Budget Manager: Nazeera Gatho	To indicate if there are sufficient funds to embark on public participation and involvement of the community in waste management projects
Supply Chain Manager: Ms Mmannini Mahloko	Procures goods and services and will be interviewed to establish if designated groups such as women, youth and disabled are considered in tenders for community based projects in waste management
Operations and management in Waste Department, Assistant Managers: Dr K.E. Masindi, MM Redelinghuys Star Moholobe, Sunku Mali and Sabela Pilane	The officials are in charge of waste divisions in waste management areas. They are chosen because they are directly responsible for monitoring waste collection, waste minimization, transportation and proper disposal onto landfill sites including transfer stations and are therefore in a good position to embark on public participation and build partnership with the community
Fife Community	Interviewed on the extent of their participation in waste

Development Workers and Five Ward Committees	management service delivery and how they disseminate information to the community on waste
Selected households: 50 residents from Emfuleni Local Municipality in Sharpeville and Sebokeng, 20 residents in Midvaal, Sicelo Shiceka and 30 residents in Lesedi L.M at Ratanda township	The residents are important in the study to establish the extent of their participation and involvement in waste management
Waste Superintendent: Regina Chibase	To indicate the level of waste removal services and involvement of the community

Data will be collected by means of questionnaires, personal observations and structured interviews, semi-structured, closed and open interviews will be conducted so that qualitative data is generated regarding the extent to which Sedibeng District Municipality implement public participation and partnerships to sustain waste management service delivery. The use of unstructured interviews will be used with caution because as Descombe (2008: 188) states, the researcher should not have preconceived ideas about the issues and direction that the interview should take especially during planning and preparation for face- to- face interviews.

Analysis and validity of data from interviews and questionnaires will be interpreted in order for the researcher to draw necessary conclusions. All data obtained from the interview and questionnaires will be categorized. Qualitative data in the form of field work, notes, interviews, transcriptions, text and photographs will be organized and be consolidated before they can be analyzed. To interpret the collected data an empirical analysis will used. Babbie and Mouton (2001: 122) define validity as “the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration”. To ensure validity interviews and questionnaires will be semi structured so as to measure what is intended, that is, measure the right thing in respect of public participation, partnership and policies that relate to waste management.

1.7.3 Ethical issues

Mbanjwa (2005:11) recommends that the researcher must consider ethical issues such as negotiating access; confidentiality of identity, good faith and participant's right to withdraw from the interview. Gibson and Brown (2007:60) state that general issues that need to be thought through include informed consent and confidentiality, avoiding harm to the participants that may arise from their involvement in the research study. The researcher should operate with honesty and integrity, professionalism that respects the rights and dignity of those who are participating in the research process. Strict confidentiality of the source of information must be maintained. Ethics are of paramount importance because a researcher cannot demand access to people, therefore assistance and permission must be solicited.

1.8 CHAPTER OUTLINE

In pursuit of the above, the organization of the research will be according to the following preliminary chapters:

Chapter 1: Introduction: Problem Statement, Study Methodology.

Chapter 2: Exposition of global theory on public participation and sustainable waste management service delivery

Chapter 3: An overview of public participation in waste management services in the South African municipalities

Chapter 4: International best practices in public participation and partnerships in waste management

Chapter 5: Evaluation of the methods used in the promotion of public participation in waste management service delivery in Sedibeng District Municipality.

Chapter 6: Empirical study on the extent of public participation in waste management service delivery.

Chapter 7: Findings, recommendations and conclusion

CHAPTER TWO

EXPOSITION OF GLOBAL THEORY ON PUBLIC PARTICIPATION AND SUSTAINABLE SERVICE DELIVERY.

2.1 INTRODUCTION

This chapter discusses theoretical framework of the study on public participation as a mechanism that enhances waste management service delivery in the region of Sedibeng District Municipality in South Africa and other areas. The chapter describes public participation in the three local municipalities of Emfuleni, Midvaal and Lesedi Local Municipality as they constitute the District (Annexure AB). Policies of the three locals will be explained and their effect on public participation and implementation will be analyzed. In terms of the interrelationship between the provincial government and the District Municipality, policies of Gauteng Province will be explained as they critically impact on local municipality on issues of waste management and public participation. Sedibeng District Municipality Integrated Waste Management Plan and stakeholders will be identified and analyzed. Various approaches and policies of other South African policies will be scrutinized and analyzed.

2.2 THE MEANING OF PUBLIC PARTICIPATION AND WASTE MANAGEMENT IN THE MUNICIPALITIES

According to Nzimakwe (2008: 44) public participation is a process whereby citizens are involved in the administrative policy decision making activities; the determination of levels of services; budget; priorities and including acceptance of physical construction projects so that the government is oriented in programmes based on community needs and encourage a sense of cohesiveness within the society. Phago and Hanyane (2007: 94) define and see public participation to be characterized by a two-way exchange of information between the people and the legitimate authority resulting to the provision of information about the needs and aspirations of the local people to the public authorities in order to initiate and implement decisions in entering partnership commitments. The two

authors are supported by Ishengoma (2010: 4) who believes that public participation promotes willingness by the poor to participate and the government sensitizes them and involve all stakeholders in planning, implementation and management of their services.

The Centre for Municipal Research and Advice (CMRA) developed a document on Public Participation in Waste Management with the Langeberg Municipality in the Western Cape Province in an effort to implement Logo South projects. Their Waste Management and Public Participation project is supported by the International Cooperation of the Association of Netherlands Municipalities (VNG-International). Logo South is a Municipality International Cooperation Program for 2005-2010 that aims to facilitate capacity development of Local Governments. CMRA defined waste as a material considered worthless or unwanted by the generator and classified waste into biodegradable waste, recyclable material, building rubble, composite waste and household waste that includes hazardous and toxic waste such as light bulbs, spray cans, shoe polish, batteries, pesticide containers and medication. CMRA identified waste management as a local government function under the service delivery function that has broad areas of cleansing, refuse removal, transportation, management of disposal and solid waste dumps such as landfill sites (Naid 2009:4) .

The National Environmental Management: Waste Act 2008(Act No 59 of 2008) defines waste as “any substance, whether or not that substance can be reduced, reused, recycled and recovered, that is surplus, unwanted, rejected, discarded, abandoned and disposed of which the generator has no further use of for the purpose of production that must be treated or disposed of or that is identified by the Minister by notice in the Gazette. These include waste generated by mining, medical or other sector but a by- product is not considered waste and portion of waste, once reused, recycled and recovered, ceases to be waste”. The Waste Act objective is to ensure that the inhabitants of South Africa are protected from the negative impacts of waste and therefore, it regulates hazardous waste which is regulated and managed by separate legislation and policies. The Act defines hazardous waste as “organic or inorganic elements or compounds that may, owing to inherent physical, medical or toxicological characteristics of that waste have a

detrimental impact on health and environment”. Effectiveness of and successful accomplishment of the aims and objectives of the Act will be through public participation that must be organized by all municipalities in their areas.

Wiedemann and Femers (1992: 356) maintain that public participation in waste management was meant to ensure that the citizens are informed about the plans of the municipality on waste management so that all interests and issues at stake are considered and long lasting decisions are satisfactory to all parties. The authors further argue that municipalities must be able to accept and assess the risks that are directly related to new waste management plans. For instance, if the municipality is unable to keep to the schedule of waste removal due to increase of workload, the municipality must discuss with the local community if co-operatives and partnership with them would be feasible.

The public participation process in waste management was supported by Vainius (2002:7) when the local people and non-governmental organizations (NGO's) in Brussels protested against the establishment of the new landfill site that would negatively affect farmers and villagers because its proximity would have negative environmental and social impacts. It was emphasized that the negative social impacts could be minimized by technical means and other compensation. Subsequently, the government embarked on Environment Impact Assessment (EIA) procedures. Public involvement and joint decision-making was done correctly by both public and preparation teams. During the preparation stage, NGO's provided valuable information and increased project transparency by contributing to public awareness and sharing information about the project among their colleagues and the general public, thus increasing general transparency of the project lifecycle.

This supports Vainius' (2002) views that during EIA process of landfill site selection and means of the waste management, public participation must be implemented. According to Vainius (2002: 7) the objective of public involvement is to give an opportunity to the public to identify those risks that are associated with their participation so that they can be managed and controlled.

2.3 FACTORS INFLUENCING PUBLIC PARTICIPATION AND INTEGRATED SUSTAINABLE WASTE MANAGEMENT

2.3.1 Population explosion and rural-urban drift

Sedibeng District Municipality is characterized by excessive environmental degradation due to tremendous waste generation arising from dense population, developments, increase in informal settlements and movement of the unemployed people from nearby rural farms, metros and districts. According to Sedibeng IDP (2010/2011:36), as soon as unemployed people gather in a certain area there is a demand for collective public services. Population density is an outstanding characteristic of urban regions and results in the changing patterns of consumption. The government is obliged to collaborate with relevant stakeholders, introduce policies and strategies that will reinforce values and encourage sustainable production and acceptable improved consumption patterns because increased urban and industrial activities lead to high levels of pollution.

Sedibeng District has the largest population of the three districts, namely Metsweding and West Rand Districts and has the greatest gross population density of the three districts. The reason for this population density is that the greatest urban rural migration into the region is predominantly from farm dwellers and poor people who immigrate to seek jobs, better wages, improved human settlement and better housing. Migration trends show that students coming to study at higher education institutions of Vaal University of Technology, North West University (Vaal Campus) and Sedibeng Colleges, hardly return to their respective homes but rather seek jobs in the region (Sedibeng IDP 2010/2011: 36).

Population growth, urbanization, industrialization and changing patterns of consumption have contributed to uncontrollable volumes of waste in the cities including Sedibeng District Municipality. A research study that was conducted by Visvanathan and Glawe (2006: 2) on causes of excessive waste generation in East Asia and Pacific Region

discovered that municipal waste generation increased at a rate of three to seven per cent per year due to population increase, expansion of trade and industry and consumption patterns in urban centres. Many cities are not able to manage waste due to public participation shortcomings and financial constraints. In most instances, lack of waste management service delivery results in growing public opposition. The authors emphasize that there is a need to modernize waste management by practising integrated solid waste management that incorporates waste minimization (Visvanathan and Glawe 2006: 2).

According to Smale (2010: 172) Gauteng Province has an estimated population of 10,53 million people as at July 2009 (Statistics South Africa 2009). The author cites CSIR (2003) and estimated that Gauteng Province generates approximately 42% of the total waste produced in the country. This figure represents the highest volumes of waste produced in South Africa due to rapid industrialization and progressive developments that draw people nearer to the Gauteng cities. The huge volumes of waste in the region are as a result of non- separation of waste at household level; limited refuse removal services in poor areas; inadequate law enforcement; littering in residential areas; poor public participation and lack of encouragement of waste minimization. This points to the need to involve the community through local co-operatives and public-private-partnerships in waste management as the government cannot manage waste alone.

According to Morkel (2010:168) the City of Cape Town faces challenges of shortage of environmental resources due to influx of masses from the surrounding rural areas to the city's informal settlements, formal housing, commercial and industrial developments. Pollution destroys natural habitats and places a lot of strain on the environment. There is decrease in landfill airspace due to Cape Town residents generating more waste than the average American, as cited by Morkel (2010). The author estimated that 760,000 of the city's 3.5 million residents live in some 190,000 informal dwellings, that is, shacks. To avert the negative effects of poor waste management, the city developed integrated waste collection in the informal settlements. The system is an area cleansing service delivery model contracting local community, because it is impossible to provide the city's

informal settlements with a similar waste collection service implemented in the formal housing areas as there is poor accessibility in the informal settlements.

The model was developed in consultation with the community to ensure that it is acceptable and supported. The model is aimed at community based contracts, community empowerment and job creation. The community based contracts are not only dependent on the capability of the local authority to efficiently and effectively manage and monitor various contracts but also to guide and educate new-comers to become responsible contractors. Morkel (2010) maintains that the model was also introduced to 140,000 formal disadvantaged RDP houses. In the RDP housing areas the integrated area cleansing services are provided by contractors and include litter picking, street sweeping, emptying of street litter bins and the removal of illegal dumps. The area has excessive illegal dumping rate due to either backwardness and ignorance or reluctance of the community to take wheelie bins to far-away drop off centres. There is continuous education of the communities to make them aware of the rules of service delivery and this is followed by the improved law enforcement to ensure compliance so that the community takes ownership of their nearest environment (Morkel 2010: 168).

Urbanization of the population has resulted in areas that are densely populated and the authorities are required to provide more services to new areas including ever increasing slum occupations. In areas where there is rapid and industrial development there should be more public services including waste collection than a developing community (Cloete 1998: 134). According to Denhardt and Denhardt (2006: 138) public participation is driven by a need for public managers and employers to deliver services in a way that is consistent with the desires of the public who should be directly involved in the decision making process. The authors ask themselves whether community participation was a way to transfer real power to the community or whether community involvement is a mere device for diffusing protests. Two different types of participation were identified by the authors, namely, first is co-optation where the government transfers little real power but citizens are given the feeling of involvement. Second is where the government retains the responsibility for public authority, example frequency of solid waste collection and street

sweeping in the areas and supervising the contractors to deliver efficient services. (Denhardt and Denhardt 2006:140)

2.3.2 Requirement for implementation of Integrated Sustainable Waste Management Plans

Integrated sustainable waste management plans are guidelines drawn by the user departments such as waste to meet the needs of community through community involvement and partnerships in service activities. Integrated Waste Management Plans are to be developed through a process of public participation and in consultation with the other relevant municipalities. This can be accomplished by ensuring that plans are based on requirements and priorities in the interest of the public and integrated in the Municipality's Integrated Development Plan (IDP). Eichler and Kidd (2004: 25) identified key stakeholders in waste management in order to develop Integrated Waste Management Plans for the uMkhanyakude District Municipality. The stakeholders included the Municipal Manager, IDP Consultative Forum, Reclamation group, waste contractors, Parks development and eco-tourism. The reason for identifying the Municipal Manager as an important stake holder in the Municipality is that he/ she is the head of administration and an accounting officer in terms of the Municipal Structures Act 1998(Act No. 117 of 1998).

2.4 LEGAL FRAMEWORK GUIDING PUBLIC PARTICIPATION IN WASTE MANAGEMENT

There is a legal framework informing waste management and public participation processes. In terms of schedule 5 B of the 1996 Constitution, local authorities have the function which includes the power to promulgate and enforce by-laws, control, enforcement and awareness between local municipalities. Sedibeng locals may have different bylaws but all necessitate more stringent measures that could be in the form of specific regulation or other legislative requirements. The National Environmental Management: Waste Act 2008(Act No 59 of 2008) was finally gazetted on 10 March

2009. The aim of the Act is to give effect to the White Paper on Integrated Pollution and Waste Management and the National Waste Management Strategy (NWMS).

The purpose of the Waste Act is to reform the law regulating waste management in order to protect health and environment by providing measures for the prevention of pollution. It provides for the institutional environments and planning matters, national norms and standards for regulating the management of waste by all spheres of government. It ensures licensing and control of waste management activities, provides for the national information system, compliance, enforcement and remediation of contaminated land. The objective of the Act, amongst others, is” to ensure sound environmental management of waste and to institutionalize public participation in the development and implementation of national, provincial and local integrated comprehensive and ecological waste management programmes”.

In terms of Chapter 2 of the Waste Act, the Minister must, by notice in the Gazette establish national standard that must be communicated to the public. The Local Municipality standards developed in terms of bylaws must establish service standards and level of service for the collection of waste, identify requirements in respect of separation, compacting and storage of waste including waste generation reduction, recovery, reuse and recycle. The Act regulates waste management matters and, for better implementation, must be communicated to the public through awareness and education campaigns.

The Waste Act emphasizes the extent to which municipalities are charged with the responsibility to improve the quality of life of all South Africans by minimizing the risk which waste poses to the environment and human health through the provision of sustainable waste services. Some responsibilities posed by the Act are:

- **Development of integrated waste management plans**

Municipalities are required to develop and implement waste management plans that are integrated into the municipal Integrated Development Plan (IDP). Integration of plans ensures that all decisions taken cater for waste management services in terms of financing

of waste management and addressing backlogs in solid waste services. Chapter 2, Section 6 (1) (a)-(f) of the Waste Act covers issues of guidelines, mechanisms, co-operative governance, awareness raising, compliance and achieving objectives through the implementation of the Waste Act.

- **Designation of waste management officers**

Waste management service delivery often suffers because of inadequate co-ordination between various departments. This fragmented approach results in delays in accountability and decision making. The Waste Act requires the three spheres of government to designate a waste management officers who will coordinate waste management issues in their areas so that accountability and decision making are properly dealt with. Section 10 (3) authorizes each Municipality to carry waste management services in terms of the Municipal Structures Act 1998 (Act No. 117 of 1998) and must designate from its administration a waste management officer who will be responsible for coordinating matters pertaining to waste management in that particular municipality.

- **Development of waste service standards**

Another responsibility in terms of the Act is to develop standards that are incorporated into the municipality by- laws. This will give a municipality a legal framework for dealing with non- compliance and non- conformity of the public in the municipal areas. Part 2 Section 7 (5) of the Waste Act mandates the Minister to differentiate on equitable basis between users of waste management services and types of waste management services. The MEC in turn ensures that when the standards are set, they should address waste services, minimization, treatment and disposal in terms of Subsection 8 (3).

- **Waste collection services**

The Waste Act has introduced a new concept of provision of receptacles for the collection of recyclable waste by municipalities. The *Act* encourages recycling at source where householders separate organic waste from bottles, tins, plastic and paper. Another approach aligned to collection services is the introduction of Free Basic Refuse Removal

Policy which endeavors to address economic conditions of the poor who cannot afford to pay the full price of municipal services such as water and sanitation; electricity and waste collection. The Free Basic Refuse Removal Service Policy (FBRRS) also supports Government intentions of free water and electricity to indigent inhabitants (Department of Environmental Affairs 2009:49).

The Municipal Systems Act 2000 (Act No 32 of 2000) is a key piece of legislation that provides guidelines on the manner in which the municipality must conduct its affairs in partnership with the beneficiaries, that is, community members. According to the act, the members of the local community have the right to contribute to the decision making process of the municipality and submit written or oral recommendations, representation on complaints to the municipal council or to another political structure of their choice. The act also states that the community must be responded to on their complaints; be informed of all the decisions of the municipal council or political structure especially matters affecting their rights, property and reasonable expectations including waste and finances of the municipality.

Public members have the duty to exercise their rights, to observe the mechanisms, processes and procedures of the municipality. Subject to Section 97 (1)(c) of the Act, members of a local community are to pay promptly for all service fees, including refuse removal services, surcharges on fees; rates on property and other taxes; levies and duties imposed by the municipality.

Chapter 4 of the Municipal Systems Act 2000 (Act No 32 of 2000) makes provision for the development of culture of community participation. The chapter mandates local municipalities to develop the culture of municipal governance that complements formal representative government with a system of participatory governance. The municipality encourages and creates conditions for the local community to participate in matters such as preparation, implementation and the review of Integrated Development Plan (IDP) in terms of Chapter 5; establish, implement and review its performance management system in terms of Chapter 6, and prepare the budget and make strategic decisions relating to the

provision of municipal services in terms of Chapter 8. This implies that the local community can be capacitated to be part of waste management. The staff needs to foster community participation, use resources and allocate sufficient funds to procure goods and services as may be appropriate to involve the community.

Smale (2010:6) presented policies and standards of the Gauteng Department of Agriculture and Rural Development (GDARD) on waste management at the WasteCon conference that was held in Johannesburg from the fourth to the eighth October 2010. The official highlighted that the Gauteng Integrated Waste Management Policy was developed in 2005 and approved in September 2006 by the Executive Council of the Gauteng Provincial Government (GPG). The policy is the basis for addressing waste management issues, problems and needs of the community of Gauteng Province. It serves to inform the Gauteng public and provincial agencies of the objectives that the Gauteng Provincial Government has identified for integrated waste management. The policy includes the hierarchy of waste management as required by the National Waste Management Strategy (1999) and National Environmental Management: Waste Act 2008 (Act No.59 of 2008). The policy requires that waste generation be avoided and if this activity is impossible, waste must be minimized and resultant waste be disposed of safely without adverse impact on the environment and people.

The policy is linked to the Gauteng General Waste Minimization Plan (GGWMP). The Plan was developed in 2008 after it was established that in Gauteng Province approximately 5,75 million tonnes of waste was generated and 3,4 million tonnes representing 60% was available for recycling. Illegal dumping was estimated at two million tonnes per annum (Smale 2010: 175). The table below shows the composition of waste in 2006 in Gauteng Province.

Table 2.1 Gauteng wide waste stream composition in 2006

Gauteng	Non-recyclable	Organic	Recyclable	Builders rubble
Percentage	40%	15%	25%	20%

Amount in tonnes per annum	2,292,000	859,000	1,432,000	1,146,000
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Extracted from Smale (2010: 176)

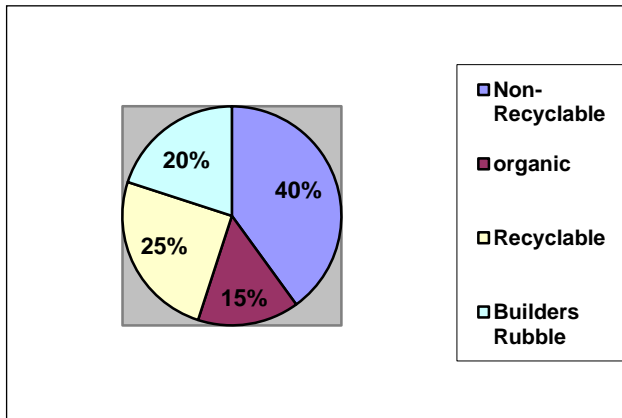


Figure 2.1 Extracted from Smale (2010: 176)

The pie diagram above shows the estimated volumes available for recovery and recycling in 2006 as reported by Smale (2010). The project of waste minimization, re-use, recycling and recovery of waste is still at a very slow pace. This may be due to the very little time devoted to awareness, education campaigns and involvement of the community to promote sustainable waste management services.

The Gauteng General Waste Minimization Plan includes measures to create waste minimization environment in prevention of generation of waste, recovery, recycling and processing of general waste. The plan has action plans for the short, medium and long term implementation procedures.

Table 2.2 Action plan and implementation procedures

Short term (2010-2011)	<ul style="list-style-type: none"> - Communication and awareness programmes on waste minimization - Establishment of material recovery facility with the municipality and private companies
Medium term (2012-2015)	<ul style="list-style-type: none"> - Local authorities establish smaller recycling collection facilities at community level in terms of the action plans -Develop smart tariffs for waste disposal - Lobby for the resistance to dumping of recyclables from the international community
Long term 2015 and beyond	<ul style="list-style-type: none"> - Design programmes for public-private-partnership between local authority and business industries for waste minimization, waste collection and proper disposal - Develop waste minimization techniques by industry such as custom designed waste bins that separate waste in the same bin

Extracted from Smale (2010: 469)

General Waste Collection Standards motivate for the separation of waste at the point of generation and these standards are linked to the General Waste Management Facility Standards. These standards form improved waste management and waste minimization in Gauteng. During implementation of and application of these standards community must be involved to improve waste management and waste minimization in Gauteng (GDARD 2010). Municipality is an executive authority to deliver waste management services and in doing so must adhere to all National and Provincial norms and standards. In terms of Section 4 of the Municipal Systems Act the municipality should follow a consultative process in the process of setting local standards for waste management services by-laws

The Gauteng Growth and Development Strategy was launched in 2005, as a practical action – oriented framework for integrated and sustainable growth and development in the Gauteng Province. The overarching strategic objective of the Gauteng Growth and Development Strategy was the provision of social and economic infrastructure and services that will build sustainable communities, enhance government efficiency and

cooperative governance, deepen participatory democracy and promote provincial and national unity and citizenship.

The GGDS strategy listed several gazetted Acts applicable to strategy and pointed out that the National Environmental Management Act (NEMA) 1998 (Act No 107 of 1998) does not deal specifically with waste management, but points out some important provisions where sustainable development requires the consideration of some requirements:

- Establishment of national and provincial standard for waste minimization, recovery, reuse, and recycling. The aim of the standards is to prevent fragmentation and duplication of functions in the environment of scarce human and material resources.
- Set strategies for waste reduction through waste minimization, recovery, reuse and recycling. These strategies need public input and how they can be best put into action by both municipality and public participants.
- Specify requirements in respect of implementation and operation of waste management programme. People are willing to be part of government processes but need to be informed about new developments.
- Determine the financial arrangement of waste minimization programme after consultation with the Minister or MEC. At local level this can be included in the IDP and for monitoring and evaluation purposes be listed in programmes of the Service Delivery Budget Implementation Plans (SDBIPs’).
- Establish institutional arrangements for administration of waste minimization programmes. The Waste Department can delegate one official to be responsible for waste minimization so that volumes of recycled waste can be recorded to determine how much landfill space has been saved and to what extent the community is participating in waste reduction initiatives.

- Issue a license that may specify conditions in respect of waste minimization recovery, reuse and recycle. In terms of Section 51(2)(a) of the National Environmental Management: Waste Act 2008 (Act No. 59 of 2008) a waste management license may specify conditions in respect of the reduction, reuse, recycling and recovery of waste.

- Identify and submit potential measures in respect of waste minimization including recovery, re-use and recycling of waste, to the waste management stakeholder and the licensing authority. This refers to ability of the license holder to conform to the regulation and comply with the conditions and requirements of the license.

- Make regulations or ordinances regarding measures that must be taken in respect of implementation of waste minimization programs. Local Municipalities publish by-laws, Province enforces ordinances and these spheres of government ensure that there is proper public participation in terms of Section 73 (2) (a) of the Waste Act.

NEMA needs to be communicated to the public so that they also participate to achieve the objectives of the Act and work closely with government as registered voters.

2.5 MECHANISMS, PROCESSES AND PROCEDURES FOR COMMUNITY PARTICIPATION

In terms of the Municipal Structures Act 1998 (Act No 117 of 1998) participation of the local community in the affairs of the municipality must take place through a political structure. The mechanism, processes and procedures are established by the municipality. Public participation must take place through ward councilors and must generally apply the provisions for the participation as provided in the Act.

A municipality must establish appropriate mechanisms, processes and procedures to enable local community to participate in the affairs of the municipality and therefore must provide for certain community inputs. The municipality must receive, process and

consider petitions and complaints lodged by local members of the local community; conduct public meetings and hearings by the municipal council, consult with locally recognized community organizations and report back to the community. When the municipality establishes mechanisms, processes and procedures, it must take into account the special needs of designated groups such as those who cannot read and write; people with disability, women and other disadvantaged groups.

In line with the Municipal Structures Act, Emfuleni Local Municipality developed a policy on petition management. In terms of Section 17 of the Constitution, citizens have the right to present a petition. Section 118 (1)(a) read with Section 115(d) of the *Constitution* provides for the facilitation of involvement of the citizens. The Local Government: Municipal Structures Act 1998 (Act No 117 of 1998) regulates the establishment of internal systems, structures and office bearers of the municipality. The municipality shall not refuse to accept or receive a petition and municipality shall respond to every petition in line with the procedures set down in the Act (Emfuleni Local Municipality Petition Policy Document 2010: 6).

2.5.1 Mechanism used in public participation

Nzimakwe and Reddy (2008; 667) identified specific stakeholders within the community. For instance, community forums can be initiated within or outside local government to give opportunity to organized formations to design policies and influence policy formulation including participation in monitoring and evaluate activities. Structured stakeholders that are involved in council committees play a role in the shaping of programmes and projects that the council approved and announced in the IDP. This IDP approval is also influenced by the forums for participatory budgeting that were created with the aim of linking community priorities with capital investment programs such as operation of landfill sites and revision of refuse removal tariffs. In the community there are focus groups that are involved in participatory action research. They give detailed information about a wide range of specific needs and values.

The most practical approach is to establish structures that will allow for meaningful participation because public participation is one of the cornerstones of effective and accountable governance. Bevir (2007:661) identified five broad mechanisms of popular participation, namely, electoral, group, citizen-government interaction, direct participation and activism. These were discussed as follows:

- Electoral Participation

This is participation through voting and generally relies on the capacity of the individual to perform minimal duties such as registering in order to exercise one's right to vote. It is reflected in the right of citizens to make financial contributions that ensure a successful campaign. The disadvantage of this electoral participation is that it does ensure that specific decisions or policies will be favoured or adopted and accepted. It reflects the values of procedural fairness by constructing equal rules of campaigns, contributions and voter eligibility.

- Direct forms of participation

The individual takes responsibility for getting personally involved in making policy, running of office, sitting on boards, or by proposing legislation. Direct form of participation is reflected in the initiative and referendum processes which put in place procedures by which citizens can propose and vote on state constitutional amendments. Bevir (2007; 661) commends this as a fairly powerful tool of popular participation that was implemented by the Pacific Island Forum, because it has power to bypass state legislatures in the policy formulation process. Though interest groups view initiative and referendum processes as a mechanism for increasing access to governing decisions, form of direct participation seeks to enhance the legitimacy of the state by opening the political processes to be controlled by citizens.

- Citizen-government interaction

This is the third broad mechanism for participation that is primarily used during the implementation stage of policy where elected and bureaucratic officials seek the advice of citizens. This type of participation ensures that participation in specific policies and

actions is supported by a variety of mechanisms such as public meetings, hearings, citizen surveys, consensus-building processes and a host of other methods that seek to involve the public in decision making. There is great deal of recognized input devices that are important to citizen-government interaction. These are simple provision of public information or complex seeking input through face-to-face public meetings. The advantage of this mechanism is that it has gained global interest due to its promise of producing workable and broadly accepted policies (Bevir 2007: 661). Based on this view, partnerships in the form of co-operatives are recommended in waste management.

- Group participation

Group participation is involvement where individuals feed their preferences through an organization or body that acts as a mediator to express their interest. The groups act as buffer between the society and the individual, collecting values and preferences whilst structuring individual behaviour. These are for example; local civic association. Group participation allows for more representation of disadvantaged voices. There are disadvantages related to this mechanism. The groups are not equally accountable to all citizens but to their own constituencies, are not guided by community principles and not all community interests are represented by the group. However, group existence promotes legitimacy, openness, dialogue and agreements to impact on policy decisions as lamented by Bevir (2007: 661).

- Activism and dissent

This is a less – commonly recognized mechanism or participation as it rejects the need for government to structure involvement and can range from benign letters to the editor to radical dissent. Used in combination with other forms of participation, they attempt to push the policies in a desired direction. This mechanism uses media to allow for open expression of will. A free media and tolerance of activism allow for greater transparency in government which is a crucial aspect of openness. The five broad mechanisms require the government to ensure that citizens have equal access to decision, decision makers are accountable for their actions, officials teach the public and facilitate meaningful

involvement. The concept of participation is essential to democratic decision making Bevir(2007:661).

Participatory democracy practice has several forms of citizen participation that have been identified. A so-called participation ladder has been used to differentiate and distinguish the scope of different kinds of participation in which citizens act as co-decision-makers and forms in which they are merely consultants. In the table below, the first three modes of participation are connected to more participative and deliberative democracy models. The fourth and fifth modes of participations are connected with representative democracy. For instance, street committees may organize themselves to guard against illegal dumping and local government would be expected to support their waste minimization initiatives. Bevir (2007:665) identified participation ladder for participatory democracy practices as outlined below.

Table 2.3 Participation ladder as identified by Bevir (2007:665)

Participation form	Citizen role	Government role
1. Self-governance	Initiators, self governance of communities or local co-operatives pick up litter to a common pick-up point	Supporter (financially or offering facility and resources)
2. Partnership	Equal partners, co-producing plans and policies such as contractors appointed to remove waste in informal settlements	Equal partners, co-producing plans and policies
3. Delegated, co-decision making	Delegated co-decision makers within policy lines previously set by governmental actors such as extension of services to newly developed areas	Main policy makers leaving abstract decisions to citizens

	engaging private contractors	
4. Open advice	Advisors, all kinds of problem definitions and potential solutions may come to the fore during the policy making process. Example, National Environmental: Waste Act 2008	Requesting advice by formulating open questions.
5. Consultation	Consultants advising on rather closed set of questions, formulated by governmental actors.	Consultor, asking advice or limited and controlled questions

Extracted from Bevir (2007:665)

2.5.2 Processes and procedures

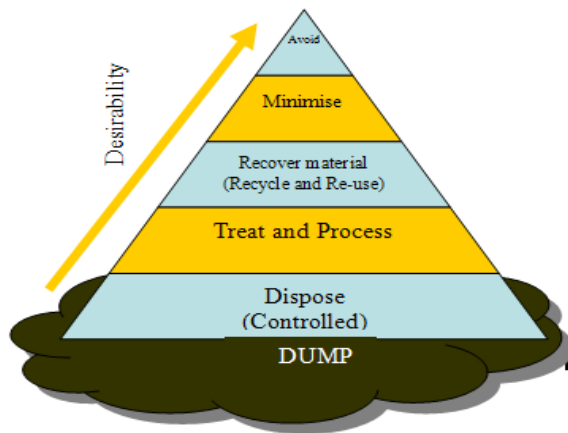
The National Environmental Management: Waste Act was promulgated following a crisis of service delivery including waste management in South Africa. The Department of Environmental Affairs (DEA) discovered that since 1996, there is increasing urbanization from 53% to 58%, informal settlements expanded around urban centres and peri-urban areas and 50% of the population including the poor, does not receive regular waste collection. There is also the inability of the most municipalities to deliver efficient waste collection services. Many waste sites do not have operating permits and do not meet environmental health standards. Illegal dumping sites exist in the whole of South Africa (Department of Environmental Affairs 2009:28).

The Act mandates local municipalities to set standards for the separation, compacting, storage and disposal of waste that is collected as part of municipal services. The process requires waste avoidance and minimization of waste generation including reuse, recycling and recovery of solid waste. In order to control littering municipalities must develop

Integrated Waste Management Plans in which services that are available are described including recovery, reuse, reduction, treatment and disposal. The Waste Act is relatively new and its implementation through public participation is not yet determined and effectiveness not confirmed because visible waste minimization is at a very low rate amongst communities. Private companies that buy waste from people fluctuate prices and discourage people who are recycling

The waste hierarchy in the diagram, Figure 2.5.1 below, attempts to explain a holistic approach to integrated system and process of waste management from point of generation to point of disposal of waste. The waste hierarchy also aims at waste minimization at source by utilizing a range of methods to reduce and reuse the much available waste as far as possible at household, neighbourhood and cities. The impact of waste on the environment needs to be managed and the damage to the environment needs to be remediated. The process involves participation of all stakeholders including governmental, non- governmental, formal and informal business sector and general public. The process also needs education and awareness to the stakeholders and series of workshops to be conducted. The low and middle income communities of the informal sector carry out a significant proportion of recycling activities in solid waste management.

Figure 2.2 The Waste Hierarchy.



Extracted from Scheinberg (2008: 9)

Scheinberg (2008: 8) supports the objectives of the Waste Act and developed a waste minimization and public participation model in an effort to modernize waste management in a city. The diagram above shows Integrated Sustainable Waste Management that involves stake holders in a municipality. The author sees the model as a mechanism to modernize waste management and changing standards for dumping and land filling in order to reduce pollution related to dumping because of serious consequences of poorly managed waste. General duty to all stakeholders is to practise waste hierarchy policy, take measures to ensure waste reduction, re-use, recycling and recovery, declare priority waste and circumstances where an industry waste management plan may be required.

The diagram below also shows Integrated Sustainable Waste Management that involves stakeholders in a municipality.

The stakeholders can be engaged in various services in solid waste management. Ishengoma (2010:2) identified several groups as examples of participants in waste management. These are: collection and cleansing, indigenous recycling, hiring of transportation services to municipality, special clearing services, export services, information services for waste management and those groups that sell or buy equipment

for waste sector operations. The author further recommends that the groups should unite as waste management operators in associations, expand or extend to other activities individually or collectively. This unity will ensure that participants sustain their projects in waste management. The author recommends that new stakeholders should be included in the list especially low-income group, disabled people and informal sectors (Ishengoma 2010: 2).

Figure 2.3 Integrated Sustainable Waste Management



Extracted from Scheinberg (2008: 8)

In the egg-shaped box the upper third of the Integrated Sustainable Waste Management, the figure represents people, organization and municipalities with interest in waste management. Private companies may be working under contract in the municipality to assist in waste management. Some of the stakeholders may be male or female interested in waste management and therefore can be engaged as local co-operatives to remove waste to augment municipality's refuse removal system. The author identified unrecognized stakeholders who may be street sweepers, waste employees on collection

trucks and waste reclaimers at dumping sites. At Sedibeng District Municipality most recyclers reclaim waste on landfill sites and transfer stations. These reclaimers support the small and micro recycling business as they sell collected waste from householders and bulk waste containers.

In the central part of the diagram of the Integrated Sustainable Waste Management, there are priorities to be considered. These priorities are waste prevention and recovery so that there is a shift of destination of material away from disposal to formal or informal reuse, recycle and composting. Aspects represent positive impacts of technical output and good health through environmental management, socio- cultural- economic effects and institutional, political- legal and policy influences (Scheinberg 2008: 9). The third aspect may be accomplished through legal contracts between a municipality and private contractors. Private contracts may be local community or emerging entrepreneurs augmenting municipal solid waste management or involved in waste minimization initiatives.

2.6 THE ROLE OF THE COMMUNITY IN WASTE MANAGEMENT SERVICES

Many projects have been established to initiate community based projects. Community members become involved in street sweeping and clearing of illegal dumps. Another role played by the community is to constantly identify their representatives who will facilitate public participation issues and participation processes in their area of jurisdiction especially in addressing challenges of waste management service delivery. Nzimakwe and Reddy (2008: 671) maintain that in terms of Section 74 the Municipal Structures Acts 1998 (Act No 117 of 1998), provision on existence of powers and functions have been made for Ward Committees. These ward committees make recommendations to or through ward councilors, to the mayoral committee or the council. The council may delegate duties and powers to the ward committee.

Public participation and integrated development plan is adopted as two interrelated principles. Integrated Development Plan is incomplete without community participation.

The community is offered an opportunity to forward their needs through the ward councilors and ward committees. At an IDP analysis phases a wish list is forwarded to the political office and budget is prepared to be aligned with the projects. During the second phase of public participation, community is informed what major projects have been commenced and completed. For instance, a mini-refuse transfer station falls under medium projects and can be completed within 6-7 months in a financial year. Van Rooyen and Naidoo (2008:74) identified critical environmental issues that demand public participation as they impact directly on the quality of life of the inhabitants. These are pollution in all forms; waste; uncontrolled resource consumption; urban decay and continual decrease in the quality of urban life. The authors propose that sustainable services in the municipalities are dependent on how environmental issues are addressed as an integral part of the planning and operations of the IDP.

Squires (2010: 18) cited nine examples of the roles the community can play to sustain waste management services as follows:

- Management of waste in the household and removing it from the premises. They can ensure that they separate waste and be assisted by the municipality in transporting unwanted waste.
- Reduce waste production and facilitating recovery for purposes of recycling thus improving environment in a small scale.
- Keep public areas clean, by preventing temptation to dump on all open spaces through their willingness to participate.
- Participate in the design of waste management plans so that waste services form part of their daily lives by voluntarily developing a culture of policing themselves in their areas.
- Supply “watchdogs”. This means that they have the right to report people that are seen dumping to enforce municipal by-laws in their capacity.
- Participating in preparing strategic solid waste plans in order to sustain programs and projects.
- Providing public education for raising awareness. Access to information is a requirement for successful public participation

- Sponsoring or participating in special campaigns and competitions to raise the profile of sustainable waste management, for instance, the national and provincial program of Clean and Green initiatives. Squires (2010: 18) identified community stakeholders as non-homogenous and within the adversity of the population listed. For instance, elite communities will not see any need to re-use and recycle waste whereas poor communities will fight for recyclable waste for sustainable living.
- Provide input in sustainable waste management facilities, setting decision- making so that formal landfill operation does not affect them.

2.6.1 Benefits of public participation

According to Kroukamp (2000:52) community participation is a nuisance, time consuming, very costly and frustrating but very important in the government organization. The following are the benefits of public participation as cited by the author:

- Participation constitutes affirmative action. It is an exercise that restores dignity because people become involved, instills self-reliance and creativity. The community finds meaning in social equity, democratic theory and issues of public interest such as policy changes.
- Public participation becomes a means of mobilizing the resources and energies of the poor to unleash their potential for a better life. It consolidates democracy by ensuring that values of the organization are enhanced. The community is able to satisfy their needs because their views become known through their involvement (Kroukamp 2000: 54).
- Public participation is a principle that all governmental spheres at national, provincial and local government have accepted in order to ensure that community needs are addressed in an appropriate manner. Consultation with the public ensures municipalities develop partnerships with the stakeholders. Public participation is a cornerstone of a democratic country and has benefits for politicians, officials, and the public itself.

Khoso (2000:26) maintains that public participation is a pre-requisite in waste management infrastructure such as vehicles and equipment that should be maintained and controlled to service the community at the right time. Regular operation and maintenance on infrastructure encourages the public to be part of the waste management system.

- According to Reddy (1999: 1) Local Government is a sphere of government and is best placed at the grassroots population so that its members are given a sense of involvement especially in the political processes that control their daily lives. The author believes that when local people participate actively, they are offered an opportunity to shape the policies of local government. Davids, Theron and Maphunye (2005: 19) view public participation as a two way interchange of decision making by the community and the government in the implementation of development programmes and projects, participation in the monitoring and evaluation of development programmes and in sharing the benefits of development.

If people participate, they develop a sense of ownership which promotes sustainable development; ensures equity where women and other designated groups become active. In that way, people become motivated, capacitated and empowered especially in waste management where there are waste minimization and composting projects. According to the authors, absolute participation has inherent risks such as costs, time and quality being lost. It is foreseen that not all residents will benefit in participation and therefore certain segments of the population will need a different approach to promote the participation process. For instance, in urban areas residents will see no reason to participate in co-operatives because their areas have good infrastructure.

2.6.2 Challenges facing local municipalities in public participation

Various authors identified numerous challenges related to public participation at municipalities. These challenges impair the process of public participation. Reddy and Sikhakane (2008: 682), for example, cited poor relationships between ward committees. This strained relationship has negative impacts on the functioning of the ward committee

resulting in the break of communication and subsequently backwardness in the quality of information relating to waste management services. It has been identified that people do not know the mechanisms of contacting government structures because democratic practices are new. This ignorance needs to be cleared through awareness campaigns. In the absence of capacity, guidance and resources, it becomes difficult to continue with public participation resulting in internal conflicts. Public members become isolated and meetings fail because of the following reasons:

- Inadequate risk assessment and management of conflicts because not everybody is interested in waste management as long as municipality removes household refuse the resident is paying for.
- People are informed but are not interested. Some people work far from their homes and play a very little role in public meetings as they arrive home late.
- Inadequate consensus whereby people with sufficient knowledge and have ability to debate issues may not be present in the public participation meeting. The inverse may occur where there are professionals who are able to interpret the policy that is under discussion. This may need a follow-up to the meeting.
- Inflexible project design to promote participation. This may need a series of public meetings and categorize residents into business, community and education sector.

The Public Service Commission (2008: 11) identified the following challenges:

- Lack of government commitment to adopting a participatory approach. They believe it is time consuming and the benefit of co-owning the service is forgotten.
- Unwillingness of project officials to give up control over project activities and directions because officials are often not receptive and do not acknowledge the views of the community. This can also be related to why contracted services fail in a municipality.
- Lack of incentives and skills among staff to encourage and adopt participatory approach. Public participation requires a set of skills amongst officials so that they are able to communicate with diverse committees. This lack of skill compromises public participation.
- Limited capacity of local participation and insufficient investment in community capacity building. The community members require information on how they can

participate; therefore they need to be capacitated on how they can be involved in matters affecting their daily lives through their contribution.

- Participation starting too late because the community is not involved at the beginning of the project, but is called upon to assist and intervene when there is imminent failure of the project or the community itself stages service delivery protests and rectify the process through crises management.

- Mistrust between the government and the community. The community feels betrayed because there is no transparency and openness which continually disrupts public participation. The role of the government is to instill confidence to the people by soliciting their inputs in matters of service delivery (Public Service Commission 2009: 11)

2.6.3 Views to improve poor public participation

Squires (2010: 19) listed broad categories of how public participation can be improved as follows:

- **Privatization of waste removal services**

Farlam (2007: 1) concurred with Squires (2010) and described full privatization as a concept in which the government sells its assets to the private sector. Ishengoma (2010: 1) states that privatization of services reduces government's role so that government concentrates on governance issues, lowers cost and increase efficiency in the collection system as private sector becomes long-term provider of services. Ishengoma(2010) believes that the concept, if properly monitored, gives government an opportunity to plan and implement programmes and have better opportunity to design implementable policies.

- **Public- Private - Partnership**

This concept discusses various ways of enhancing community participation in planning, operations, protecting rights of citizen and considering community groups as contractors in the delivery of services. This can be achieved through the investigation of Section 76 - 78 of the Municipal Systems Act 2000 (Act No 32 of 2000) which advises that before the

municipality can hand over municipal services to outside providers, the municipality must convince the MEC that it has no capacity. Public- private- partnership entails involvement of various stakeholders including municipalities and private sector businesses for example, informal recyclers and micro enterprises (Scheinberg 2008: 85).

Public- Private- Partnership is described in South African law as “a contract between a government institution and private party where a private party performs an institutional function and or uses state property in terms of output specification”. It may entail substantial project risk on financial, technical and operational basis that is transferred to the private party, though the private benefits unitary payments from government budget and /or user fees (National Treasury 2007:5).

Ishengoma (2010: 1) defines Public- Private- Partnership as a concept that describes a spectrum of possible medium to long-term relationships between the government and other organizations that are not government, that carry out a project or provide a service. It involves the sharing of risks and rewards in which the private sector assumes substantial financial, technical and operational risk in designing, financing and operation of project and provision of services that are traditionally offered through public channels by the private sector. Ishengoma (2010:1) maintains that the risk inherent in the public-private- partnership relationship can be mitigated through the involvement of central and local government as regulators and focus resources on service delivery planning, performance monitoring and contract management rather than on the direct management and delivery of services. The author outlined various advantages of involving public private partnerships as follows:

- Over a long-term period PPP yields robust and attractive cash flow from investors as it brings the efficiency of business to public service delivery and has the ability to raise additional finances
- It allows the government to retain ownership while contracting the private sector to perform specific functions. The author made reference to National Policy that favours PPP in Tanzania as a country that aspire to attain Millenium Development Goals by year

2025, therefore, aims to improve service delivery including solid waste through PPP concept (Ishengoma 2010: 2).

At the National and Provincial levels of government the main legislation governing PPP's is Public Finance Management Act (1999) and the Treasury Regulation¹⁶. Municipal PPP is governed under Municipal Finance Management Act (2003). Public Finance Management Act and Municipal Finance Management Act focus on delivering outputs through value-for- money solutions (National Treasury 2007: 8).

2.6.3.1 Establishment of co-operatives

Co-operatives are established with an aim of reaching all areas in waste management. In informal settlements of higher density waste services become impossible and in most instances are non-existent due to lack of road infrastructure. For instance, Ethekwini Municipality provides solid waste collection services through local co-operatives in all overcrowded, densely populated informal settlements. The municipality budgets annually for these contracted services and registers this project in the IDP and Service Delivery and Budget Implementation Plans (SDBIPs). The officials monitor the efficiency and evaluate effectiveness of these contracts (Ethekwini Municipality Integrated Development Plan 2010/2011: 88).

Herbert and Gruzd (2005: 46) maintain that the success of the involvement of PPP and co-operatives is how the municipality engages in consultative processes to educate and inform the residents about services to be rendered. The advantage of the concepts is the introduction of the local community to economic activities through the long term involvement in contracted waste services. The authors believe that the long-term nature of contracts allows local equity and management overtime. Both parties must identify the risk associated in PPP as clearly costed and appropriately allocated so that participants know in advance what they are committing to. Procurement for utilization of large, medium and small enterprises can benefit economic development to targeted inhabitants (Herbert and Gruzd 2005: 46).

2.6.3.2 Guiding rules to promote public participation

Kroukamp (2002:50) identified six guiding rules to be followed when public participation is promoted:

- Participation must begin at the lowest level within the community. People who are consumers of service at ground level must gain wisdom and know the benefits of participating in projects and understand what the advantages of such participation are
- Participation must take place at all stages of particular project. These stages include briefing session, ways to present plans, available assistance for citizens, implementation, evaluation stage and whether the project is feasible or not.
- Participation is more than casting a vote or an isolated activity. Community must be able to take decision in the management of its own affairs. If involved community will sustain the project and work as a collective.
- Participation process must deal with resource allocation and control including services needed to achieve the goal. Community must be able to identify their strengths and weaknesses, opportunities and strengths. In this way they will be able to organize themselves as seen in groups of NGOs and CBOs.
- Participation must deal with existing loyalties. Sometimes projects fail because people lose interest as time goes by. People should build tolerance within themselves.
- Participants must be cautious about possibility of conflict in some form. Community and government officials must be able to deal with the conflict that emanates from their activities, example slump in markets that discourages economic activities of the groups especially emerging co-operatives and private partners (Kroukamp 2002: 50).

2.6.3.3 Seven basic steps in development of plan of action towards public participation process

The steps to be discussed below may be applied in situations that need community participation as recommended by Kroukamp (2002:54):

- Form a group of interested people. Stakeholders to be involved must be identified. These will be valuable participants who will be utilized in future activities of the organization, example existing NGOs who are already involved in community projects. A planning group is then established to prepare the rest of the action plan.
- Get to know and involve the targeted community. The community profile must be studied to understand population size, economic activity, existing CBOs and NGOs and problems prevailing in the area. Let the community understand its needs and identify those challenges they need to overcome, example in waste management how best can they be involved.
- Choose initial activities that have a large appeal and reasonable chance of success. The aim is to have maximum participation, example organize busses to take people to the hall for meeting or Mayoral Imbizo.
- Develop a plan of action. The plan should be based on realistic and achievable goals. This will attract other members to agree on the predetermined goals.
- Evaluate the proposed components with potential support to make sure they agree with planned actions. Unpack project proposal and deliberate on components example terms of reference and the scope of project if local community will be involved in the removal of solid waste.

- Implement the plan of action. This step starts with problem identification during implementation and creation of strategies to correct these problems. Volunteers should always be thanked and their participation acknowledged.
- Evaluate on an ongoing basis. Areas with poor success should be noted and analyse those things which went wrong. This will help participants improve their performance example re -explain what was not understood (Kroukamp 2002: 54).

2.6.3.4 Best practices as solution to poor public participation

The United Nations Environmental Program as quoted by Squires (2010; 17) proposed best practices as a solution to poor public participation:

- Develop a public involvement framework so that all communities are reached within the Municipal area
- Identify participants and stakeholders through proper community structures
- Identify appropriate techniques of public participation, for instance, Imbizo meetings such as Presidential visits, National Council of Provinces and Peoples' Assembly
- Plan and execute events by involving local communities
- Allow stakeholders ample time to assimilate the information provided, consider the implications and present their views
- Identify mechanisms which ensure decision makers consider views and suggestions made by stakeholders, integrate findings and recommendations into the environmental assessment report; financing proposal and agreement
- Ensure that responses and feedback are given on the issues or concerns raised

2.6.3.5 Principles of public participation

According to Atlee (2008: 1) the Community Development Societies Principles of Good Governance are:

- Promote active and representative participation towards enabling all community members to meaningfully influence the decision that affect their lives.
- Engage community members in learning about and understanding community issues such as the social, environmental, political and other impacts associated with alternative courses of action.
- Incorporate the diverse interests and cultures of the community development process and disengage from support of any effort that is likely to adversely affect the disadvantaged members of a community.
- Work actively to enhance the leadership capacity of community members, leaders and groups within the community.
- Be open to using the full range of action strategies to work towards the long term sustainability and well being of the community.

Atlee (2008: 2) believes that democratic processes are developmental and there is wisdom involved in these processes. The author cited processes such as making collective decisions, solving social problems and creating shared vision. The following principles offered some guidance for designing democratic processes:

- **Include all relevant perceptions**

Public participation is not about allowing people to rubber stamp decisions. Creative inclusive perception generates more wisdom than mechanical inclusion of people. This means there should be information sharing to the public about participation and waste management

- **Empower the people's engagement**

People should be involved in the creation of democratic decisions. They will support the implementation of the decision and have the feeling of the “We, the people will prevail”

- **Ensure high quality dialogue**

Most public forums need good facilitation to ensure high quality dialogue. This is to ensure that dialogue is deepening understanding, build relationship and expand possibilities.

- **Establish ongoing participation process**

“Intelligence is the capacity to learn and learning is an ongoing process therefore collective intelligence can manifest most powerfully in democratic process that are continuous”. Once-off consultation will not reinforce learning and participation will not yield results (Atlee 2008: 2).

Sewell and Coppock (1977: 15) advise politicians and public officials that the public should know about issues of waste generation, management and challenges of environmental degradation which have a negative impact on the social and health status of the citizens. If the public is poorly informed they will not be able to sustain a high level of participation in waste management.

2.6.4 Types of public participation in waste management

Nkuna (2007: 237) cited that leaders are required to provide direction for service delivery which must be effected within the spirit of a policy framework that facilitates public participation. In the article, Nkuna used the views of Ishmael David, Francois Theron and Maphunye (2005: 114) analyzing Pretty (1995). The authors then listed seven types of public participation he called typology:

- **Passive participation**

This is a one sided unilateral top-down approach by the authorities who tell people the coming event or the past event. This type of information is shared by professional and the community has little opportunity to make changes. For instance, the designs of the new landfill sites are regulated by the Record of Decision and License conditions from the Department of Agriculture and Rural development. The community is informed about the processes of development and no input is expected from them.

- **Participation in Information Giving**

Researchers or government officials on monitoring and evaluation processes of service delivery standards may conduct telephone interviews or questionnaires to people and they participate by answering questions. The public is however not given an opportunity to influence proceedings because the findings of the research are rarely shared or evaluated for accuracy at that point in time, unless another researcher uses the same instrument elsewhere.

- **Participation by consultation**

This is whereby the public is consulted in opinion polls and consultants and planners listen to their views. In strategies of waste minimization the municipality can consult the public on the establishment of mini-recycling facility and where it can be located in their area. Some people may dispute the location whilst others agree to the point of construction of a structure. The consultant may define both problems and solutions and endeavour to modify these in the light of the views of the public. The consultants are not obliged to consider the views of the public and the public does not participate in decision making.

- **Participation for material incentives**

This refers to the situation where people participate by providing resources such as labour in return for monetary rewards. For, instance, a local men or woman may be allowed to use his or her own vehicle to remove waste in the area. The project is either implemented for a period of twelve months or three years and the participants are rotated at the end of the predetermined period. The participants or beneficiaries are rewarded a salary in terms of the signed contract.

- **Interactive participation**

According to Scheinberg (2008: 64) interactive participation is considered when stakeholders participate in a joint analysis for development of action plans and capacity building. The most legislated plan is an integrated development plan and when the community participates, their inputs result to ward-based projects. Scheinberg (2008: 64) defined a stakeholder as someone who has a claim to influence a process or participate in decision making and planning. The term is expanded to include claims based on social, political, economic, health and other concerns such as waste management.

Ababio (2004:273) quoted the International Association for Public Participation (in DWAF 2001: 05) and identified five levels of participation that a municipality can apply in the endeavour to involve communities. The first level is to inform the public what the problem is so that they understand and form part of the solution. Illegal dumping is rife and if a community continues ignoring the poor living standards; rivers, land and air will be polluted. The Integrated Waste Management Plan in the Sedibeng region identified illegal dumping as a threat to the lives of the people because it degrades the environment and therefore people's participation in curbing illegal dump is solicited.

The second level is to consult the community. In the three local municipalities it became evident that introduction of services in the new housing and unserviced areas was a priority. This activity is bound to fail if the community is not involved and not provided

with resources such as relevant vehicles and sufficient personnel to collect refuse in these areas. If it is impossible to accomplish the aims and objectives of service delivery in these special areas, the community should be involved to join government with their resources. The third level is to involve the community in the issues of new policies such as the promotion of waste minimization, reduction of waste generation, reusing, recycling and composting organic waste. Their involvement at household level will sustain waste management services and control environmental pollution.

The fourth level is collaboration where community is involved as equal partners in waste management. For instance, local community members can be identified in densely populated areas and be appointed as co-operatives to collect refuse in these areas. This helps in the upliftment of the previously disadvantaged communities to reduce poverty levels and unemployment rate. The last fifth level is to empower community to be able to make the best of the opportunity to be part of waste management aspects, products and services. This is demonstrated in IDP analysis phase where the community is allowed to identify ward based projects including waste management. Youth can be of assistance in identifying polluters because this age group is targeted for empowerment in municipal services. Revision of tariffs is a legal imperative to enhance municipal revenue so that the municipality is able to render uninterrupted waste collection services (Ababio 2004: 274).

Stakeholders are typically recognized as having a clear stake in waste management. In some instances there are stakeholders that end up unrecognized especially their contribution to waste management. The table below contains a list of stakeholders including the unrecognized. The list is endless especially where age groups begin to recognize their democratic rights.

Table 2.4 Types of stake holders in a municipality

Recognised stakeholders in solid waste	Unrecognized stakeholders in solid waste
Household and businesses who generate waste	School teacher and student
Municipal waste department	Farm workers

City Council or Mayor	Nurses in hospitals or medical school
Environmental inspectorate	Political party in opposition
Private companies who offer waste services on behalf of the municipality	The World Bank
Owners of property, households next to the dumping site	University's Departments of Economics
Employees of the Municipality	The Nation Bank
Private owners of dumping sites or recycling companies	Hydro-electric company for climate change management
A women's union interested in a clean environment	Player in a football team can be environmental patrons
Environmental NGOs	Development Bank of SA (non-finacial)

Extracted from Scheinberg (2008; 64)

Another important stakeholder that is capable of promoting public participation and integrated sustainable waste management is the Institute of Waste Management of Southern Africa (IWMSA). It is a professional organization that promotes environmentally, cost effective and appropriate waste management practices to protect the people of Southern Africa from adverse effects of poor waste management. IWMSA has various interest groups that focus on key waste management elements. Interest groups include Landfill Interest Groups, Collection and Transport Interest Groups, Waste Minimization and Recycling Interest Groups and Health Care Waste Forum. The organization promotes the science and practice of sustainable integrated waste management; provide opportunity for networking; exchange information with experts; have a voice in the formulation of legislation and provide professional and business growth. The organisation contributes to the development of public-private-partnership in waste management through facilitation of seminars, conferences on waste and training of waste management officials in municipalities (IWMSA 2010: 3).

2.6.5 Principles of Service Delivery

The White Paper on Local Government (1998: 93) listed guiding principles to be considered by the municipalities in choosing service delivery options.

- Accessibility of service: the municipality must ensure that all inhabitants residing on their areas of jurisdiction have access to a minimum level of service. People living in informal settlements have the right to waste removal whether it is by way of plastic bin liners supplied by the municipalities and need roads for easy vehicle movement. This does not only help waste services but a range of services related to human settlement such as fire engines and ambulances. Services must be easy to utilize and convenient for the people.

- Affordability of services: Affordability and accessibility are interlinked because equipment used in refuse removal services may be financially unaffordable and costly to the municipality. The inverse may happen that a service is of a high standard that the community may not afford. For instance the rising annual tariffs cannot be affordable to the poor and the municipality must implement Free Basic Refuse Removal Services Policy.

- To counteract the negative effect of unaffordability of service, tariff structure must balance the economic viability and promote access to service by poor. Municipality must determine service levels, if the services are too high they might be economically unsustainable and discourage the community to continue utilizing the service. It is therefore of paramount importance to involve the community on the type of service they can afford. Inadequate service levels may also be viewed as a continuation of division of society classes such as low, middle and high income users, especially in urban areas where there are huge numbers of low cost houses that need refuse collection service but streets are narrow.

- Cross subsidization between high and low-income groups, commercial and residential users. The debt collection department can determine how to differentiate consumers of high and low income residents. The municipality must designate officials to continuously assess and analyze community profile of the area.
- Quality of products and services. The White Paper proposes that the quality of service includes attributes such as relevance to purpose, timeliness, convenience, ethics, safety, continuity and responsiveness to the service users. The purpose of refuse removal service is to promote a clean healthy environment. Community expects municipal employees to remove refuse on time and if they complain they must come back to the member of the public. That is why each municipality must have a call centre or customer service centre or help desk. They must be professional, ethical, have respectful relationship between municipality and service users.
- Accountability for service. The municipality renders refuse removal services by way of weekly house-to-house collection, transportation and refuse dumps management. The municipality remains accountable for the budget, equipment and human resource.
- Integrated Development Plan and services. This proposes that the municipality should adopt an integrated approach to service delivery through proper planning and community involvement by taking into account the economic and social impacts of service provision in terms of policy. For instance, poverty reduction through job creation in through establishment public –private- partnerships in the waste management sector.
- Sustainability of services. This is dependent on the proper utilization of financial, human and equipment resources. Services must be rendered without duplication. For instance, the municipality can consider contracted services for sustainable waste removal service.
- Value for money. This points out to the fact that if the public does not utilize services provided for them, there is a risk of financial loss because waste vehicles, for example,

will move along streets not collecting anything and the kilometers traveled charge on fuel, wear and tear, labourers and drivers.

- Ensure and promote competitiveness of local commerce and industry. The municipality is aware that there is a need to cross-subsidize from high-income groups to low socio-economic residents. Tariffs must be properly revised, published and there must be transparency at all times. Local commerce and industry may refer to the utilisation of private contractors as partners

- Promoting democracy. Public administration at local government level is expected to promote the democratic values and principles enshrined in the Constitution 1996, Section 195(1). Waste management services are an integral part of municipal basic services. The government initiated several programmes that benefit the community and offer opportunities for the community to feel they are part of the democratic state. These programmes include clean up campaigns, clean and green competitions, cleanest town competition and best performing municipality in a Province.

Swill (1997: 222) describes how the government and people become partners in waste management. The public members participated in the implementation of Operation Masakhane which is a government initiative to accelerate service delivery and stimulate economic development. The community is encouraged to pay for services and this can be achieved through an enabling environment, sustainable growth and investment. Enabling environment is a situation where people are updated by ward councilors on both service backlogs and annual tariff increases. Swill (1997) sees the programme of Operation Masakhane as focusing on the mobilization of the public and resources for sustainable waste management services, enhances administrative capacity of local government and maximizes community participation.

Oelofse (2010:159), quoting DPLG (2007) affirms that the new local sphere of government that was created by amalgamating over 800 municipalities into 283 municipalities is further subdivided into Metropolitan municipalities, District

municipalities and Local municipalities. The new three spheres of government are required to function as a single system of cooperative government for the country as a whole, while responsibilities for refuse removal, refuse dumps and solid waste disposal are assigned to local government, that is Metropolitan, District and Local municipalities. The Department of Environmental Affairs (DEA) provides leadership and guidance to enable the other national departments, provincial environmental departments and local municipalities to meet their executive obligations in respect of waste management. DEA is mandated to establish guidelines, mechanisms and structures to ensure that there are properly coordinated, uniform and effective activities undertaken by waste sector managers (Oelofse 2010: 159).

Sedibeng District Municipality developed, completed and distributed its Integrated Waste Management Plans for Emfuleni, Midvaal and Lesedi Local Municipalities. The District listed focus points and recommendations for implementation. Activities are spread over municipal financial years to accommodate budget approval and IDP review processes. As a requirement in terms of the National Waste Management Strategy (NWMS) and the IDP Review Process all municipalities are legally bound to compile such a plan in their administrative areas (Sedibeng District Municipality Integrated Waste Management Plan (2005: 1). In the recommendations of the IWMP there are critical focus areas to be considered such as waste collection infrastructure, institutional capacity, human resource, financial resources, communication, waste minimization and management of illegal dumping.

In terms of the recommendations, infrastructure is needed because public participation is realistic when there are resources to service the community. Landfill sites and recycling facilities promote waste minimization as a modernized waste management process because in these facilities sorting of waste by some community members takes place. The total number of houses that are being serviced determine the average volumes of waste generated by each household and inform the municipality to budget for the unserved areas. This helps in the revision of tariffs according to level of services rendered by the municipality. Personnel availability is crucial in waste management as the public expects

regular waste removal and that monitoring and evaluation of services must be done to ensure economical, efficient and effective waste management programs. The level of community participation is also determined by the response of municipal employees to the public calls or complaints. The attitude of employees towards the members of the public is important to promote good governance and public participation (Sedibeng IWMP(2005: 102-114).

Moore (1996: 29) maintains that government objective is to create value for the society and therefore should ensure that managers utilize proper resources to keep the environment clean, protect the public from natural disaster, educate children and reduce poverty. National government applies coercive power on citizens to pay tax that is ultimately diverted to purchase waste collection equipment. The municipality is in a good position to expand the resources by involving communities to be part of solid waste management services.

Denhardt (2006: 415) states that human resource management and performance improves productivity because knowledgeable personnel are able to bring about innovative initiatives that improve commitment, motivation and creativity of employees.

The need for intensive public awareness and good leadership in waste management is thus highly recommended to enhance waste management services through public participation.

The South African Local Government Association (SALGA) (2009: 48) believes that improved public awareness and education enables municipalities to prepare for the impacts emanating from uncontrolled environmental aspects and services including waste management. The municipality is further provided with opportunity to effectively implement strategies to respond to proper waste management demand. In the SALGA document presented at Climate Change Indaba (2009: 17) climate change responses identified waste mitigation and projects that can be initiated. These projects include establishment of buy back centres, material recovery facilities (MRF's), garden refuse

sites and composting facilities. These projects need to be facilitated through public participation for long term sustainability (SALGA 2009: 48).

Visvanathan and Glawe (2006: 5) state that open waste dumping is prevalent in most developing countries and composting is practised in a small scale though it is estimated that almost half of the municipal solid waste can be reduced through composting initiatives because high percentage of organic material constitutes waste content. Visvanathan and Glawe explain that the reasons for ineffective composting practices are high operating and maintenance costs, incomplete separation and lack of effective marketing. The authors proposed few remedial steps to the identified shortcomings, for instance, municipality must embark on education campaigns and appoint workers from community to conduct door-to-door collection of segregated recyclables and non-bio-degradable waste such as plastic, bottle and tin at home back yards (Visvanathan and Glawe 2006: 5,6,8).

2.7 CONCLUSION

Public participation is needed in most municipalities because of increasing environmental problems. Some of the problems are centred on inadequate provision of basic services such as waste collection, water and sanitation and electricity. Inefficient service rendering can be attributed to lack of financial resources, equipment and technical people that necessitate public participation to sustain waste management services. In this chapter, concepts of public participation and sustainable waste management services have been outlined. Stakeholders and their roles have been identified. Legislative framework relating to waste management services and the impact thereof has been explained. Types of public participation described with special emphasis to public private partnership and establishment of co-operatives to augment waste management service delivery. The next chapter will deal with the overview of public participation in waste management in the South African Municipalities.

CHAPTER THREE

AN OVERVIEW OF PUBLIC PARTICIPATION IN WASTE MANAGEMENT SERVICES IN SOUTH AFRICA

3.1 INTRODUCTION

This chapter deals with an overview of public participation in waste management in South Africa. There are different approaches on public participation in waste that are adopted by various municipalities based on the needs of their population, infrastructure and level of solid waste services they contemplate to render in their areas. Several options that may be implemented to promote public participation will be discussed. These are public-private partnership in waste, co-operatives, composting, Expanded Public Works Programme, recycling programs, awareness, composting and risk associated with some of the projects. Public- private- partnership will especially be identified and analyzed as to how it is controlled, mitigated and managed.

3.2 THE ROLE OF SEDIBENG DISTRICT MUNICIPALITY TOWARDS LOCAL MUNICIPALITIES

There are three categories of municipalities that are established in terms of clause 155 of the Constitution of the Republic of South Africa. These categories are: Category A: Metropolitan Municipalities characterized by areas of population density according to the Municipal Structures Act 2004 Chapter 1 Subsection 2(a)(1); Category B: Local Municipalities; and Category C: District Municipalities. In Gauteng there are three metros, namely, Johannesburg; Tshwane and Ekurhuleni which relate to their local municipalities in terms of service delivery. District Municipalities, namely, West Rand, Metsweding and Sedibeng District Municipality. Sedibeng has three local municipalities, namely, Emfuleni; Midvaal and Lesedi local municipalities. Metropolitan Municipalities are autonomous. Non-Metropolitan Municipalities are served by two local authorities, namely, the local municipality and district municipality (Afrika 2010:162). The author

cites Vennekens and Govender (2005) and further explains that there are three assumptions that motivated the division of local government into local and district municipalities. The first assumption is that some services are better provided on larger scale due to economies of scale and needed to be assigned to the district municipalities. The second assumption was based on the need to improve coordination of planning that can be achieved at district level. Third assumption is that, it has been assumed that opportunities for redistribution exist at the district scale. These assumptions indicate that the district and local municipalities are intended to have differing but complementing roles and responsibilities. District Municipalities are concerned with planning and the promotion of integrated development planning and economic and environmental development. Local municipalities are concerned with public service delivery such as waste management, provision of water and electricity (Afrika 2010:163)

In terms of Schedule 4B and 5B of the 1996 Constitution of South Africa, functions relating to the environment include cleansing, refuse collection and waste disposal. These are tasked to local government sphere through sectional legislation such as National Environmental Management: Waste Act 2008 (Act No 59 of 2008). There is a need to distinguish between the roles and responsibilities of the district and local municipalities. The Municipal Structures Act 1998 (Act No 117 of 1998) outlined specific powers and functions for the district. These relate to integrated, sustainable and equitable social and economic development of the district. This role should be performed through initiating IDP for the district as a whole, build capacity of local municipalities; exercise local municipal powers where there is lack of capacity and promote equitable distribution of resources between the local municipalities in its areas. IDP development is initiated and completed through public participation. The district should develop Integrated Development Plan frameworks to be used by local municipality for the development of their IDPs. It is expected that local municipalities should involve the community in the development of their IDPs. The district is also responsible for waste disposal sites operating at district level or servicing more than one municipality within the district. Local municipalities are responsible for providing waste management services in terms of the Municipal Structures Act (Act No. 117 of 1998). Specific functions include compilation and implementation of general waste management plans, termed Service

Delivery and Budget Implementation Plans (SDBIPs); implementation of public awareness campaigns; collection of data for waste information systems, provision of waste services; management of waste disposal sites within their areas of jurisdiction and enforcement of appropriate waste minimization and recycling initiatives, that is, voluntary partnership with industry and waste minimization clubs.

The study conducted by Afrika (2010:164) discovered that there was very little done by the district municipalities and some are not involved in waste management as is expected and required by legislation. The study was conducted at 46 district municipalities in South Africa; it focused on the roles and responsibilities of local and district municipalities in waste management with particular reference to local government structure, the legal mandate for both local and district municipalities and how these were understood and implemented specifically in relation with waste management and stakeholder engagement. .

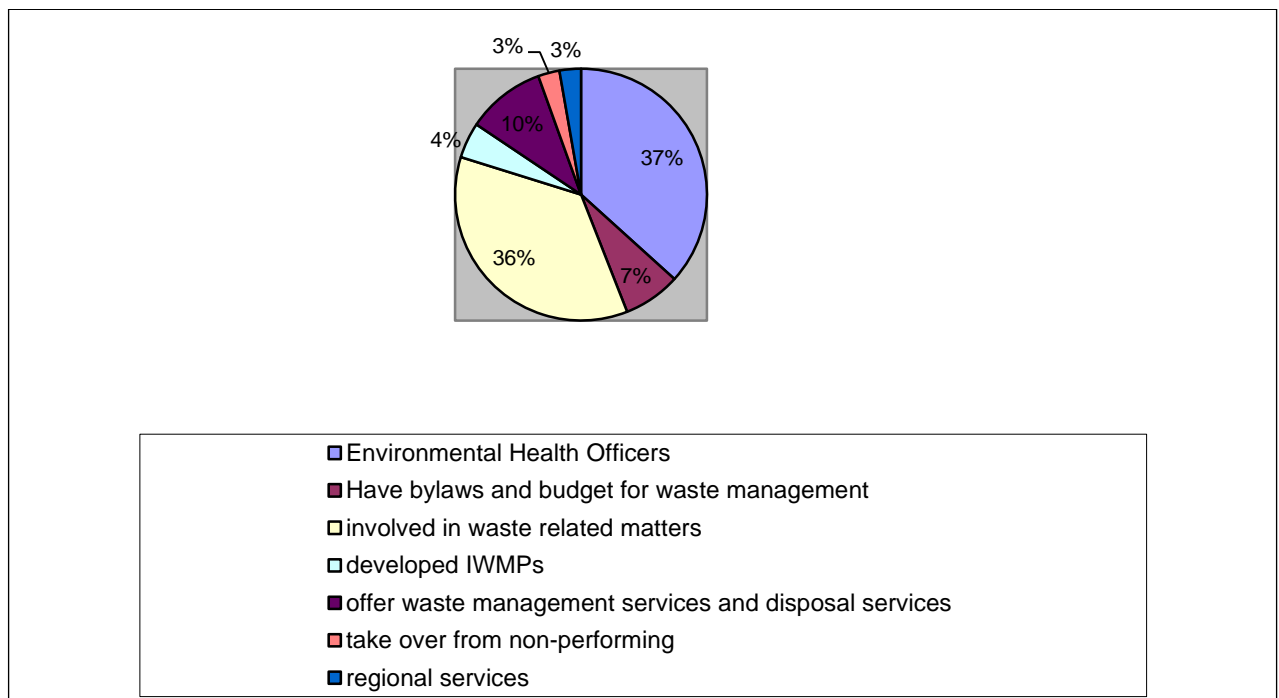
The findings indicated that there is limited technical and capacity building support from the district officials themselves resulting in procurement of external service providers to develop IWMP. District municipality responses showed that eleven per cent offer waste collection and disposal services in areas that are remotely located from any nearby municipalities. The problem facing district municipalities is that delegation of waste management is not as important as other basic services and budget limitations which consequently results in insufficient resources that are allocated for waste management. In terms of legislation, local and district municipalities have different but complementary roles in waste management services at local sphere. District municipalities are to be actively involved and assist local municipalities in places where there is incompetence in as far as solid waste service delivery is concerned (Afrika 2010: 167).

3.2.1 Involvement of District municipalities in waste management

The Pie diagram below depicts the extent of involvement of the District Municipalities in waste management as described by Afrika (2010:167):

- “8 % of Local Municipalities had by-laws and budget for waste management but no provision for public participation
- 36% of district municipalities indicated that waste management is a competency of Environmental Health Officers who do not have clear guidance on waste management responsibilities and they only respond to cases of illegal dumping, overgrown stands and animal carcasses.
- 34% in waste related matters with no public participation programmes in waste management
- 5% developed IWMP with no involvement in waste management in their local municipalities
- 11% of district municipalities indicated that they offer waste management services and disposal services but do not capacitate local municipalities on public participation
- 3 % take over from non performing municipalities instead of capacitating them
- 3% offered regional services such as landfill servicing more than one municipality”

Figure 3.1: The role of district municipalities in waste management.



Extracted from Afrika (2010: 167)

At this stage, it is not clear to what extent is Sedibeng District Municipality involved in waste management issues. Though Integrated Waste management Plans were developed for the locals, it is unknown if they capacitate local municipalities to implement public participation in waste management to minimize waste through recycling, assist them to establish facilities for waste sorting and involve the community in prevention of illegal dumping as they are custodians of environmental management including air pollution. Existence of local co-operatives and public- private- partnerships in waste management is to be determined. This study will also concentrate on the level of support of the Sedibeng District Municipality to Emfuleni, Midvaal and Lesedi local municipalities on public participation in waste management to sustain waste removal services, improve quality of lives of residents through informal job creation in waste and keep the areas clean for better health for all citizens.

3.2.2 Public management ethics and prescribed guidelines

According to duToit, van der Waldt, Bayat and Cheminais (1998: 116) several guidelines for public participation were identified for public managers. The guidelines would assist the community to understand and be certain that public officials operate in their best interest in service delivery. In view of the authors, the prescribed guidelines are legal rules, fundamental rights, code of ethics, right to government information and administrative justice. The prescribed guidelines are as follows:

- **Legal Rules**

According to Morkel (2010:172) the City of Cape Town promotes public participation through involvement of the local community in the door –to- door waste collection and removal of bulk illegal dumps. The process is carried out through the procurement procedures as required by the Municipal Finance Management Act ,2003. The author explains that “the contracts are signed by contractors and the contract management section manages appointments, including general workers and effectiveness of contractors against standards and handling of complaints. Payment of contractors is done only after the submission of evidence that the volumes of waste were deposited to the

landfill site through the weighbridge”. In terms of the Waste Act Section 10 (3) a municipality is obliged to designate a Waste Management Officer to coordinate waste matters.

- **Fundamental rights**

In terms of Section 24 of the 1996 Constitution, inhabitants are entitled to an environment that is not harmful to their wellbeing. Chapter 2 provides for the fundamental rights that include equality, right to life and respect for and protection of dignity. This means Sedibeng District Municipality must be in a position to develop the three local municipalities to be capacitated in waste management matters and be capable of promoting public participation to enhance solid waste management services.

- **Code of Ethics**

Each service sector has a code of ethics that serves as guidelines and reflect the desire of public officials to serve the community with dignity and integrity. For instance, it is acceptable in terms of legislation to build partnership with the community in matters that affect them.

- **The right to government information**

Sedibeng District Municipality’s 2010/2011 Integrated Development Plan guides local municipalities under its jurisdiction. Local IDPs are linked to the Sedibeng District Municipality’s IDPs. The guidelines include government services rendered to the public, what is expected of the community and how they can contribute to the services for sustainable development.

- **Administrative justice**

Section 33 of the 1996 Constitution provides for the rights of each individual that there must be efficient administration. Du Toit et al (1998: 117) maintain that communities are not all well educated or orientated with respect to the operations of the government or conversant with public affairs. According to Denhardt and Denhardt (2006: 137), the success of any political area ultimately depends on the pride and commitment of the citizens. The authors argued that the idea of civic engagement should be rekindled and this lies at the base of all efforts to improve community life and putting citizens first. The concept of putting citizens first, is based on the assumption that people acting as citizens must demonstrate their concern for the larger community, their commitment to matters that go beyond short term interest and their willingness to assume personal responsibility for what happens in their neighbourhood and community. This defines effective and responsible citizen, in turn, the government must be willing to listen and should put the needs and values of citizens whenever decisions and actions are taken. The government must have new and innovative ways to understand that what citizens are concerned about the notion of citizenship involves both rights and responsibilities. The citizens must assume a positive role to better the society as a whole and by so doing, people will be pursuing the good values such as political participation, political equality and justice. The administrators will ultimately be obliged to deliver public goods and services (Denhardt and Denhardt 2006:137).

3.2.3 Objectives and strategies of Sedibeng District Municipality in promotion of public participation

The objectives and strategies that are developed in Sedibeng District Municipality are included in the Integrated Waste Management Plan and are approved in the IDP. Both legal documents require community inputs to add value in the processes (Sedibeng IDP 2010/2011: 36). In order to plan and design solid waste management programmes and projects the District identified the total number of people per local municipality in its region as follows:

Table 3.1 Population status in Sedibeng.

Population Group	Sedibeng District Municipality	Emfuleni Local Municipality	Midvaal Local Municipality	Lesedi Local Municipality
Black	89.6	95.7	40.5	76.8
White	84.7	91.1	66.3	71.5
Coloured	85.0	95.9	36.5	67.6
Asian	92.1	96.0	0	89.0

Extracted from SDM: IDP (2010/11: 29)

Employment and Unemployment status of the Sedibeng District Municipality

Table 3.2 Employment Status in Sedibeng

Population of Employed People Across all Sectors	Male		Female		Total	
	Crude Number	Percent	Crude Number	Percent	Crude Number	Percent
Black	153,212	82.4%	131,602	85.8%	284,814	83.9%
White	28,695	15.4%	19,057	12.4%	47,752	14.1%
Coloured	2,071	1.1%	1,822	1.2%	3,893	1,1%
Asian	1,939	1.0%	897	0.6%	2,836	0.8%

Table 3.3 Unemployment Status in Sedibeng

Population of Employed People Across all Sectors	Male		Female		Total	
	Crude Number	Percent	Crude Number	Percent	Crude Number	Percent
Black	42,349	94.04%	54,184	95.37%	96,531	94.78%
White	2,203	4.89%	2,145	3.78%	4,349	4.27%

Coloured	37,6	0.83%	407	0.72%	783	0.77%
Asian	105	0.23%	79	0.14%	184	0.18%

Extracted from SDM IDP (2010/11: 30) quoting Global Insight 2009

The unemployment and employment status represent the need to prioritize the community needs. The unemployed indigent group of people needs to have access to basic services such as waste removal, electricity and water. As a result of unemployment in the region, the community does not show any interest in improving waste management services and they are not aware of their role in participating meaningfully in the local government efforts of improving the good quality of life of the residents. In planning for public participation the district can opt for local co-operatives especially in densely populated areas with poor road infrastructure (Mazinyo 2009:42). Areas with growing informal settlements are existing and are expanding. The unemployed community members can be registered in a data base for consideration in the recruitment and procurement of local co-operatives for waste removal, recycling and composting activities as proposed by Mazinyo (2010: 42).

3.2.4 Factors reducing public participation in Sedibeng District Municipality

Ababio (2004: 276) remarked that “apathy is a function of indices such as age, gender and area of residence”. What contributes to reluctance to participate in policy process can be attributed to various factors such as lack of resources, ignorance of the community and lack of capacity of the municipality officials. Low participation levels by the community in local government activities are a reality as demonstrated below:

- **Historical Factors**

In terms of Section A of the White Paper on Local Government (1998:01) apartheid segregated and forcefully removed Black people to municipalities that were never viable, resulting in great majority of the Black community not being aware of their role in the new government structure. In Sedibeng District Municipality, these areas were Evaton, Sharpeville, Sebokeng, Bophelong, Boipatong, and Residensia. In these areas there are

weekly household refuse collection services introduced to the community but there are still illegal dumps visible at open spaces and highways along N1 and Golden Highway.

- **Lack of education and civic apathy**

Few reasons are cited such as that the community is not adequately informed to participate and majority of the community are not clear about the role of municipality. The community is not competent to participate in municipal and government planning issues that would influence them directly and some residents may be aware of their ward and town but may not identify with the ward councilors and town council. Ward committees were introduced with the aim to enhance participatory local democracy in terms of Local Government: Municipal Structures Act, 1998 (Act 117 of 1998). Reddy and Sikhakane (2008: 687) discovered that in Buffalo City rural inhabitants were least invited to Council public meetings and this created a gap in the knowledge of council activities, budget and service delivery.

- **Community disillusionment with local government ineffectiveness**

Thornhill (2007: 285) cites Section 24 of the Constitution of South Africa which affords everyone the right to an environment that is not harmful to their health and well-being. The author observed that the community of Makuleke came into partnership with private companies to improve their development and conservation of their natural resources. The community needed access to information and knowledge on government services. Nzimakwe and Reddy (2008: 672) maintain that the public must govern and must be actively involved in government issues at local level. The authors report that at Ethekwini Municipality there is a community participation policy to facilitate mechanisms and processes of public participation in the Durban Metropolitan area.

- **-Lack of public accountability, ethical conduct and perceived corruption**

Ababio (2004: 278) states that municipalities should be accountable and answerable to their superiors and external authority. This will promote high ethical standards of behaviour that is needed from public servants. The author believes that the behaviour and conduct of municipal officials and councilors do not meet the expectations of the public

resulting in loss of confidence of public members as officials and councilors cannot deliver on the promises of better service delivery towards better life for all. This can be observed, through public demonstrations and service delivery protests not only at Sedibeng District Municipality but in other provinces as well in South Africa. This needs to be avoided through the involvement of the community by informing them why some projects cannot be implemented so that they become part of the solution.

Matshabaphala (2007: 241) believes that service delivery depends on strategic leadership where such leadership needs to be always alert to the needs of the community at grass roots level for effectiveness and efficiency in South Africa. This implies that municipal officials in leadership capacity should be developed and skilled to demonstrate good leadership in the process of delivering services to the public and integrate strategic processes to community development and participation. Tshishonga and Mbambo (2008: 767) maintain that people should actively partake in local government sphere for development. This requires multi- skilled, empowered and conscientised municipal officials, citizens and communities of South Africa as whole. To reinforce accountability and commitment in service delivery, Nkuna (2007: 231) warns those in public administration to use strategies such as media to promote public participation. This will improve decision and judgment about what services should be delivered through participatory administration.

- **Non- representativeness**

The community often complains that the services that are provided by the municipality are of low standards and rarely address their needs. Shortage of staff and equipment in waste management departments results in backlogs and odors from plastic refuse bags that are not collected. This discourages the community which subsequently clears their sidewalks by dumping on open spaces. Waste management has been implemented on an ad-hoc basis due to amalgamation of previously disadvantaged areas that did not have waste removal services at all. Strydomm (2006:5) sites how the community of Bontheuwel in Cape Town initiated a No-messing Project to avert the negative impact of environmental conditions they were leaving under. The grass root level volunteers

cleaned the streets, planted the trees and educated the community to take care of their environment. The aim of the project was to change the mindset of the community and the face of the area as the place was very dirty and nothing was done by the leaders of Bontheuwel to counteract dirty and appalling conditions of the area.

Local municipalities of Sedibeng District Municipality have complained that they have neither sufficient funding nor adequately trained and skilled staff to effectively plan and implement waste management functions in a sustainable manner. Communities have not been involved and that the level of services differed from one area to another, specifically in previously disadvantaged areas that were left with no service since 1984 (IDP 2010/11: 24).

Sedibeng's strategy to ensure promotion of waste minimization and maximize recycling of waste is a response to the requirement of the National Environmental Management: Waste Act (No.59 of 2008) that waste management must move away from routine curbside collection to waste minimization, recycling, reuse, reduce and recover waste. This is possible through the involvement of community as these activities are not a core function of the municipality. The table below shows the strategies as planned in the Sedibeng District Municipality's IDP (2010/2011:90).

Table 3.4 Strategy: Ensure the Waste minimization and maximize recycling projects

Key Deliverables	Activities
Update SDM Integrated Waste Management Plan and develop a Waste Information System	<ul style="list-style-type: none"> -Develop terms of reference and circulate to local municipalities -Engage with local municipalities the district IWMP/WIS formulation -Establish waste facilities for the community
Ensure the rolling out of community campaigns such as waste management to improve quality of life of residents	<ul style="list-style-type: none"> -Clean-up campaigns as part of World Environment Day -Integrate programmes with the provincial and national environmental events in the

	region
Ensure the development and implementation of a waste recycling strategy	Advertise for industrial waste exchange project

SDM IDP (2010/11: 90)

Waste minimization, waste recycling, reuse and reclamation are recommended in the IWMP of SDM. Linking the IDP to IWMP is a better mechanism to reach community and there is a synergy between the two documents.

3.2.5 Public participation in waste management

Public participation and stakeholder engagement is viewed as a means to achieve democratic developmental governance at district level. The aim is to solidify social cohesion, enhance developmental aspects of public participation; promote governance approach to public participation and ensure a two-tier system of public participation. Sedibeng DM identified challenges in implementing public participation process in Sedibeng such as inconsistent functioning of Ward Committees; late and inadequate feedback given to the community, lack of follow-up service delivery complaints, weak oversight and accountability on service delivery related complaints raised by the community in public meetings. To solve these challenges, turnaround strategy on local government emphasized amongst other things; partnerships between communities, civil societies and local government to be strengthened, municipality to meet basic needs of the community and to build clean, effective, efficient, responsive and accountable local government. Sedibeng further recommended that previously disadvantaged communities should have easy access to services as a whole and that the municipality should have people oriented administrative structures and political office bearers (SDM IDP 2010/11: 43). The partnerships formed may be in the form of allowing certain areas to be serviced by the community to augment municipal services.

- **Strategy: Ensure public participation**

The SDM Integrated Development Plan (2010/2011:117) identified key deliverables to accomplish successful implementation of the strategy to ensure public participation. Stakeholders to be involved as key role players are ward committees, religious groups, youth groups, CBO's and NGO's as tabulated below:

Table 3.5: Promotion of Public Participation through stakeholder participation

Key Deliverables	Activity
Strengthen Ward committees through providing assistance programmes	<ul style="list-style-type: none"> -Community stakeholder engagement on regular basis: Religious groups, Rate payers, youth groups -Engage community organizations such as CBO's and NGO's -Design programme for ward based participation
Build capacity of councilors to be effective public representatives.	<ul style="list-style-type: none"> -Present participation report -Engage councilors and schools -Provide Councilors with information for community programmes -Setup provincial SALGA (build capacity) -Engage councilors in research -Distribute relevant policies
Implement and coordinate petition management system	<ul style="list-style-type: none"> -Petition management in place -Petition policy communicated to the community
Hold public meetings	<ul style="list-style-type: none"> -Public meeting programs

	-documents to be put in libraries
Arrange Sectoral Imbizo	-Include designated groups
Facilitate establishment of street committees	-strengthen ward committees
Reviving priority area environment management and waste management	-Update IWMP and WIS -Facilitate recycling

SDM IDP (2010/2011: 117)

- **The attitude of residents towards the municipality**

According to Ababio (2004: 276) the community has been reluctant to show interest in local governance because they were not initially oriented on how the government works and how they would play an important role to make the government work for them in service delivery including waste. The author also states that community participation can take self-serving forms of action leading to clashes due to a variety of interest in the community. This view was demonstrated by the secretary general of the African National Congress in his public speech when he reassured South Africans that the uprising and destruction of property is not about service delivery, but about those political individuals who serve their interests first and influence the public to reach their goals (SABC News: Morning Live (18.02.2011)).

- **Implementation strategy for basic refuse removal services to the indigent household**

The National Policy for the provision of basic refuse removal services to indigent households has been legislated to improve waste removal services in previously disadvantaged localities such as the high density, low income areas. This policy relieves the poor from paying essential municipal services as they cannot afford to pay the full price thereof. In terms of Clause 74(2)(C) of the Municipal Systems Act 2000 (Act No 32 of 2000) these poor household must have access to at least basic services such as water, electricity and refuse removal. The implementation of this policy needs stakeholder participation to inform residents so that indigents must register to benefit in the provisions of policy (DEA 2010:1).Fragmented and uncoordinated ways of controlling

pollution and waste, must foster partnerships between government, communities and the private sector to deal with waste related issue (Kuye, Thornhill, Fourie, Brynard, Crous, Mafunisa, Roux, van Dijk and van Rooyen 2002: 139).

Folz and Frech (2005: 73) maintain that one aspect of solid waste management is recycling which has become a popular way for citizens to support environmental conservation that helps to extend the life of local landfill sites. The authors report that in 1998, small cities in the United States of America developed more than nine thousand curbside programmes and twelve thousand recycling drop off centres. This was the result of increased levels of public participation in this co-produced level that helped to boost the national recycling rate from nine percent in 1989 to twenty-eight percent in 1999. Ninety percent of the small cities provided waste collection and disposal services, two thirds have solid waste recycling programme, whilst thirteen percent of these small cities contracted out recycling services to private or no-profit organizations. There is only two percent of the country that operates the recycling programme within the municipality (Folz and French 2005: 73). The Sedibeng District Municipality recommended that the three local municipalities should improve levels of waste minimization through recycling, reuse, reduce, and reclamation of waste in order to improve solid waste services.

Jewaskiewitz (2012:3) explains that there are a number of municipalities that are faced with challenges in the management of landfill sites that are running out of airspace. The author warns those municipalities that would possibly embark on to projects facilitated by private companies which promise initiation of projects at no cost, that there is no priceless component in waste management. For instance, proper investigation needs to be done whether waste to energy is a viable project in those municipalities that are small in size and are cash trapped. Comparison should be done and best options looked into, such as, awareness and education to residents to separate waste at household level before it is disposed to landfill sites. This is a form of promoting community participation and preventing landfill sites running out of airspace. In densely populated communities and informal settlements, skip bins can be placed in strategic areas as pick up points and informal dwellers can be encouraged to separate cans, bottles, plastic and paper.

Alternatively, the municipality can appoint a private contractor with bin lifting equipment and engage the local community to clear the strewn waste around the skip bins. The municipality should also encourage the community to recycle at source to minimize and reduce waste that is deposited into the skip bin (Institute of Waste Management of Southern Africa October: 2010). Strydom (2006:8) makes an example of tyre recycling and reuse of waste material, that jobs can be created through awareness and education whereby manufacturers, distributors and vehicle owners educate communities and construction companies to reuse tyres in a manner that will prevent environmental pollution and reduce fatal road accidents. In this process there is a need to comply with Waste Tyre Regulation that would ensure that tyre industries play their role to involve municipalities and other stakeholders such as retreaders, importers and dealer's association. The burning of tyres as a source of heat in open spaces is an environmental hazard. The picture below is an example of a pick- up point in informal settlements.

Figure 3.2 Collection point near informal settlements



Extracted from Institute of Waste Management of Southern Africa presentation October 2010

Ward Councilors are ideally placed so that they are a link between the municipalities and the people. Their role is to communicate people's needs and problems to the

municipality. They should consult and inform communities around municipal services and programs such as ward- based programs funded by the Municipal Infrastructure Grant (MIG). These waste programs directly benefit the community as these communities participate in the form of Expanded Public Works programs in cleaning and litter picking around these landfill sites (Emfuleni Local Municipality SDBIPs 2011 : 5).

According to Boya (2012:8) Pikitup in the City of Johannesburg, developed a new strategy of eradicating excessive waste production by residents, businesses and individuals in order to have less waste disposed at landfills sites. The company came up with waste minimization activities for waste generators, for them to rethink when buying, reduce rate of generation, reuse and recycle waste. These activities would result in less collection, storage, transportation and disposal of waste. The householders, businesses and individuals are expected to reduce negative impacts on the environment through waste minimization at the point of generation. Boya (2012:8) boasts great achievement in implementing the strategy, in that the statistical results showed 15% of waste minimization through separation at source,, including composting; 30% was through waste to energy plant construction and initiation and 55% was the benefit of additional landfill space, giving the landfill site added lifespan of eight years. The success was much dependent on public support and participation. Pikitup encourages manufacturing companies to take back their own packaging and other recyclables. It develops facilities that promote reuse, recycling and composting of organic waste and these initiatives will encourage maximum participation of residents in recycling through continuous education and awareness campaigns that capacitate residents in the process. These initiatives will be sustained in the City as there is population growth of nine percent per annum and waste generation will need to be managed as well (Boya 2012 : 8).

Landfill sites managers are inundated with demands to comply with lists of legislation and ever-changing work processes in operations of landfill sites. Van der Merwe (2012: 16) maintains that in order to comply with landfill minimum requirement, environmental legislation and regulatory standards, vendors, manufacturers and producers should ensure that reuse and recycle takes place with very little or no landfill at all. This can be

accomplished through the establishment of facilities that ensure that activities undertaken by interested stake holders do not affect people, environment and society. van der Merwe identified e-waste that needs to be properly managed as: ferrous, non ferrous metals, PVC, lead, acid batteries, printer cartridges, precious metals, plastic, cardboards and paper. All these need one-stop recycling to minimize e-waste to landfill and prevent underground water contamination (van der Merwe 2012: 17).

Matete and Mahomed (2012: 49) conducted a study amongst medical and chemical engineering students in University of Kwa Zulu Natal, to identify opportunities for hazardous waste minimization that has a potential to contaminate general waste and landfill sites. The authors observed that the university does not have a waste minimization plan for any of the three waste categories, namely, hazardous, general and inert waste. Hazard waste contains organic or inorganic elements with inherent physical, chemical or toxicological characteristics that have lethal impact on health and environment, therefore, need a specialized safe disposal and management.

The aim of the study was to determine the status-quo of hazardous waste management using case study schools at the University of Kwa Zulu Natal, develop a plan, identify opportunity for waste minimization and assess the willingness of students to engage in hazardous waste minimization. Separate storage facilities were provided for chlorinated and non-chlorinated waste. Hazardous waste was separated into chemical and bio-hazardous stream where chemical waste was then separated for each waste stream. Students were the generators of waste, therefore, were expected to handle their waste and deposit it into the marked drums. Collection and disposal was done by a contractor, waste minimization was done through the process of re-distillation of solvents and chemical exchange programmes for generated waste were put in place. The less toxic chemicals were replaced with chemicals used in projects and students' practical. The study discovered that 79% of students generated waste weekly, 72% understood waste minimization and 90% was willing to participate in implementation of the waste minimization plan provided there were workshops to capacitate them. The management

of chemical and hazardous waste can be introduced to high schools to ensure that municipal waste and landfill sites are not contaminated (Matete and Mahomed 2012: 51).

Ward committees are structures from different sectors of the communities. Their role is to assist and advise ward councilors thus increasing and promoting community participation. The positive impact they have is effective dissemination of information, assessment of needs, building partnership, consulting the community and picking up local problems related to refuse removal, illegal dumping and inconsistent periods and days of refuse collection (Emfuleni Local Municipality Policy on Ward Committees 2010:4).

Sedibeng District Municipality is a custodian of Community Development Workers who are deployed so that by working together, communities can access government services. The most important role is to give advice to people, help people with service delivery problems, assess needs and work with local people to build partnership with Government. The advantage of using Community Development Workers (CDWs) is that they have good contact with the organizations because they know the community very well and can help in research, consultation and monitor implementation and disseminate information (Emfuleni Local Municipality Policy on Ward Committees).

3.3 OPERATIONAL PROJECTS INVOLVING PUBLIC PARTICIPATION IN WASTE MANAGEMENT

Waste Management as a broad concept of service delivery invites the public to participate in the following: Public- Private- partnership, local co-operatives, composting, waste minimization which includes recycling; reduce and recovery of waste material, Expanded Public Works Programme, Awareness and education and composting.

3.3.1 Public- Private -Partnerships in Waste Management

Hampwaye (2005:83) reports that the city of Cape Town designed a Community-Based Waste Management System, which is a successful model of partnership between local

government and the communities in the service delivery of solid waste management services. In this project, great emphasis is placed on the promotion of pro-poor economic development that benefits the poor. There is equitable service provision. The project cultivates responsibility among the communities and promotes skills development and cost-effective service in the waste management sector. Hlongwane (2006:1) emphasized that the mandatory obligation of waste service delivery to the community compelled the city of Cape of Town to design strategies that would offer all city residents access to waste removal services. Due to densely populated informal settlements and RDP houses outsourcing of refuse removal services was opted as a convenient and flexible alternative to waste services in the city. In these areas, City's Integrated Area Cleansing and Waste Collection is fully outsourced. The community members enter into contracts in terms of procurement processes. This system is successful and worth replication in other municipalities (Hlongwane 2006:2).

Several service delivery projects have been identified by the municipalities to have a potential of improving the socio-economic status of the people. When public private partnerships are involved in waste they should target local communities and have a direct impact on the poor and previously disadvantaged communities thereby effecting local socio-economic upliftment. The Integrated Waste Management Plan for Nelson Mandela Metropolitan Municipality (2005- 2010) explains that Local Agenda 21 of the UN conference on Environment and Development is for sustainable and environmentally sound development for all countries. It states that Local Agenda 21 objectives and activities aim to minimize waste collection, maximize environmentally sustainable re-use, recycle and promote safe waste disposal and treatment.

The IWMP for Nelson Mandela Metropolitan Municipality stressed that in order to accomplish the objectives Local Agenda 21, consultation and interaction with NGO's, focus groups, voluntary groups and politicians was key starting point in the participation of the public in waste management. Education and awareness to communities and initiation of programmes to encourage behavioral change was a practical action to promote sustainable development and participation in waste management.

Gqoli (2004:10) explains that public-private- partnerships were designed and approved with the objectives to deliver high quality basic services to historically underserved areas; ensure greater diversity in the government and the private business commitment. The National Treasury PPP Note Number 03 of 2004, Code of Good Practice for Black Empowerment in PPP applies to departments in public entities listed and constitutional institutions. The municipality may choose which type of PPP is best between giving out municipal service to private company or allow private company to utilize state and municipal property for commercial purposes.

According to the National Treasury Regulation 16 (2004:14), public- private- partnership project managers and partners must design and identify its location. They should take into consideration its relevance to integrated development plans. The National Treasury passed a public- private- partnership project cycle reflecting Treasury Regulation 16 in terms of the Public Finance Management Act 1999.

Farlam (2007:42) quotes the National Treasury Regulation 16 (2004) and gives guidelines that the risk mitigation strategies are effective financial strategies. Attention to detail is required during the planning phase before the South African Treasury approves the first submission. Feasibility study must be undertaken in the PPP project during the preparation phase. During this phase operational and strategic benefits of PPP are explained. The proposal allocation of financial, technical and operational risks between the municipality and the private party are set out. The institution assigns costs for all the risks associated with undertaking the project.

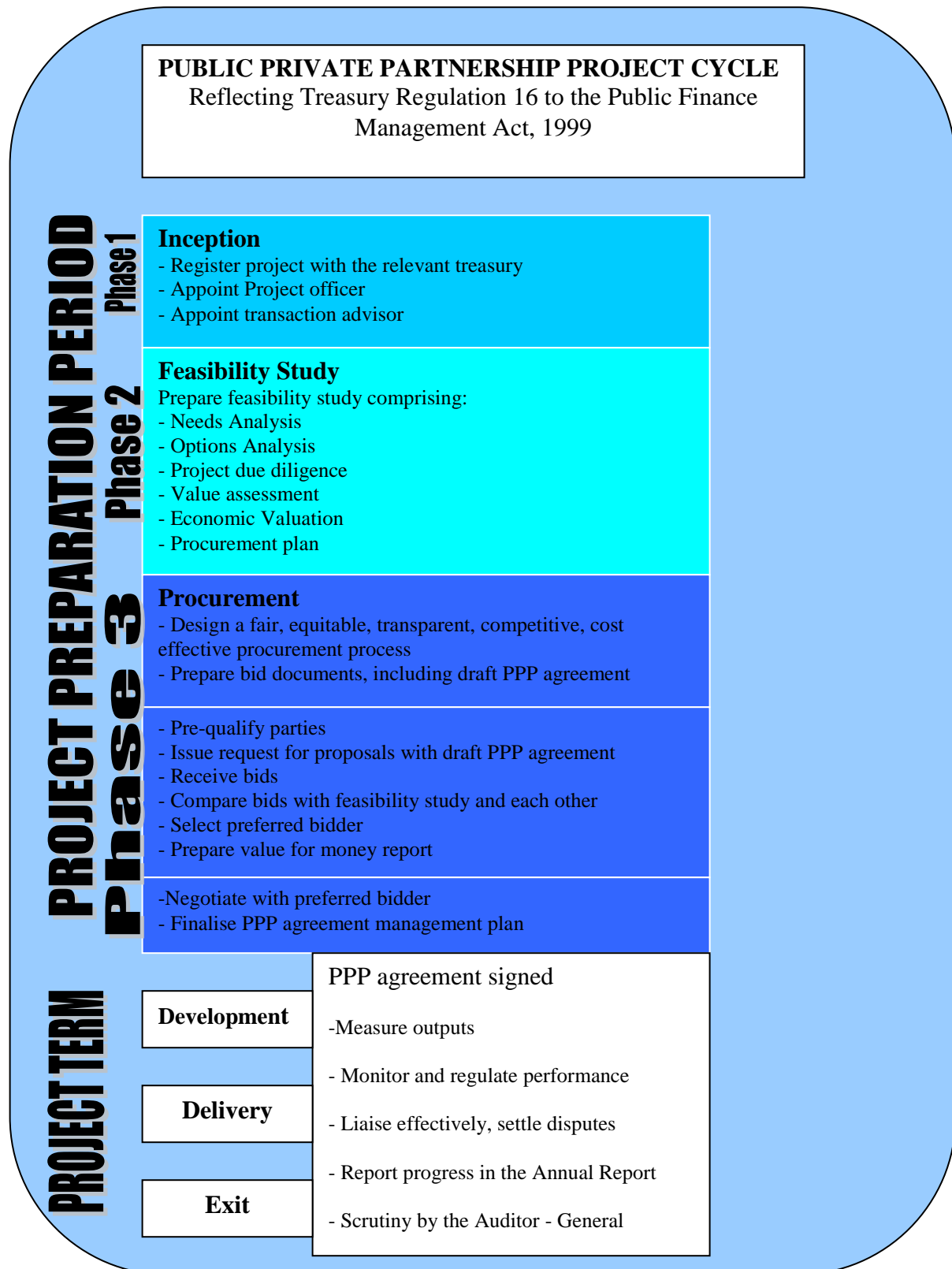
Environmental Conservation Act, 1989 (Act No 73 of 1989) is the most important piece of legislation governing waste in South Africa. During public participation processes officials in the environmental sector need to educate the public on the regulations of this Act to capacitate community on issues of compliance in waste management. For instance, health care waste is managed separately to prevent underground water pollution and contamination of the environment.

Kalema (2007: 253) argues that there is growing concern among communities that misuse of public funds is a result of lack of accountability and less interest in fulfilling the demands of the general public. The author observed that public complaints are not taken seriously and most of the time public is not involved in accountability issues thus violating their democratic rights. The solution to this problem is to involve the community in the identification of objectives in service delivery and how will the objectives be accomplished. The requirement for sustainable waste management service is an innovative of enhanced community participation through training, awareness and education campaigns that are supported by the availability of resources for participation. Srivastava, Kulshreshtha, Mohanty, Pushpangadan and Singh (2004: 534) support public-private-partnership in service delivery though there are challenges that are directly related to the establishment of PPPs. The authors identified barriers in the accomplishment of the objectives as influenced by the non-willingness and apathy of the community to participate; lack of environmental awareness and education and lack of an integrated approach to the establishment of the project. The solution to these limitations is to promote co-sharing of activities in solid waste management, and promotion of public-private-government partnership. Where there is excessive waste generation community should be taught about waste segregation at household and industry level. In Sedibeng lack of resources such as operational vehicles and timeous replacement of personnel in waste management department affect service delivery leading to backlogs in waste collection. Involvement of local co-operatives and private service providers can assist in curtailing the extent of backlog and sustain a clean environment.

Zotos, Karagianis, Zampetoglou, Malamakis, Antonopoulos, Konogianni and Tchobanoglous (2008: 1687) proposed that willingness of stakeholders and awareness raising on public participation should be harnessed in the agenda of public education. Waste collection, waste minimization, promotion of recycling and material re-use should be sustained through the co-operation of the community the community and industries as waste generators and producers. In Sedibeng district the public participation processes are in place and the extent of involvement of the community in waste management is yet to

be established. The amended National Waste Management Strategy was Gazetted on May 2012. The strategy does not compromise on participation of the civil society in waste management. The private sector should be responsible for the waste generation and provide information on the waste it generates (National Waste Management Strategy 2012) The guidelines introduced by National Treasury below will assist municipalities in accounting how funds will be utilized for the benefit of the community.

Figure 3.3 National Treasury PPP model of project cycle



Extracted from National Treasury Regulation No 16 (2004:11).

The National Treasury (2004) insists on public sector operator model and identifies the steps to be followed in mitigation of risks. The steps are:

1. Identify the risks
2. Identify impacts of each risk
3. Estimate the likelihood of the risk occurrence
4. Estimate the cost of each risk (multiply the cost and the likelihood of it occurring)
5. Identify the strategies for risk mitigation
6. Allocate risk (identify risk to be borne by the private party and those to be shared)
7. Construct a risk matrix (consolidate all project risks, their impacts and associated costs)
8. Construct the risk adjustment model
9. Conduct a preliminary analysis of test affordability (Farlam, 2007:43). Below is an example of identified risk

Table 3.6 Identification of risks in PPP

Risk	Explanation
1. Appointment of project officer and transaction advisor	Possibility is that the incumbents are not experienced with PPP projects and fail to meet the objectives of the project.
2. Procurement plan	There is a possibility to forget women, the disabled, youth, and NGOs. Overlooking the designated group may delay approval by the National Treasury especially those in the local geographic area
3. Design risk	Possibility is that the private party design may not achieve the required specification, for example, the type of equipment he/she may use to assist in waste management
4. Interest Rate	Fluctuations of interest rates may affect project loans leading to failure of the project
5. Operating risks	Project dependencies such as equipment, skilled workers, labour disputes, employee fraud may stall the

	project
6. Annual reports to treasury	Project manager may not meet the deadlines and the auditor general might discredit the municipality
7. Political Risk	Unforeseeable conduct by a government institution that affect the expected return on equity or cost of project

Extracted and adjusted from Farlam (2007: 41). Sourced from South African National Treasury PPP manual (2004: 63-66)

Table 3.7 Risk analysis in Public- Private -Partnership

Risk	Absolute - inherent risk						Control Assessment
	Likelihood	Score	Impact	Score	Category	Score	Identified Control
1. Appointment of project officer and transaction advisor	Likely	4	Critical	5	High	20	<ul style="list-style-type: none"> - Proper scoring in tender documents on functionality, e.g. how many projects of the same nature have been implemented - Experience in finance matters is a requirement
2. Procurement Plan	Likely	4	Critical	5	High	20	<ul style="list-style-type: none"> - Municipal Finance Management Act to be properly implemented - Contracts to be signed and complied with
3. Design risk	Commo	5	Moderate	3	Medium	15	<ul style="list-style-type: none"> - Subject to legal department

	n						<p>first</p> <ul style="list-style-type: none"> - Refer to tender documents and advertisement
4. Interest Rate	Almost certain	5	Critical	5	High	25	<ul style="list-style-type: none"> - The person must provide for contingencies in quotation - Compare process of hiring versus purchase of equipment
5. Operating Risks	Almost Certain	5	Critical	5	High	25	<ul style="list-style-type: none"> - National Strikes are unavoidable, therefore communicate with municipality and make up for the hours lost
6. Annual Report	Likely	4	Critical	5	High	20	<ul style="list-style-type: none"> - Auditor general to receive reports at specified times. - Disciplinary measures and sanctions to be imposed to the

							responsible staff
7. Political risk	Likely	3	Moderate	3	Medium	9	<ul style="list-style-type: none"> - Code of conduct for councilors viewed as reference - Conduct workshops on stakeholder involvement - Define roles

Extracted from Presentation of the Risk Management officer Emfuleni Local Municipality 2011

Konyana (2011:2) defined risk management as a process of identifying, assessing and prioritizing risks of different kinds. As described above, the author categorizes risks that need to be mitigated as political, financial, operational and project related. The underlying premise of enterprise risk management is that every organization exists to provide value for its stakeholders and there is no risk free environment. There is a risk inherent to delivery of services. Risk management is a management function that is fully integrated with all planning, budgeting and performance process of the municipality. It is a tool for ensuring that the municipality meets its objectives and ultimately service delivery (Konyana 2011:2).

3.3.2 Engagement of Local Co-operatives in Waste Management

The aim of the involvement of local co-operatives is to mitigate against environmental pollution and degradation in the area of jurisdiction of the municipality. Mazinyo (2009:42) mentions that twelve thousand informal households in Duncan Village near East London benefited from the project that was funded by the Dutch Municipality and supervised by Buffalo City Municipality Environmental Health Department. Mazinyo (2009:44) cited that one hundred and sixty-seven local residents picked up litter at pick-up points established in strategic areas that are densely populated in informal settlements of Duncan Village. They signed contracts between them and the Buffalo City Municipality to remove refuse and sweep streets within the informal settlements. The impact of the project was that there was improved waste management in the area through the involvement of local co-operatives in these informal settlements (Mazinyo 2009: 42-47).

According to Rubelli (2011:9) EtheKwini Metro Council experiences environmental challenges due to the existence of 97500 informal units that have 250 000 population resulting in waste service delivery problems. The solid waste division contracted with a private management company, UNITEC (PTY) LTD. The company planned, managed and supervised the project. It engaged Black Empowerment contractors and this was easy to implement because supervision and vehicle maintenance was included in Munitechs's contract. Those involved in the waste project were eighteen contractors and five women contractors who participated as Women's Equity category. Rubelli (2011:9) cites that 703 people were beneficiaries in the project to reduce unemployment and minimize poverty. The author points out that in Inanda, there are

informal contractors for black bag distribution to houses where the cost of collection per house per week in 2004 was between R3 and R4.00, but this excluded the cost of cutting vegetation and skip truck contractors. The process of appointing contractors was done in a transparent manner where ward councilors were involved and interviews were conducted. The contractors used small and medium trucks to collect door- to- door waste deposited in black plastic bags by householders. Skip contracts are used in less accessible areas but this system yields less success as very often spillages are regularly experienced.

Another waste management system that promotes community participation as reported by Rubelli (2011:9) is the establishment of drop off centres that are run by small business in garden refuse centres. The national government funded twelve community buy-back centres. External donors funded training of staff from other local councils as landfill supervisors, education officers and litter assistants. Durban Solid Waste maintains 103 paper banks that are mostly situated in schools.

3.3.3 Expanded Public Works Program (EPWP)

The former Minister of Labour, Mr M. Mdladlana published Ministerial Determination No 3: Expanded Public Works Program on Government Notice 22 October 2010 No 949. The EPWP is a program to provide the public or community assets; or services through a labour intensive program initiated by government and funded from public source. Working for waste is one of the programs that constitute expanded public works in community- based programs. EPWP programs and projects are incentive based and include those implemented by Non-Governmental Organizations, Community Based Organizations and Community Work Program. The conditions of employment for EPWP are that the state implementing agent or contractor hires workers to work in elementary occupation on EPWP. The workers are employed on temporary basis, or contract paid on task- based work or task- rated or time-rated basis. This program supports many projects to a number of people in the municipality in service delivery departments, like roads, electricity, water and sanitation and waste service delivery (Government Notice 22 October 2010: 6).

3.3.4 Recycling, re-use, reduce and recovery

The objectives of sustainable waste management is to retain natural assets and benefits from natural environment, keep people healthy and active through their participation and involvement. In terms of National Environmental Management: Waste Act 2008, waste should be managed at source, that is, the point of generation where waste is separated from a waste stream for further use and the owner processes that separated material as a product or raw material. When waste is reused, it means that some articles from the waste stream are utilized again for a similar or different purpose. Industries, private companies, Non-Governmental Organizations and Community Based Organizations have noticed benefits of waste reclaiming that it has a job creation and poverty alleviation elements. The municipality benefits in that the much needed space of the landfill site is saved and the environmental degradation from excessive waste generation is mitigated. The municipality needs to keep a database for the reclaimers and register them to assist them with the establishment of buy-back centres; mini-recycling facilities; drop-off centres and transfer stations (National Environmental Management: Waste Act 2008 (Act No 59 of 2008)).

3.3.5 Composting of green and organic Waste

Composting is another area where the public can participate to promote waste management services in a municipality to save landfill site. Danso, Drechsel, Fialor and Giordano (2006: 1400) did a study of composting among farmers who were prepared to pay for compost in order to improve their food productivity in their land in the region. The authors identified urban and peri-urban farmers who specialize in high value crop for urban consumption and export. To accomplish their objective they banned the use of chemicals as they contaminate the land. Organics from composting were widely used as an elixir for soil and most favoured in food production. The shredding of greens benefits the municipality in that the tree trunks occupy a lot of space if deposited on landfill sites, reducing the much needed space for other types of waste that are easily compacted in the sanitary landfills. For instance, the Gauteng Department of Agriculture and Rural Development focuses on development of rural farmer to be active in food production, to reduce poverty, hunger and unemployment in the Province.

Van der Merwe and Steyl (2004:184) undertook a case study on 350 rural landowners to reveal the extent of environmentally detrimental waste generated in the Western Cape. The study confirmed that inappropriate storage; collection and disposal strategies were used on rural property. Sanitary landfills were poorly constructed, located and operated resulting in environmental problems. Farm owners were willing to participate in public service delivery and pay for the services rendered to them. Van der Merwe and Steyl (2004:185) identified that 40% of the population still lives in rural setting and that this is the group of citizens that is largely ignored by the government and is to be catered for by rural landowners or the occupants themselves. The authors proposed that there should be participation of government authorities and all stakeholders in order to minimize adverse effects on environment; develop waste management systems that placed highest priority on waste prevention; minimization, reuse and recycling in order to accomplish the objective of environmentally sound disposal facilities.

Waste minimization was implemented in the form of composting of organic waste that is permanently disposed to create fertilizers and soil conditioners. In the study region, it was established that approximately 60% vineyard waste, 25% of orchard waste, 71 % of vegetable waste and all animal manure is composted. The problem of pesticides and oil that contaminate soil and pollute rivers, needs a separate management system such as engagement of private companies as these are hazardous in nature. If these are burnt in densely inhabited areas they course an evil-smelling smoke (Van der Merwe and Steyl 2004:192).

3.4 DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT IN WESTERN CAPE

Hoon, McBain-Scharl and Chetty (2004:9) describe the impact of environmental problems as emanating from the neglect by municipalities of waste management services as most essential public and basic services. This has resulted in pollution of various media such as soil, air and water. The authors applied the waste management hierarchy to develop Integrated Waste Management Plan for Western Cape based on the requirements and priorities in the interest of the public and integrated it with the municipality's Integrated Development Plan. During the

development of IWMP, private companies, NGOs, municipal officials, councilors and community members were involved. After capacitating the stakeholders in the Western Cape Province, the IWMP became a working document and the Integrated Waste Management Forum comprised of officials and community became a platform for stakeholders to interact with local government on issues regarding waste management. Hoon et al (2004:7) maintain that stakeholders were able to discuss, support and advise the environmental management department in various areas, such as aligning IWMP, health care waste management plans, IDP, promotion of new technologies and bringing people up to date with the new waste management technologies (Hoon et al 2004:7).

3.5 CONCLUSION

This chapter has dealt with public participation in waste management with specific focus on various types of participation to sustain waste management services in the country. Sedibeng District Municipality's Integrated Waste Management Plan and problems of population density coupled with unemployment rate have been analyzed. Public- private- partnership has been discussed in terms of legal approaches and risks inherent to the concept that need to be managed and controlled. Waste minimization and composting of organic waste to save the landfill space have been highlighted as important activities to be undertaken by communities to preserve their surrounding environment as well as sustaining waste services for better life for all. Expanded Public Works Program and local contractors have been discussed as projects that aim at reducing poverty and unemployment in waste management. The next chapter deals with international best practices in public participation and partnerships in waste management.

CHAPTER FOUR

INTERNATIONAL BEST PRACTICES IN PUBLIC PARTICIPATION AND PARTNERSHIPS IN WASTE MANAGEMENT

4.1 INTRODUCTION

This chapter deals with the international views on best practices in public participation and partnerships in waste management. The discussion focuses on the ways that other states and cities implement public participation. Partnership strategies that can be utilized elsewhere including South Africa are analyzed in depth. Good practices that can be replicated will also be analyzed to suit the situation of Sedibeng District Municipality where the new information will be disseminated.

4.2 PRACTICES IN WASTE MANAGEMENT WORLD WIDE

World cities and towns differ in population density and geographical size. Services rendered to the public should, however, be equal irrespective of the type of settlement people are allocated to.

4.2.1 Community Based Solid Waste Management Projects in Netherlands

Several studies were conducted in the field of solid waste management and it was established that community participation in service delivery and waste management from other sectors like water supply and sanitation will have relevance to solid waste management. In Netherlands, Aanschutz (1996: 5) found that low income neighborhoods were involved in waste minimization projects. The author explains that there were two core issues namely, inadequate waste services for low income communities and inequalities in the provision of waste services and employment levels. Inadequate waste services for low income communities involve the collection and recycling of solid waste. These inadequate service levels were the result of poor physical conditions such as narrow lanes and unpaved roads; lack of political power of low income communities and unplanned, unauthorized neighbouring settlements. Socio-cultural minority

groups and position of women were a concern and were involved in the operation of informal waste collection and recycling which reinforced their low social status. In the view of the author, low income areas are of home base of these groups that are involved in sorting and recycling.

In Netherlands, community-based waste management projects were implemented by members of the community to clean the neighbourhood and earn income from sale of recyclable waste and composting. As described by Aanschutz (1996: 5-6) groups divided waste management services into two categories namely; primary and secondary waste collection. Primary collection is a community- based waste collection from neighbourhoods to a dumping site outside the area. Secondary collection involves waste transportation to the final disposal site and operation of this site is done by the municipality. The benefit of community -based waste management system is that solid waste services covered a larger population through mobilization of the community and public- private resources. Private entrepreneurs were integrated in the solid waste management system in support of households and the municipality was the mediator to fight their opposition of community- based services (Aanschutz 1996: 5-6).

Fransen (2010: 133) reports that Dutch producers and importers responsible for marketing, packaging and packed products advocate prevention, collection and recycling of used packaging so that there is less packaging material in municipal waste and street litter. Waste diversion is simple prevention of uncontrolled disposal in the form of open dumping. The author highlights that high diversion was demonstrated in Tompsin Country, St Francisco and Quezon City. People changed their behaviour to compost waste, separate waste at their offices, separate collection of kitchen and garden waste. Producers in the mentioned cities modified and adapted to the system. This practice can be replicated in other countries if municipalities are aware of the proper operations and management of landfill sites.

4.2.2 Decentralization of solid waste services in Lusaka

According to Hampwaye (2005:80) failure of the Sustainable Lusaka Program and other programs dealing with solid waste collection emanated from financial; human resource and administrative weaknesses, including incapacity to provide people with infrastructure and

services and neglect of solid waste management as a public service. Due to increase in population and rural- urban drift, most people live in unplanned settlement with consequent inability of the local and national government to deliver basic services particularly to the poor. The author explains that decentralization arrangements in service provision have an element of poverty reduction focusing on pro-poor strategies wherein poor unemployed people participate in the same poverty reduction program. The author further explained that six major types of contracts in waste management were identified to provide public service by the private sector. These were: service contracts; management contracts; build-operate-transfer; concession; joint ventures and community- based provisions. The type of contract chosen by the municipality was dependent on the local conditions and availability of financial resources. This was also dependent on the political will to facilitate private sector participation. Hampwaye (2005:81) maintains that new waste management system for Lusaka was based on co-operation between stakeholders and private waste management companies. The new system aimed at ensuring that all the city inhabitants have access to affordable waste management and live in a waste free, healthy environment. The city adopted five principles namely: polluter-pays; priority waste hierarchy; full cost recovery; proximity and affordability. These principles would ensure that inhabitants become responsible citizens in waste management. The priority waste hierarchy was aimed at recycling waste before final disposal. Waste recycling industries near peri-urban areas were taught to be able to reduce poverty by creating jobs among residents. The ward councilors became involved and urged residents to participate and deposit waste in designated areas. In this way the ward councilor was encouraging residents not to leave waste management to the council only. The country of Lusaka decided to embark on this decentralization system of service and legally transferred power, authority and functions of solid waste management from the central governments to lower organs or sub-national government. Advantages of this system were:

- Local government service provision can be more responsive and flexible than delivery by the central government
- Decentralization brings about improved governance, equity and development as well as poverty reduction
- Decentralization bring the government closer to the people
- A more open political system is created

- Participation is promoted and the control of functions held by the local municipality and stakeholders is improved, thus increasing efficiency and effectiveness. Where public-private-partnerships are created, qualitative and quantitative shortfalls are addressed and managerial efficiency is improved with access to finances and knowledge of technology to give opportunity to public sector to provide social responsibility, awareness and access to local knowledge
- Decentralization improves access to services and allocation of infrastructure and resources
- The poor are afforded better access to local public services through political decentralization for better participation in services such as water, energy and waste management

The author, however, identified few disadvantages of decentralization:

- Devolution of functions from central to local government may pose a challenge in the implementation process due to lack of financial; human and equipment resources including capacity
- Functions may be transferred to locals without corresponding fiscal resources, consequently, there will be unfunded mandates resulting in decentralizing poverty. The proposed solutions to challenges of decentralization are:
 - Municipalities that are financially cash trapped need to actively involve private sector so that both parties share the risks of participation projects and not transfer the risks wholly to the private sector
 - Incapacity and inadequacies of local municipalities can be improved through collaboration with private and public sector and creation of public-private-partnerships (Hampwaye 200: 82).

Muswema (2010: 288) identified few pre-requisites for an enterprise relationship. These are: signed agreements of co-operation between the two parties, that is; prospective service provider, supervisor and municipality. Both parties should declare equity shareholding, there should be South African Revenue Services registration that should be solicited as a legal requirement. The service provider should submit proof of employing three or more staff by showing pay-slips and Department of Labour consultation. Unemployment Insurance Fund (UIF) and training are important requirements for SMME development. Public-private-partnerships in waste

management has not been implemented in a large scale in South Africa including Sedibeng District Municipality due to various reasons that limit involvement of private companies and lack of funds to kick-start these projects in municipalities. Forsyth (2004: 429) defined public-private-partnerships as partnerships that maximize public debate about the purpose and inclusivity of collaboration between state, civil and market actors, as well as achieve the economic purpose of collaboration. The author believes that the deliberative partnerships benefit all parties, investors, state and citizens through cost reduction in meeting local needs and creation of norms that bound both the government and private partners. The establishment of partnership cannot be difficult in Sedibeng District Municipality as the executive mayors and council speakers of the three municipalities are conversant with public participation and issues of cooperative governance. Projects like conversion of waste to energy, reducing green-house gas on landfill sites can be established to mitigate climate change and create jobs locally in the implementation of projects. Emfuleni L.M. has a plan to convert waste to energy.

4.2.3 Stakeholder participation in solid waste management in Asia

Joseph (2006:865) highlighted the importance of involvement and participation of all stakeholders such as waste generators, waste processors, formal and informal agencies, non-governmental organizations and financing institutions for sustainable waste management. Joseph (2006) maintains that in order to achieve sustainability in waste management an integrated approach requires to be adopted. This includes prevention of waste generation; recycling; energy recovery and environmentally sound land filling of waste. Involvement and participation of all stakeholders and government institutions is very important and if properly implemented yield best results. Industries which have significant impact on recycled products after consumption must form part of stakeholder interaction between waste system and other relevant systems. The author identified areas where stakeholders can be involved in Asian cities as follows: household waste collection services where communities participate by segregating waste at household level and organize it to compostable material for anaerobic digestion and recyclable waste. In Asian cities, streets are unpaved and semi-paved and these have all types of municipal waste. These need drain silt to be segregated and disposed without mixing with the other waste. Another area identified was Nalgouda District of Andra Pradesh in India where there was zero garbage but had

no dustbins supplied. The town was divided into seven zones having a tractor and few sanitary personnel who were going around the zones at specified times and households handed over the garbage to the sanitary personnel. The project achieved 100% segregated garbage without any additional staff and sanitary machinery. This helped in revenue generation through the sale of recyclables and compost (Joseph 2006: 865).

Blottnitz (2012:1) related two-stream approaches in the implementation of dry and wet waste bins that are used to avoid unnecessary disposal on landfill sites. The author advises that household food waste, garden greens, canteen and restaurant waste including non-sorted from of paper should form part of South Africa's industry. Sedibeng District Municipality has local municipalities like Midvaal and Lesedi that are mostly rural and agricultural in nature. Rural farmers need to be identified and local people educated and orientated on separation of dry and wet waste. The municipality benefits in that the landfill life is extended, leachate is reduced and green-house emissions are suppressed. Where there is nutrient recovery, use of fertilizers is minimized, soil content is improved and there is organic certification. Energy recovery from landfill sites promotes energy saving and improves better sales to the needy communities. Public-private- partnership is enhanced in that waste generators, recyclers, municipality and industries are collectively involved.

Nottingham (2012: 275) concurs with Blottnitz (2012: 1) on wet and dry waste concept. The author believes that wet and compostable waste make up 50% of waste to the landfill and guarantees that composting reduces the volume of green waste by 40-60%. The author in his study introduces the use of earth worms that further reduces the volumes through the activity of earthworms, thereby, improving soil fertility and promoting land rehabilitation for food production and development of parks. This type of project needs workshops to be conducted to agricultural farmers to make it viable in the Sedibeng District Municipality.

4.2.4 Door-to-door collection: Chennai experience

Chennai is one of the metropolitan cities in India that promote door-to-door garbage collection through the co-operation of the local councilors and the environmental staff. Households and

shops keep two bins in order to recycle waste at source. One bin is for recycled material to be given to reclaimers and the other is for food; organic waste and inorganic waste that is taken out for municipal disposal. There are compost plants for disposal of compostable waste. Collection services are also privatized in Chennai and an innovative method of private participation is in place. The concept of decentralized compost is recommended by Joseph (2006: 868) that it should be promoted and be complemented with marketing strategies for compost and windrow composting should be practiced at solid waste dumping grounds. The quality of compost will depend on the type of greens and organic waste deposited on the composting facility for processing. The author maintains that high quality compost produced is not an issue as long as composting activity reduces the quantity of wastes that are disposed on the sanitary landfills and subsequently landfill emissions are minimized. Another recommendation of the author is that there should be allotment of land, power, water and reasonable rates and taxes for setting up plant for recycling of solid waste. In urban areas, there should be long term contracts and short-term loans to encourage interested public members to participate in solid waste management (Joseph 2006: 869-870).

Palm (2012:7) maintains that all domestic waste should be sorted at source in terms of National Domestic Waste Collection Standards. These standards require the service provider in the area to provide appropriate containers, should have waste removal schedule and provide clear guidelines to households regarding the types of waste in relation to waste sorting. The activity of waste separation needs municipality to encourage community to recycle. The role of municipality in this regard is to provide facilities where source separated waste can be dropped for collection. It is not necessary for the municipality to collect source separated waste but public must undertake to participate in this activity.

Local non-governmental organizations in India mega cities also initiated a program on waste management proving that the community can be responsible in waste management collection services. Colon and Fawcett (2006: 917) published their study on 'zero waste management scheme' on how NGOs and CBOs developed neighbourhood door-to-door waste collection services, initiated composting and recycling activities. The municipality played a crucial role to ensure that waste by-laws are not violated at all in the project by drafting waste handling rules.

The rules laid guidelines and demanded source segregation and waste recovery to ensure that the community participates fully and integrate their activities in the municipality's integrated plans. Sedibeng District Municipality has the potential to implement this type of project because they have Integrated Development Plans in place and all Executive Mayors and Council Speakers conduct public participation meetings.

4.2.5 Research within integrated project 'waste' in Switzerland

The study conducted by Joos, Carabias, Winistoerfer and Stuecheli (1999: 417) in Switzerland revealed that there were process changes in solid waste management material flows. There was firstly widespread introduction of refuse bag charges that encouraged consumers to become more directly involved with solid waste problems such as the strategies to reduce excessive product packaging. The second one was the effort made by manufacturers of consumer products to reduce the amount of packaging material and to recycle secondary or transportation packaging. This project was a success in the region. The third material flow in solid waste was the separate collection of used paper, various types of glass, batteries, PET bottles and green waste. The success of this project was absolutely dependent on the genuine desire of the population at large to do something about the environmental management. Though this type of waste was not yet charged on householders, it yielded best results in the region. The fourth material flow was the substitution of waste wood and old tyres for fossil fuel in the cement industry. This was an indication that private industry is interested to utilise more and more waste in production processes contributing to the current technologies, economies and ecological factors (Joos *et al* 1999: 418).

Tariff charges in the Sedibeng District Municipality are not related to the volume of waste removed per household. Parthan, Mike, Wilson and Cox (2011: 592) propose that in any given year multiple stakeholders involved in waste management should pay for their services. According to the authors different rates may be charged according to different service providers such as landfill disposal, household collection, special prepared services like builders rubble and bulk containers. Tariffs should also be aligned to the by-laws of the municipality to control

illegal dumping and to emphasize “Polluter Pays” principle as contained in the National Environmental Management Act, 1998 (Act No 73 of 1998).

4.2.6 The waste promotion program in the city of Jaslo (Poland)

The City of Jaslo in Poland, promoted the concept of household waste separation since 1993 but the quality and quantity of recyclable material remained low. Grodzinska-Jurezak, Tarabula and Read (2003:67) relate that the residents’ participation had to increase in the city’s integrated waste management services and the UK approach to public education had to be adopted. The approach entailed recycling road show that was modified and the program was based on visiting many households by the home advisors who were selected from the local secondary schools. The home advisors were trained in municipal solid waste management and communication principles, their role was to inform residents about the local waste recycling system, conduct a short survey and provide people with specific educational material. The results of the survey revealed that 75 % of people recycled scrap metal; 50 % claimed they will recycle; others admitted that they did not participate for various reasons. The educational campaign yielded best results in that there was an increase in recycled tonnages, material and recycling rate from tenement block and private housing areas of the city. The paper recycling was more than glass in collection. The council ultimately extended both the program and increased funding for another year due to good results of the project. The authors maintain that the goals of the project were to increase segregated recycling tonnage and raise public participation in the waste service in the Jaslo City through awareness of waste generation, making residents think differently about the waste they produce; increase the level of personal ownership and better understanding and recognition of the need for waste management facilities.

Public participation is not only conducted by municipalities, but government agencies in environmental and waste management have the responsibility of increasing public participation. Charnley and Engelbert (2005: 167) relate that effective community involvement is hardly an easy process because most people expect the municipality to do everything. If the community is asked to participate the proposal raises emotional stress unless the project is fully explained. In

the Gauteng province and local municipalities of Sedibeng there are public participation units who involve industries, businesses and other departments within the municipality.

4.2.7 Private sector participation in delivering solid waste management services in Bangladesh

Ahmed and Ali (2006:781) studied and examined the role of facilitating agencies in developing tripartite partnership for solid waste management service in Bangladesh. The authors learnt key lessons such as a number of obstacles that prevented spontaneous partnerships among the public sector, private sector and people. Facilitating agencies were able to overcome the obstacles to form partnership of the three. The tripartite arrangement resulted in high accountability and better service delivery. The author further proposed that cities in developing countries should resort to private sector participation in delivering solid waste management services. This can be done at Sedibeng District Municipality to reduce the volume of illegally dumped waste on open spaces. Ahmed and Ali (2006:781) further state that public-private-partnership is viewed as a potential alternative to the traditional service delivery by the public sector and both public and private sector agencies share the responsibility in providing service though the arrangement can take many forms. People can support private sector participation with payment of service charges and play an active role in improving accountability and service quality of both public and private sector. In this way there will be a paradigm shift from passive service receivers to active service partners. External help from facilitating agencies may enable the public and private sector to form partnership with the people for better service delivery. In order to implement this project the stakeholders were involved and Bangladesh waste department of the municipality hired an NGO called Prodiplan which acted as facilitating agency. A memorandum of understanding (MOU) was signed between the Solid Waste Unit and Prodiplan. The NGO was expected to embark on the door-to-door collection service and citizens were required to pay small amounts of service charges. Six wards were selected and public awareness campaigns were intensively demonstrated. A compost plant was built near the dump site. Aerobic and vermin-compost was developed and this was demonstrated to several NGOs surrounding the city. A ramp was built for secondary bin site but it was not user-friendly as it yielded to multiple handling of waste. The municipality decided to construct a better ramp to directly deposit on to the bin. Medical waste

was mixed with municipal waste. A hospital waste management program was designed. The support of the Mayor motivated the NGO and the program was extended to clinics which paid a reasonable service charge. Prodipan staff visited Dhaka and India to observe good practices and to increase their knowledge. The door-to-door garbage collection program increased from six wards to twenty-six wards, because of the involvement of all the stakeholders wherein the relationship was cemented between municipality, private sector, elected representatives and the citizens. Sedibeng District Municipality can also involve NGOs in cleaning of streets in towns

Challenges and barriers identified by Ahmed and Ali (2006:784-790) against public-private-community partnership were as follows:

- Lack of capacity to conceptualize and implement innovative approaches by municipalities. The public sector does not have the skills to change the traditional mode of service delivery and build partnerships with the private sector and citizens. They do not even have funds for experimentation along this line.
- There is no felt need among municipalities to work with NGOs and citizens
- Due to lack of funds, skills and access, NGOs, CBOs or citizens do not have advocacy for public-private-partnership with municipalities. The authors recommended that there should be formal tripartite arrangement rather than ad-hoc or informal arrangement and that there is a need for support from citizens and elected representatives in addition to support from municipal officials and private sector. The authors also claim that areas under public-private- partnerships based on solid waste service delivery were considerably cleaner; behaviour change achieved and better service was experienced by rate payers due to fruitful discussions among public and private sector agencies (Ahmed and Ali 2006:784-790).

4.2.8 Public-community- based- participation (PCP) system in India

Chakrabarti, Majumder and Chakrabarti (2009:125) studied the plight of India in solid waste management where municipal authorities executed 98% of waste management. Taxes for providing municipal services were on a flat rate and not in relation to the volumes of waste generated by those paying the tax. This implied zero-marginal cost of waste generation

resulting in unlimited waste generation leading to additional difficulties in providing the desired level of public service. The authors further identified the capital-intensive modern techniques which increase efficiency in waste collection and disposal cannot be implemented in India due to capacity problem of the municipal authorities. The authors recommended realignment of responsibilities between private sector, public sector and civil society. Integrated approach was recommended as a possible solution to waste management service whereby private sector involvement with community participation was implemented. Community participation linked to waste management authority was a frequently suggested method. Private sector involvement with community participation was only implemented at household collection level. The authors further proposed that the starting point to introduce new methods of solid waste management was to embark on people's awareness regarding the new method and promote willingness to co-operate with the authorities. The municipal authorities involved NGOs; the informal sector and private business agencies. (Chakrabarti et al 2009:129). In Sedibeng NGOs in waste still need to be developed.

4.2.9 Pro-poor public-private- partnership (PPPP) in Dares Salaam

Ishengoma (2010: 3) explains that the livelihood of the poor must be central and urban settlements sustainable development is only possible if solid waste management concerns are adequately addressed with specific focus to social dimension of the citizens. The author defined pro-poor-public-private-partnership (PPPP) as a public-private- partnership which is poverty focused, poverty friendly or which involves and benefits also the poor. This type of partnership ensures that the poor participate in the provision of services; receive the services and the activities also benefit the poor. Sedibeng can recruit people in informal settlements to be part of waste management. Waste management services have these qualities and therefore need to be implemented in poverty alleviation programmes and projects. This type of public-private-partnership should have a set criteria, for instance, services should be affordable and accessible; the poor must be willing to participate. If there is reluctance to participate sensitize the people and involve all stakeholders in planning, implementation and management of their services. The risk inherent to the public-private- partnership should be shared and not transferred as a whole to private sector. There should be by-laws

accommodating the PPPP, flexible pro-poor contracting, legal framework and enabling environment.

Ishengoma (2010:6) outlined practical PPP options, their advantages and disadvantages as follows:

Table 4.1 Practical PPP options, advantages and disadvantages

PPP Brief description	Advantages	Disadvantages
1. Franchise type of contract for waste collection and disposal (CBOs, NGOs, SMEs)	-Is cost saving, municipality not involved in waste and fee collection -Increase revenue collection	- Difficulty to deal with non-payment as private sector
2. Waste companies have exclusive rights to collect waste and fee (e.g. done in Nakuru, Mwanza and Moshi)	-Is cost saving, municipality not responsible for salary payment of workers -Revenue enhancement and more income for municipality	Challenge of dealing with non-payment by private company
3. Street/road cleaning/drain sweeping contract per length of street	-Income/ money for private - Clean roads and drains	Requires very close supervision by municipality
4. Waste Collection for main big market contract to private with direct payment per load (done in Dar es Salaam)	-Sure money for the private - Clean markets	Require very close monitoring, follow-up and supervision
5. Franchise contracts to community local leaders or committees for waste collection if their neighbourhoods for direct	-Cost saving, local authorities are not involved in primary collection and not responsible for fee collection and close	Is a burden to local leaders who are usually unwilling to charge their people

charges and pay disposal fees	supervision	
6. Contract to the private for waste collection and paid for the amount (volume and tonnage)of waste disposal by local authority which bill waste producers directly	- Ensures removal of all solid waste, reclaimers therefore get more money as all solid waste is disposed on landfill	-Causes reclaimers to scramble for reclaimable waste including non-waste material and stones -Forces authorities to prohibit recycling on landfills
7. Franchise type of contract for disposal fee collection and dump site maintenance and pay percentage to municipality	- More revenue gained by local authority from percentage of dumpsite	-Dealing with non-payers as they cannot be prevented from dumping
8. Different PPP contracts- same sector -Primary waste collection by CBOs -Secondary collection to companies -Waste collection fee for disposal	- there is avoidance of fee collection by local authority -income to fee collectors - there is creation of more employment within the same sector -there is sure money to waste collectors	- requires empowerment to the agent to collect fees on behalf of municipality -requires customer satisfaction to prevent eruptions of disputes

Extracted from Ishengoma (2010: 6)

In Dares Salaam, waste contractors operating PPP based solid waste management establish their own association at municipal level. Ishengoma (2010: 7) points out that these associations were useful in collective bargaining, representations in waste issues and negotiation opportunities. The author acknowledges that it is difficult to establish co-operatives but with the willingness of the community, private sector and municipality it is possible. Once established, the project has positive spin-offs.

4.2.10 Establishment of small transfer stations in Egypt

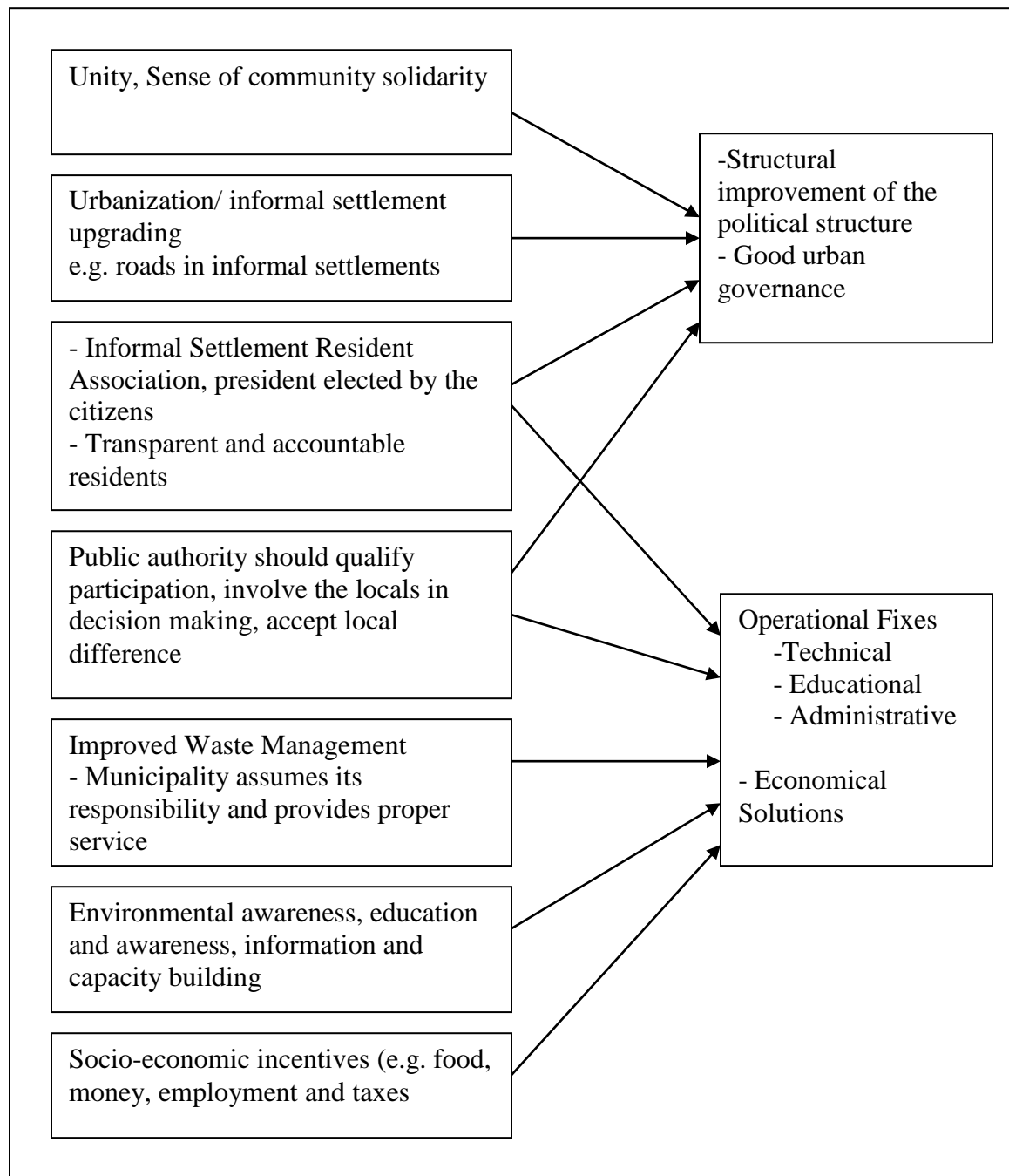
Coffey (2010: 95) mentions that small transfer stations are a convenient waste management facility in Vietnam, China, Nicaragua and Egypt. The author explains that this is a recent trend used to facilitate very low cost primary collection system. Primary collection system is the waste removal system from household; point of generation and businesses. The author explains that these small transfer stations are allocated where the waste is generated and local community removes waste using smaller vehicles than big waste compactors. Primary collection can be contracted to micro-and small enterprises, CBOs, NGOs. The collector is paid by fees which are collected directly from each household that the collector services to avoid the costs to the municipality of collecting refuse charges. The collector recycles and sells waste that is collected from the collector's area to the recycler located near the transfer station in order that the collector is able to supplement his/her income. There is no remaining waste in the transfer station after completion of the process of transferring waste and the transfer station is washed with a high pressure hose to prevent odors and nuisance. In this system another service provider is contracted to render secondary collection services, that is, removing waste from communal collection or transfer stations. This project promotes community participation, benefits the poor and ensures that the community lives in an environment that is conducive to human livelihood. Emfuleni L.M. has transfer stations can pilot the project in the area of Vereeniging.

4.2.11 Promotion of public participation in Rio de Janeiro informal settlements

According to Lillemets (2003:1) informal settlements in Rio De Janeiro were regarded as part of social disadvantaged communities that grow uncontrollable in great numbers in most cities, increasing the rate of slum development. This called for authorities to adopt all possible approaches that would understand the lives of slum dwellers. This included equitable governance that required broad-basis partnership in waste management. The strategy aimed at achieving efficiency, effectiveness and sustainability in waste management. Informal settlements in these slum areas had poor road infrastructure. Local associations were hired to create employment, reduce poverty and improve the quality of service as there

was poor access to municipal waste services. The advantage of hiring local people was that they know critical hot-spots where refuse is accumulated. The waste pickers moved door-to-door collecting refuse bags from the doorway on identified dates and hours and bring it to a common collection point to be transported by municipal truck. The challenge of informal settlements is a social issue because it needs proper planning by local authorities as the informal occupants are entitled to basic services such as rendering of waste services; provision of water and sanitation; electricity and road infrastructure. The author is of the opinion that if dwellers in informal settlements are involved to identify what they want in service delivery, there will be sustainable development in the area. Tsepong, Boiketlong and other informal settlements can be involved in the waste cleaning project. The figure below is the proposed process of public participation in informal settlements.

Figure 4.1 Process of public participation in informal settlements



Extracted from Lillemets (2003: 44)

The author identified advantages in this process of participation in these informal settlements as follows:

- Public participation by informal settlement dwellers overcomes exclusion from institutions and structures of society to achieve social justice

- Participation is a basic need and basic human right
- Public participation is a voluntary engagement in self-determined change where there is people involvement in developing themselves, their lives and the environment
- When people participate they develop livelihood strategy to reduce vulnerability to shocks and improve their livelihood.

The author however cited a few disadvantages of public participation in informal settlements. There is a belief that people have previous experiences with development interventions. This could have an impact on their willingness to become involved again. Approaches adopted for public participation can become tools to manipulate slum dwellers to be easily subdued by strong decision makers harming slum dwellers to be empowered. Garden projects can uplift the standard of living in these areas.

4.2.12 Decentralization as a developmental tool in French cities

Mousel (2002:112) identified societal disparities where rich and poor citizens divided French cities into fragmented entities with impoverished neighbourhood split-off where the poor were becoming marginalized. The wealthier districts were increasingly ring-fencing themselves sowing misery and threat to the poor. The author proposed that the local authorities promote decentralization as a development tool towards interconnecting a large number of players that have responsibility and respecting rights of all. In the decentralization process, there would be increased capacity for coordinated, democratic and effective management of all population centres because it was noticed that urban centres were spreading uncontrollably and generating more waste with excessive energy consumption and environmental pollution. Decentralization was only possible if people were part of the system. The author recommended that the approach limits risks of poor waste management, control nuisance and integrate local authorities with those determining standards and regulations and promote civil partnerships, for instance, national, provincial and local authorities. In terms of the Waste Act, 2008, municipalities must designate Waste Management Officer to co-ordinate waste matters.

4.2.13 Waste collection, transportation and disposal in South Asia

Visvanathan and Glawe (2006:6) observed the efficiency and extent of refuse collection services in Sri Lanka, Bangladesh, India, Afghanistan and Pakistan. The authors discovered that people were willing to pay for refuse collection only and did not bother about where their waste was dumped. Due to densely populated cities that generated excessive waste that ended up on open dump sites, neighbouring local authorities were encouraged to come together to develop an integrated system that promotes recycling, biomass utilization, develop waste power-plants and asbestos treatment. The first step undertaken was the promotion of public awareness and public participation in order to instill cooperation of the citizens and change attitudes. Women, private sector, CBOs and NGOs became involved in people's awareness of waste management problems. There was effectiveness of the collection and transportation system, effective communication system and cooperation between various stakeholder groups, for instance, city council, provincial government and service users. The authors report that in Sri Lanka, CBOs distributed 200 litre metal barrels free of charge to households, which aid in composting organic waste. The compost volumes were divided into two portions, 50% was used for home gardens and the other portion was sold to the public. The price of compost depended on the quality of compost. Emfuleni L.M. has a shredding area in Waldrift dump site and this can be developed to a fully operational composting plant to divert greens from landfill sites.

4.3 PACKAGING AND HOME COMPOSTING IN IRELAND

The Institute of Waste Management of Southern Africa (2006: 3) released a publication in the study conducted by OIREACHTAS Environment Committee on the extent of the involvement of the Ireland Ministers in waste minimization. The study revealed that only 7, 2 % of waste in Cork City was re-used and 92,8% was collected by municipality disposal trucks. Galloway City re-used 56% and 44% was disposed on landfill sites. The rest of the percentage that was not separated and re-used, a challenge that waste minimization needed to be further promoted in the region. The committee recommended that companies in the City should be levied on all non-reusable packaging as a way of forcing producers to adopt friendly attitude towards waste management. Another recommendation was that the government should set standards to compel

companies to re-use paper, and the government officials use recycled paper in their offices because Ireland produces more waste per head than any other country in Europe. Ireland was required to conform to the European Union landfill obligation, therefore, had to prioritize collection of plastic waste and improve curbside collection. This would be possible through awareness programs to elevate the quality of plastic collection and identification of suitable outlets for the collection of waste. The committee also persuaded local authorities to support home composting and explore other organic waste management systems. The waste facility centres had to be opened on extended hours including weekends to allow residents to use facilities in their free time. This led to the establishment of industry packaging recycling schemes that played an important role in the initiation of the project that involved the paper industries. The paper industries took back newspapers with built-in cost through a levy on newsprint. This project can be implemented at Sedibeng District Municipality to encourage food security gardens in the region.

4.4 SKIP BIN FACILITIES FOR WASTE MANAGEMENT IN MANZINI AND MATSAPHA MUNICIPALITIES IN SWAZILAND

Simelane, Simelane and Mamba (2010: 119) conducted a waste survey on 839 households in Manzini City which has an estimated population of 5504 people to determine the extent of waste generation amongst high-income and low-income groups. The authors reported that high-income groups with small families generate more than low-income groups who have bigger families. The City has peri-urban areas that have increased the proportion of unserviced areas. In Matsapha City landfill site receives mixed waste such as tyres, ash, builders' rubble, industrial waste, garden refuse, and general municipal solid waste. The information on waste generation was gathered from boarding schools, day schools and hostels. The skip bins were used as a centralized system in densely populated peri-urban areas. Waste collection points in Matsapha are used and are well managed. Manzini City does not have bins, resulting in people dumping waste on the riverbank, causing water pollution. Manzini City needs the approach adopted by Matsapha. In Sedibeng, there is no system of tyre recycling and this needs to be established with private companies to save landfill airspace.

4.5 RECOVERY OPTIONS FOR DIFFERENT MATERIALS IN GERMANY

Schmalbein, Wens, Gillner and Pretz (2010: 160) assessed alternative waste treatment options for municipal solid waste and their focus was on technologies such as thermal and biological treatment. The reuse of raw material was dependent on the proper separation at source and the availability of appropriate market to process secondary raw material. The authors identified the factors influencing the success of the project, for instance, National Waste Management System, generated waste stream, secondary raw material of the waste stream, quality requirement and their market value. The land-filling and waste disposal was a concern and there were high restrictions in the country requiring industries to meet high quality standards. The authors discovered that the composition of waste varied in terms of income, social status, level of education, awareness of environmental context, seasonal consumption, political, legal and scientific influence. The usage of aluminum cans was reduced because there was increase in the re-use of secondary metal that required less energy to be processed into raw material. The advantage of this process was that there was cost reduction on waste management and living costs for the whole population. Arcelor Mittal and Cape Gate industries at Emfuleni L. M. can play a big role in educating community to recycle cans on their behalf for processing.

4.6 THE INTERNATIONAL WASTE STRATEGY FOR SUSTAINABLE DEVELOPMENT

Viotti and Kauppi (2009: 383) maintain that the concept of sustainable development should be based on the equilibrium between consumption and population size in order to avert the impacts of environmental degradation such as less food production and goods for service required to maintain the increasing population. The authors advise that there should be increased relationship between the third and first world countries so that land pollution with deforestation should be reduced and preservation of diversity culture increased. Waste and pollution should be managed to assist in mitigation of climate change. These activities will be possible if political leaders at national level design policies and agreements that will guide and bind international participants in the Gauteng province.

4.7 POST-WAR WASTE MANAGEMENT IN MONROVIA

Smuts (2010:6) relates the post-war waste management experience of the people of Monrovia in the Republic of Liberia. The department of waste management in Monrovia was required to prioritize public service to improve basic living conditions and uplift the population after the traumatic wars. Several factors such as poverty level of the population, composition of waste stream and geo-environmental characteristics of the locality were taken into consideration. Restoration of dignity was done by educating the people to compost waste food; requesting community living in densely populated areas to take their refuse to pick-up points or skip bins and ensure waste is removed before it is pushed into storm water drainage system to prevent flooding of residential dwelling units. Monrovia City partnered with the private sector to render the necessary waste collection services and disposal site operations. The private sector was the only option to provide personnel, plant and equipment through contracts and funded by donors. Communal waste collection points were placed in strategic areas for accessibility by the communities. The city consolidated its relationship with the public and private sector. The community participated in door-to-door waste collection, large business generators had private arrangements and complied with the city ordinances. This happens in Sedibeng during service delivery protests where waste is strewn all over and left to municipalities to clear the mess. In the absence on private sector participation the use of EPWP beneficiaries restores the dignity of the community through mess cleansing

4.8 INFORMAL WASTE SECTOR IN LESOTHO

Mvuma (2010: 100) conducted a study to determine the average income derived from waste harvesting activities in Lesotho. The waste harvesters are the unemployed, poverty stricken people that live in highly populated areas. The groups are classified under the informal sector of waste management and recover waste through separation in landfill sites, streets, illegal dump sites, public refuse storage barrels and drums. The recommendation of the study was that these informal harvesters should be formalized by the government into co-operatives so that their profits have great investment with job-creation in Lesotho. At Emfuleni Local Municipality

reclaimers in landfill sites of Boitsepi, Palm Springs and Waldrift have been formalized and the number permitted in the sites is controlled by the recycling committee established by the superintendent appointed for landfill sites.

4.9 CROATIAN NATIONAL WASTE MANAGEMENT PLAN FOR PERIOD 2007 – 2015

Akcija (2007: 2 - 3) studied the contents of the Croatian National Waste Management Plan for the period from 2007 to 2015. The author discovered that during the development of the National Waste Management Plan, the government did not engage the NGOs sufficiently for the success of the implementation of the plan. The author indicated that the challenge facing the department in the City was that the community generated excessive waste and did not have waste minimization activities. The Environmental Protection Operation Programme of 2007 to 2009 was aligned to the development of the National Waste Management Implementation Plan, which was the main planning document. The environmental NGOs and general public became involved and household waste separation activities improved. In 2005, the City progressed in the implementation of the National Waste Management Plan in that there were 160 000 containers of mixed municipal waste. 40 000 containers were reserved for separate material collection and the City planned to have 30 new containers for each 1000 people. The project succeeded because of the involvement of the general public. Sedibeng District can replicate this program and purchase bins for available four transfer stations in Vereeniging.

4.10 PUBLIC PARTICIPATION IN WASTE MANAGEMENT IN CONAKRY, GUINEA

Benstien (2004: 32) relates how the city of Conakry changed from poor service delivery in 1996 to a better city through involvement of the local private sector and the municipality. The municipality and the private sector identified responsibilities between the two parties and each party recognized the underlying principles of public consultation. The principles are as follows:

- Collection can be better handled using low-cost equipment and labour-intensive means.
- Increased and sustainable coverage for collection can be achieved on a cost-recovery basis through user-fees with households' willingness to pay.

- Households are ready to pay if services are effectively provided
- Households are more prone to pay for services to private providers than to public one
- Cost recovery for disposal cannot be achieved in the short-term. Local municipalities should have SDBIPs aligned with IDPs and budget
- Households were ready to pay for the services if the selection process of the operators is transparent. This is achieved through competitive bidding processes. In Sedibeng, there are supply chain management departments that specialize in tender specification, evaluation, adjudication and appointment of service provider with specific focus on previously disadvantaged groups

The author states that the local private sector collected waste and the municipality reduced staff from 353 to 80 to be in charge of transfer stations and disposal sites. Disposal fees were collected by the private sector and the 27 private operators were granted a 3-year franchise agreement to operate 30 districts. In the new arrangement waste volumes collected increased from 218 380m³ in 1997 to 342 294m³ in 1998. Household collection was from 500 houses to 1624 in July 1997 and increased to 30 515 in October 1998. Payment recovery improved from 28% in September 1997 to 80 % in October 1998. This achievement was possible because of communication and information to the population to introduce new arrangements. In Sedibeng areas that have serious backlog with no household refuse collection can be involved through tender processes to collect solid waste where the municipality cannot extend the services. Solid waste disposal fees can be determined and an automated, calibrated weigh bridge linked to the municipal finance billing system like water and electricity. In these departments water and electricity metres are outsourced at Emfuleni Local Municipality. New arrangements will be communicated to industries that make use of disposal sites (Benstien (2004: 32).

4.11 PUBLIC PARTICIPATION IN MUNICIPAL SOLID WASTE MANAGEMENT

Squires (2006: 3) studied and evaluated the public participation level in the Caribbean. The author concluded that “public participation is national in scope and should involve everyone in the country, population as a whole, waste generators, waste pickers, recycling industries, waste collection contractors, waste facility operators, politicians, central government and public agencies”. The author’s final proposal was that effectiveness of public participation process would have to be determined over a period of time based on pre-determined performance indicators. The International Association for Public Participation provided a matrix called the IAp2 Public Participation Spectrum which highlights the types of techniques to be considered in realizing the desired level of participation and provides a handy tool or checklist as reflected in the table below.

Table 4.2 IAp2 Public Participation Spectrum

INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Goal To provide the public with balanced and objective information to assist them to understand the problems, alternatives, opportunities, and/or solutions	Goal To obtain public feedback	Goal To work directly with the public to ensure that their concerns and aspirations are understood and considered	Goal To partner with the public in each aspect of the decision e.g. services	Goal To place final decision-making in the hands of the public e.g. programmes in the local region
Promise To keep public informed	Promise To keep public informed, listen to and	Promise To work with the public and provide	Promise To look to the public for advice and innovation in formulating solutions	Promise To implement what the public decided

	acknowledge their concerns and provide feedback	feedback on how the public inputs influence the decision	and incorporating such advice into decisions to the maximum extent possible	
Tools: -Fact sheets -Web sites -Open houses	Tools: -Public comment -Focus groups	Tools: -Workshops -Polling	Tools -Citizen advisory committees -Consensus building -Participatory decision-making	Tools: -Citizens jury -Ballots -Delegated decision

Extracted from Squires (2006: 16)

Squires (2006: 17) identified some best practices for successful public involvement as follows:

- Municipality must develop a public involvement framework to establish the scope, timing, and resource requirements necessary to support the process
- Identify the participants and stakeholders and establish their legitimacy or representativeness using social analysis taking into consideration that not all social actors can be consulted on every detail of the proposed project
- Identify appropriate techniques of public participation and provide relevant information using a combination of seminars, simple written material, visual aids and scale models
- Plan and execute events at a time and venue that will encourage the maximum attendance and free exchange of use by all interested groups. Money may be specifically allocated to help facilitate community involvement for instance to pay for travelling expenses or costs involved in hosting meeting and enquiries
- Allow stakeholders sufficient time to assimilate the information provided, consider the implications and present their views
- Identify mechanisms which ensure decision makers consider views and suggestions made by stakeholders. Integrate findings and recommendations into the environmental assessment report, financing proposal and agreement.
- Ensure that responses and feedback are given on issues or concerns raised.

Feedback is given at the IDP and public participation meetings at local municipalities and Sedibeng District Municipality.

4.12 DETERMINANTS OF PARTICIPATION IN MUNICIPALITIES

Larson and Lach (2006: 819) maintain that voluntary participation in organization groups and activities “is determined by multiple factors that include demographics, personality, social orientation, situational and context variables”. The authors rely on previous research reports that identified the levels of participation as increased in higher income groups and peaks up in the middle income and ages. The authors explain that there is an enlarged activity among lower income members of an environmental organization in comparison to inactive high-income members. Gender, age, marital status, home ownership and length of stay in a locality influenced participation. According to the authors the level of education and employment status increased the likelihood of joining environmental groups but individuals are reluctant to join volunteering activities. Other variables identified by the authors are self- esteem, empathy and ideology. Group orientation affects participation through the individual’s social network, goals, needs and availability if asked to join. Participation has also increased by involvement in multiple organizations, personal contacts, socialization or outings especially in rural areas. The participation of the students is higher than inactive urban members. These determinants can help local municipalities if they wish for the community to participate in a project. Sedibeng and Emfuleni L.M. have a system of dividing target groups according to different categories, such as aged, business, unemployed and informal settlements.

4.13 CONCLUSION

Public participation requires involvement of all stakeholders in waste management. In this chapter several international cities have been explored on how public participation in waste management is implemented. It has been learned that most countries experience population density, waste generation and poverty amongst people. The solution to the challenges of poor waste management has been through the active participation of the NGOs, CBOs, private sector and government through public-private-partnership and tripartite relationship. The stakeholders

have been involved in household collection, street sweeping, education and awareness, home composting, management of landfill sites and contracting of the community and private sector. In areas where there are informal settlements, poor road infrastructure and overcrowding, the local co-operatives are contracted and use low cost vehicles for collecting waste from pick- up points to disposal sites. It has also been learned that drums can be used to promote recycling and waste minimization, skip bins can be distributed at accessible points for the community and those who make extra cash can recycle from these points. Participation and involvement depends on the socio- economic status and family size of the individual families in the locality of their residence. Private sector involvement has been possible through contract arrangements in transparent procurement processes. Payment for services rendered has been possible through private sector. This has been a lesson that the municipalities can imitate in waste management. The next chapter will deal with the evaluation of the methods used in promotion of public participation in waste management service delivery in the Sedibeng District Municipality.

CHAPTER FIVE

EVALUATION OF THE METHODS USED IN THE PROMOTION OF PUBLIC PARTICIPATION IN WASTE MANAGEMENT SERVICE DELIVERY IN SEDIBENG DISTRICT MUNICIPALITY

5.1 INTRODUCTION

This chapter deals with the evaluation of the methods used in the promotion of public participation in Sedibeng District Municipality. Stakeholder engagement and areas of service delivery where stakeholders are involved will be evaluated. Sedibeng District Municipality IDP and Integrated Waste Management Plan will be utilized as legal documents guiding the district in promotion and implementation of public participation. Extent of engagement of public- private-partnership and involvement of cooperatives in waste management to sustain waste management services will be evaluated.

5.2 SETTLEMENT PATTERNS OF THE PEOPLE OF SEDIBENG DISTRICT MUNICIPALITY

Settlement patterns are crucial in the study because rural- urban drift influences consumption patterns and contributes to waste generation. Waste management projects are also developed according to where the problem has been identified and these projects are included in IDP.

5.2.1 Assessment of the SDM Integrated Development Plan 2010/2011

In terms of the Integrated Development Plan (2010/2011: 35) the residents in this region have urban, semi-urban and non-urban status in their settlement. Sedibeng IDP defined an urban area as one that has been legally proclaimed as being urban and includes cities, towns and metropolitan areas. Semi-urban areas are not part of a legally proclaimed urban area but connected to it. This category includes informal settlements and to some extent non-urban areas. Areas that are farther away from towns and cities than semi-urban areas are also classified as

non-urban and include commercial farms, small settlements, rural villages and other areas. Informal settlements are informal residential areas that do not have any formal town planning structure and have limited access to basic engineering services. Six informal settlements out of thirty five are in the process of being formalized therefore they will need access to basic refuse removal services that the district and local municipalities will have to plan and included in the IDP.

5.2.2 Housing settlement by population group

The importance and value of highlighting the housing settlement is to be able to plan for public participation in terms of urban, semi-rural, non-urban and informal settlements. The table below represents the number of households by population groups as reported in the Sedibeng District Municipality IDP (2010/2011: 36).

Table 5.1 Number of households by population groups

	Sedibeng	Emfuleni LM	Midvaal LM	Lesedi LM
Black	201 047	160 992	22 565	17 489
White	43 378	32 077	7 933	3 368
Coloured	2 811	22 029	507	284
Asian	20 033	1 754	98	181

Extracted from SDM IDP (2010/2011:36) quoting Global Insight 2009

The Sedibeng District Municipality (2010/2011:35) gives the dynamics and factors of fluctuations in population status as due to decline in the rate of urbanization. The decline is attributed to the growth of informal settlements or dwellings coupled with the urban sprawl that goes along with poor infrastructure such as poor waste management, water, electricity, sanitation and unplanned densely populated housing settlement. This has been a challenge to Sedibeng District Municipality and local municipalities because budget has to be increased, more personnel has to be recruited and vehicles have to be procured for waste removal services.

5.2.3 Strategies and solutions to challenges of settlement patterns and service delivery.

The solution to this challenge facing Sedibeng District Municipality on waste management and the human settlement was through the identification of strategies that were included in the IDP (2010/2011: 160) to ensure public participation. The following are the strategies identified to promote best public participation:

5.2.3.1 Strengthening ward committees through providing assistance programs

SDM IDP (2010/2011:213) proposes that local municipalities should develop cluster resource centre to provide administration support to ward councilors and ward committees. Local municipalities must develop a culture of municipal governance to complement formal representative government with a system of participatory governance. The local municipalities must establish the ward committees for each ward where a ward councillor is representing that ward as the chair of that committee. Schubert (2012:21) emphasizes that in the implementation of Integrated Waste Management Plan strategy all elements of the system must be identified. This includes interaction between all elements of the system such as public, politicians, industry, officials and available operators of waste resources.

5.2.3.2 Building the capacity of councilors to be effective representatives

The Public Service Commission (2008:33) recommended that service departments should be able to engage citizens especially in areas that were previously affected by service delivery protests. The Commission proposed that established Citizen Forums and departments can approach the Public Service Commission for assistance in Citizen Satisfaction Surveys and development of Citizen Forums Toolkit. Dalahmeh, Assayed and Suleiman (2008: 160) propose that university experts and research institutes should be involved in the capacity building of the councilors and community to sustain the projects and enhance project quality and ownership. This can be initiated in the local municipalities as they have stakeholder engagement unit in the Offices of the Speaker

5.2.3.3 Implementing and coordinating a public management system to effectively deal with petitions from members of the public

In terms of the SDM IDP (2010/2011: 167) coordination involves establishment of petition management system that has an electronic log-in system that will ensure proper capturing of complaints by the public and provision of quick responses with regard to feedback. The system will be a tool to give early warning signs on the statistics of complaints and petitions for the municipalities to respond and have follow-up feedback mechanisms to reporting to municipal managers. This IDP (2010/2011) is supported by Emfuleni Local Municipality Petition Policy (2010:3) which maintains that public complaints should be responded to and feedback should be given to communities using local languages for maximum communication to the public. Emfuleni Local Municipality responded to public complaint on the unacceptable conditions and operations of Zuurfontein landfill sites. The response of the municipality included legal application for closure license and rehabilitation which were achieved in 2010. Community complaint and the response of the municipality are attached as **Annexure A**.

5.2.3.4 Holding public meetings by virtue of the Municipal Systems Act and Municipal Finance Management Act

The Municipal Systems Act 2000 (No 32 of 2000) sets principles, processes and mechanisms necessary to enable municipalities to fulfill the constitutional functions in the provision of service delivery and upliftment of local municipalities. The Act acknowledges the need for regular interactions between municipal authorities and local communities. The Municipal Finance Management Act 2003 (No 56 of 2003) established norms, standards and those requirements that ensure transparency, accountability, and responsibility in terms of financial management. For instance, procuring goods and services for waste management services and involvement of public-private-partnerships supply chain processes should be followed.

5.2.3.5 Arranging sectoral Imbizo and dialogue in relation to the Gauteng Development Strategy

In terms of the Gauteng Development Strategy (GDS) and Sedibeng IDP (2010/ 2011: 167) focus should be on designated groups such as, women, youth, the elderly and people with disability. According to the IDP (2010/ 2011: 167) Sedibeng aims to build stakeholder relations and effective communication. This will be accomplished through invitation of designated groups to be part of public participation of council programmes.

5.2.3.6 Facilitation and the establishment of street committees

The aim and objectives of the facilitation of establishment of street committees is to promote development of initiatives within the communities. The Office of the Speaker at Sedibeng District Municipality maintains that participation of all residents including citizens and non-citizens in the region is crucial in decision- making processes (Office of the Speaker 2012: 1).

5.2.3.7 Providing adequate support for stakeholders

The Executive Mayor of Sedibeng District Municipality (2010: 1) implemented this strategy by organizing public participation Indaba, to achieve the legislative mandate of community and stakeholder participation. The objectives of the Indaba were: to solidify social cohesion, develop aspects of public participation, develop two-tier system of public participation and promote government aspect of public participation .Program of Indaba proceedings is attached as **Annexure B**. Support also involves sharing of knowledge in the Annual Report in **Annexure BB**, Service Delivery and Budget Implementation Plans in **Annexure C, CA and CB** for Midvaal, Sedibeng District and Lesedi L.M. respectively.

Sedibeng District Municipality identified in terms of the Waste Act 2008 areas where stakeholders can participate. The areas for participation are waste minimization and promotion of waste recycling through effective refuse collection system, implementation of integrated waste management plan, removal of illegal dumps, education and awareness campaigns, development of mini-dumps/transfer stations and proper operation of landfill according to Department of

Water Affairs and Forestry (DWAF) Minimum Requirements (1998) to prevent underground pollution. Local municipalities can regularly review and update their integrated waste management plans and develop waste information system in terms of the National Environmental Management: Waste Act 2008 (Act No.59 of 2008). They can facilitate waste recycling and develop tyre recycling programs in Sedibeng. All these activities will be possible through involvement of people and private sector.

5.2.3.8 Identifying the best possible form of public participation

Engel and Himlin (2009: 29) analyzed the Gauteng Social Development Strategy (GSDS) and came to a conclusion that the strategy provides a framework for sustainable development to reduce poverty through improved capacity of citizens participating in the society. This includes coordination and partnership with community organizations, NGOs, CBOs, businesses and municipal level governments. Below is the profile of audience at the IDP public meeting as related by Engel and Himlin (2009:164). The table shows the extent of understanding public participation and areas where people can engage themselves and the government officials on issues of service delivery especially waste.

Table 5.2 Profile of Audience at IDP public meeting in Sedibeng District Municipality

Municipality	How many people	Areas / group that attended	Issues raised
Emfuleni LM	300- 500	-Business people -Informal settlement dwellers -NGOs and CBOs -Church groups	-Service delivery -Unemployment
Lesedi LM	Unclear response	-Poorer areas	-Service delivery -Unemployment
Midvaal LM	40-100	Unclear response	-Unemployment -Service Delivery -Municipal

			Development projects
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Extracted and adjusted from Engel and Himlin (2009:164)

Emfuleni Local Municipality divided the area into six regions so that the community members have access to the venue of the IDP 2012/2013 to 2016/2017. The regions are:

NORTHERN ZONE, EVATON AREA

- Region 1 for Ward 18,19,20,24, 26 and 43 meeting at Palms Springs Hall

WESTERN ZONE BOPHELONG AND RURAL AREAS

- Region 2 for Ward 5,6,7,8,9,10, 23 and 25 Bophelong, Bophelong Community Hall

EASTERN ZONE AND SUBURBS

- Region 3 for Ward 1,11,15,16,21 and 45 Vereeniging, Banquet Hall

NORTHERN ZONE, SEBOKENG AREA

- Region 4 for Ward 2,17,27,28,30,31,32,33,34,35 and 36 at Sebokeng, Saul Tsotetsi Sports Complex

SOUTHERN ZONE INCLUDING SHARPEVILLE and TSHEPISO AREAS

- Region 5 for Ward 3,8,12,13,14 and 22 at Boipatong Hall

NORTHERN ZONE INCLUDING TSHEPONG AREA

- Region 6 for 29,37,38,39,40,41,42 and 44 at Residensia ,Tshepo Themba Hall

Business people, NGOs and Sector Departments were invited at Riverside Hotel in Vanderbijlpark. Public meetings were conducted as required in terms of Sections 21 and 28(3) of Municipal Systems Act 2000 (Act No.32 of 2000) as well as Section 21(1) (a) of the Municipal Finance Management Act,2003 (Act No.56 of 2003). The IDP officials drew a program that was published in the local papers for the community to know, that is, regions with its Wards, dates, venue and time. Buses were organized for communities staying farther from the venue. Midvaal extended invitation to the public for Service Delivery Budget and Implementation Plans 2012/13. Documents are attached as **Annexure C**.

The process flow diagram below for public participation is recommended by the Gauteng Department of Local Government (GDLG) (Engel and Himlin 2009:95). The authors were mandated by the GDLG to conduct the study on public participation and recommended ways to promote public participation for Gauteng municipalities. Erasmus (2012: 26) agrees with the authors that the community must be involved and the municipality must involve private companies to initiate projects that benefit the community and reduce carbon emissions especially after the country hosted the Conference of Parties (CoP 17) in 2011 on climate change in Durban.

Various projects can be established by the municipality with an aim to preserve natural resources, create jobs, for instance, conversion of waste to energy to save electricity. Goven, Langer, Baker, Ataria and Leckie (2012: 163) explain that community involvement takes a step further where powerful private interests are involved and in this case new technologies are brought forward to benefit the citizens. The frustrations experienced with the previous interactions and consultations are jointly remedied. The co-operation between the government and community is improved and the staff willingness to involve community is maintained. In the process of waste generation materials are generated from manufacturing industries and municipal waste from households (Goven, Langer, Baker, Ataria and Leckie 2012: 163).

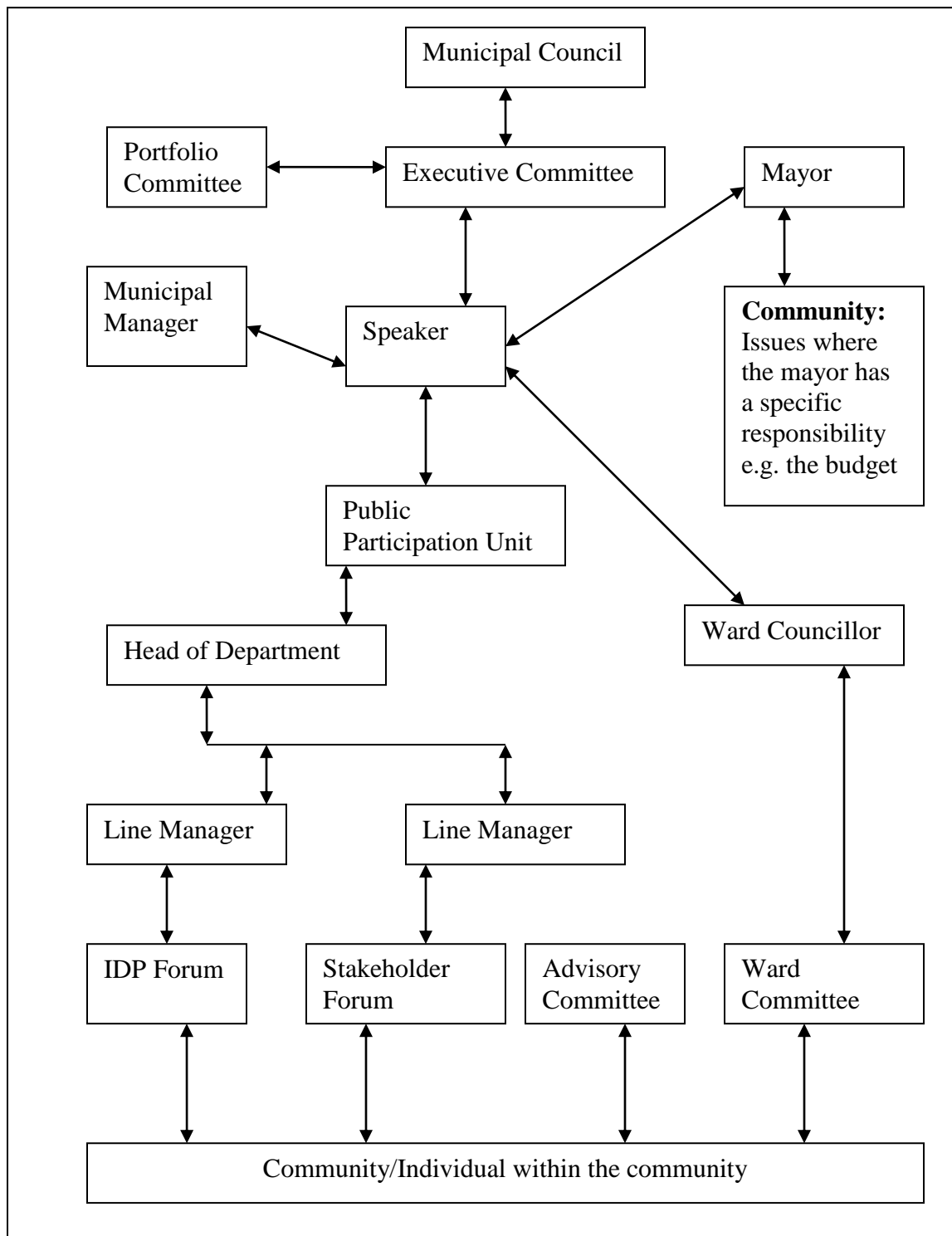
Demirbas (2010: 1280) identified three processes by which such waste can be recycled and used, namely, physical processing; biological processing and energy recovery. These processes assist the government in waste conversion to energy in landfill sites to prevent explosions and fires from accumulated methane gas, soil, water and air contamination. The processes further improve waste management service delivery in that if the community is aware of the benefits of these processes they will participate in the prevention measures. They identified four major projects that can be initiated by municipality, namely, prevention of excessive generation of waste, recycling, waste conversion for energy recovery and proper land filling.

Another best form of participation is achieved through awareness and education to the community. Kasner (2012: 34) supports a clean environment that is free from littering and therefore the community should be empowered to minimize waste, reduce waste to landfill and

reduce waste to cut domestic cost on expenditure. The author outlined the target groups that could make it possible for public participation to be achieved. These are schools, businesses, industries and general public. The projects that can be identified for these groups are waste minimization, composting and establishment of food gardens. Such projects were developed in Cape Town with strategically tailored Waste Wise education and awareness campaigns. The author advises that the municipality should develop partnerships, identify stakeholders for sustainable developments, develop service level agreements and sign memorandum of understanding with schools, community and business.

Sedibeng District Municipality participates in a Clean and Green Bontle- ke- Botho Programme that was designed by Gauteng Department of Agriculture and Rural Development (GDARD). The programme involves schools, ward councilors and municipality departments like Health, LED, Water and Sanitation, Waste, Electricity and Gauteng Departments of Agriculture and Rural Development (GDARD) Stakeholder Unit. The aim of this programme is to promote a litter free Gauteng through the participation of Metros, Districts and Local Municipalities and the community. The programme emphasizes awareness and education campaigns to community members to keep their places for their own health and safe environment. The ward councilors and ward committees have a major role to play to change the mindset of the community in waste management by regularly convening ward committees explaining the importance of public participation to sustain waste management services.

Figure 5.1 Recommended process flows for public participation



Extracted from Engel and Himlin (2009: 95) quoting DPLG (2007)

From Table 5.2 of stakeholder attendance at a public participation meeting, it is learnt that Emfuleni and Midvaal registered people who attended the meeting but Lesedi did not identify stakeholders (Engel and Himlin (2009: 164). Lesedi LM targeted poorer communities as their stakeholders and Sedibeng identified stakeholders who were inclusive of businesses, informal settlement dwellers, NGOs, CBOs, church groups and vulnerable groups. In the responses it is not explained that the stakeholders are involved as partners in service delivery, instead, people complain about unemployment and lack of service delivery. At Emfuleni L.M. the community complained about illegal dumping though they have household refuse removal in ward 16. IDP meeting and feedback is attached as **Annexure E**. This can be the opportunity for Sedibeng to involve NGO's and business people to be part of waste management through job creation in waste. The extent of the community involvement also will be identified when interviews and questionnaires are conducted in the next chapter.

5.3 AIMS AND OBJECTIVES OF EVALUATING PUBLIC PARTICIPATION METHODS IN SEDIBENG

The main aim and objectives of evaluating methods of public participation in Sedibeng is to identify gaps in people's involvement in waste management. The objective is to assess the extent to which public participation has been implemented at Emfuleni, Midvaal and Lesedi local municipalities. The best practices will be identified and existing challenges will be noted in order to make recommendations about how best to improve implementation of public participation (Buccus, Hemson, Hicks and Piper 2007: 10). The authors are of the opinion that there is a need for implementation of approved policies to public participation. For instance, Batho-pele policy of 1997 was the first policy to be adopted and its aim was to enforce service delivery excellence and to involve the communities on issues of service delivery. Another detailed policy on public participation is DLG 2005 Draft National Policy Framework for public participation. In this policy, the legislative framework key principles of public participation; assumptions underlying participation and different levels of participation are outlined. The role of ward committees and community development workers are highlighted. Though the policy seems to be general, the involvement of community in waste management service delivery needs to be identified for better implementation of policies on public participation (Buccus et al 2007:11).

5.4 ASSESSMENT OF WASTE MANAGEMENT SERVICE DELIVERY AND CAPACITY OF SEDIBENG DISTRICT MUNICIPALITY

In order to understand the extent of public participation in waste management and the methods used, it is necessary to have an assessment of waste management services and capacity of Sedibeng District using the existing information from the integrated waste management plan. Waste collection, transportation and disposal are carried out by the local municipalities. There is a shift towards outsourcing the recycling function to small community contractors to drive towards waste minimization as a non-core function of the municipality. The Department of Environmental Affairs and Tourism (2007:13) reported that out of the 477 148 households of the three districts of Gauteng , 90 % is urbanized and 10% is located in rural areas. The assessment, done by the national department is that waste minimization effort at community level is still very little or non-existent in some areas and that the districts and local municipalities should capacitate householders to reduce waste at source, produce less waste and realize monetary savings from recycling. Local community contractors should be encouraged to sort the waste at transfer stations before being transported to landfill sites. In areas where there is difficult waste collection due to geographical location, composting on a community and household level should be carried out. Communal dump sites composting and recycling should be encouraged to reduce waste transportation costs and promote community participation. In this way solid waste services that are people driven and minimization driven are achievable goals in Sedibeng and South Africa as a whole. The modernization process of shifting from weekly collection to landfill, waste separation at source needs to be an agenda of public meetings and all other possible methods used to reach people. Wilson, Velis and Cheesman (2005: 797) recommend that informal sector should be utilized by the municipality and establish facilities for recycling from communal bins in informal settlements and drop off points for door-to-door separated waste. Buy-back centres should be accessible to avoid long distances to waste buyers of waste material.

5.5 SEDIBENG DISTRICT INTEGRATED WASTE MANAGEMENT PLAN AND PUBLIC PARTICIPATION

Sedibeng District developed Integrated Waste Management Plan in 2005 for Emfuleni, Midvaal and Lesedi local municipalities. In the three local municipalities, it was identified that there were areas which did not have household collection services especially informal and rural settlements. The District's IWMP (2005: 112-118) recommended various strategies to be implemented with the community of Sedibeng as follows:

- **Improve and maintain waste collection infrastructure.** The local municipalities are to identify unserviced areas, implement refuse removal delivery, add new development areas into collection routes, standardize 240litre bins. The challenge facing the local municipalities is the collection of waste in 240litre bins as these bins need compactor vehicles that are compatible for this service. Complementary vehicles from private sector for the big areas like Emfuleni Boiketlong informal settlements, Tsepong, Evaton West and Bophelong need additional budget to augment municipal solid waste services.
- **Waste Minimization as a focus area needs contractual agreements with recycling companies.** The integrated waste management plan recommends that Sedibeng should involve public and submit request for proposals (RFPs) especially recyclers and appointment of recycler should be as transparent as possible. Refuse containers should be placed at strategic points where is difficult to service the areas, like informal settlements. The districts should embark on education and awareness programs
- **Management of illegal dumps will require communities to establish community watch programs and they must adopt this program through awareness campaigns.** The waste management service levels reported in the SDM IDP (2010/2011: 55) are as follows: Emfuleni has the highest removal levels of 85.8% followed by Lesedi with 82.6% and Midvaal has 78.2% of households that have access to refuse removal services. At the time of publishing the IDP service backlogs in waste management services, Midvaal recorded highest refuse removal backlog of 21.7% contributing 14.4 % to the

district backlog and 1.1 % to the provincial backlog. Emfuleni has the smallest refuse removal backlog of 14.1% of the district backlog and 6.2% of provincial backlog (SDM IDP 2010/2011:58). The below table is an indication of service backlogs in the four municipalities of Sedibeng District, Emfuleni, Midvaal and Lesedi Local Municipality. This proves the fact that new service delivery method like public- private- partnerships and local co-operatives must be engaged in solid waste management in the region.

Table 5.3 Refuse removal service levels for the core functions

Name of Municipality	2007 Refuse removal	Removal percentage	Removal backlog	Removal Percent backlog per District	Removal Percent as province total
Sedibeng	204 680	84.8%	15.1%	100%	8.2%
Emfuleni	168 787	85.8%	14.1%	75.8%	6.2%
Midvaal	18 980	78.2%	21.7%	14.4%	1.1%
Lesedi	16 933	82.6%	17.3%	9.7%	0.8%

Extracted from SDM IDP (2010/2011: 60)

5.6 ANALYSIS OF INFORMATION FROM IDP 2010/2011 AND INTEGRATED WASTE MANAGEMENT PLAN 2005

Public participation in waste management as reported in the 2010/2011 IDP and integrated waste management plan of 2005, does not reflect that the community of Sedibeng is involved in waste removal services, such as door-to-door collection, informal settlements, landfill sites and transfer stations. Mention has been made that recyclers must sign contracts in order to sustain recycling programs. The willingness of the district to involve the public, business, schools and churches in waste management is clear. The challenge is the implementation of the recommendations. Further information will be obtained through the field surveys and interviews to the community and officials of Sedibeng District Municipality if the community is willing to participate in waste management services.

5.7 CLOSING THE GAP OF BACKLOGS THROUGH PUBLIC PARTICIPATION

Anschütz, Ijgosse and Scheinberg (2003: 22) maintain that municipalities should move away from the routine waste collection and disposal and adopt a waste hierarchy that has waste system elements which refer to how solid waste is handled and where it ends up. A number of National Environmental Ministries including South Africa have adopted the waste hierarchy as an operational policy and a corner stone of the integrated solid waste management approach which gives priority to prevention, minimization, recycling and other forms of recovery of materials. The National Environmental Management: Waste Act, 2008 (No 59 of 2008) is one policy which seeks to modernize waste management and minimization through four 'R's that is: reduce, reuse, recycle and recover waste. The authors further explain that municipalities should from time to time evaluate the effectiveness of solid waste management and take into account all situations affecting the residents such as:

- residents constantly throw waste next to containers rather than into them
- low percentage of the community pay for waste services. In South Africa there is Policy on Basic Refuse Removal for Indigent Households and families are required to register at their nearest local municipality where they reside
- there are increasing complaints about waste pickers interfering with disposal activities. For instance, Boitsepi has three hundred and fifty reclaimers who are formalized but outside the gate youth stops waste vehicles to get waste for reclaiming
- streets and open spaces are full of waste that is illegally dumped
- the cities include high percentage of un-serviced households
- households report regularly missed collections by municipality
- municipal waste departments spend all of their time responding to complaints and are not able to organize regular collections and routes due to shortage of compaction vehicles and personnel
- there is a reported, observed or documented proliferation of illegal dump sites for domestic, commercial or construction and demolition waste

- municipal waste departments or private service providers are experiencing a decrease in availability and functioning of solid waste vehicles or other equipment. Municipalities have old, ailing fleet which is regularly in workshops for repairs with no back-up arrangement from private contractors and
- There is persistent failure of service in certain areas because streets are narrow, no road infrastructure in highly densely populated informal settlements and mud is too deep for trucks to pass (Anschütz et al 2003: 24).

All these situations are not backed-up by private companies or extra service providers to close the gap of backlogs. In such situations, Sedibeng District should know what is working well in the region and what is not and identify bottlenecks and stakeholders with interest in Solid Waste; so that, what triggers sustainable development is understood. Sedibeng should also adopt principles that include concern for disadvantaged groups as proposed by Ishengoma (2010: 3). Sedibeng should look at wide range of conditions and methods and to use participatory action research methods. The major principles proposed by Anschütz et al (2003: 25) are equity, fairness and sustainability. The Constitution of South Africa does not compromise on equity, therefore, residents should have equal service that is distributed fairly on sustainable basis, efficient and effective to bring change to the lives of Sedibeng people. The participatory approach by local stakeholders like Mayor, Public Works Departments, City Council, residents, businesses, NGOs, informal sector, waste management departments should be a reality to close the gap of backlogs.

5.8 WASTE MANAGEMENT IN SEDIBENG DISTRICT MUNICIPALITY

According to the final IDP (2011/2012: 18) waste management at SDM in general is not different from the South African situation. Waste management at local, provincial and national spheres is influenced by economical, physical, social and political factors. Waste management is implemented on ad-hoc basis to consider current needs instead of sustainable future due to urban/rural drift. There is no involvement of the community, example, in identification of landfill sites resulting in the lack of support by communities. The majority of towns of comprise previously disadvantaged communities and are found in the three local municipalities where the level of services varies by area without proper waste management services. Sedibeng District

Municipality recommends waste prevention, waste minimization, resource recovery, treatment and safe disposal. These proposals are possible if the community is consulted and involved.

Sedibeng Environmental Division developed an environment program of Action (EPOA) that has an aim to provide strategic guidance in support of Sedibeng growth and development strategy. It also aims to assist the government stakeholders and the three local municipalities to adopt a consistent approach towards environmental management in the region. The EPOA identified water pollution, waste and air quality as major environmental challenges. The three challenges are intertwined. For instance, water pollution will occur if waste is deposited along Vaal River banks, landfill sites not properly managed will contaminate underground water with leached and air pollution will occur where there is burning of waste and tyres. Poverty reduction strategies and waste are partners therefore Sedibeng should design programs for public participation in waste to reduce poverty in the region. The revised IDP 2011/2012: 45) reports that there is no stakeholder database and there is a need for consolidated database in the MS Access database program which will assist in the reporting, analysis of trends and communication with stakeholders. In terms of the Municipal Structures Act 1998 (Act No 117 of 1998) there is division of powers between the local municipality and the district. The general public has no clue as to which functions are performed by local municipality and that are a competency of Sedibeng. This is the reason why petitions are referred to Sedibeng whereas service delivery in the form of water and sanitation and waste are at the local level. It is the duty of both local and district municipalities to educate the community constantly so that petitions are handled in a coordinated manner.

5.9 VIEWS OF THE PUBLIC SERVICE COMMISSION ON PUBLIC PARTICIPATION IN THE PUBLIC SERVICE

The Public Service Commission (2008:25) discovered that public participation units had been established in some departments of local, provincial and national government to effect public participation activities. Sedibeng District Municipality and the three locals also have public participation units in the Speaker's Office. The type of public participation is general participation such as IDP, budget presentation, invitation to Council sittings, project initiation

and political meetings. Involvement of stakeholders is not well pronounced on issues of waste management in the form of public- private- partnership, local co-operatives and tripartite partnerships in waste management. The commission also reported that at national and provincial spheres 44% of the departments have public participation units and 56% of departments do not have public participation units.

5.10 APPROACHES TO PUBLIC PARTICIPATION

The Department of Local Government (DLG) (2011:29) proposes that stakeholders and household settlements should be separated as follows: rural citizens, urban citizens, informal settlements, field experts and businesses. The reason is that, their needs are not the same as well as the services delivery cannot be uniform. The choice of service delivery in waste collection depends on the eradication of backlogs and accessibility of areas. For instance, if there are no roads for removal of refuse in informal settlements, the local cooperatives can be contracted to collect refuse in between informal structures to the pick-up point as proposed by Morkel (2010: 172) and Mazinyo (2009: 42)

5.11 LOCAL CO-OPERATIVES FOR CLEANSING AND WASTE REMOVAL

Satgar (2007: 2) referred to the development of Black Economic Empowerment Act 2003 (Act No 53 of 2003) and the Co-operatives Act 2005 (No 14 of 2005) as crucial services for the development of a co-operative sector. The author explains that cooperatives are user and member centred, they have to be legally registered entities in terms of Cooperatives Act and cannot exist as informal institutions. Sedibeng District Municipality needs to establish a database for the cooperatives and encourage all three local municipalities to engage cooperatives in waste management, to keep the streets clean, to manage transfer stations in recycling programs, to be engaged in awareness and education campaigns.

5.12 HEALTH CARE WASTE AT SEDIBENG DISTRICT MUNICIPALITY

In terms of the National Environmental Management: Waste Act 2008 (Act 59 of 2008) health care waste is excluded in the Act and regulations that govern waste management. Integrated Pollution and Waste Management Policy, 2000 (IP&WM) aims to move away from a previously fragmented and uncoordinated waste management system to integrated waste management system. The Environmental Conservation Act 1983 (Act 73 of 1989) makes provision for the regulation of waste specifically with the aim of providing for the protection of the environment. Molefe, Gwensa, Kristiansen and Rogers (2006: 7) analyzed the document on the development of National Health Care Waste Management Policy and discovered that Health Care Waste Management was identified as one of the issues of priority in the National Waste Management Strategy (2000) that requires immediate attention. The authors cite that the inclusion of health care risk waste was triggered by the high level of public concern regarding the transmission of blood borne diseases due to needle pricks caused by poor management of health care risk waste that affects both workers and community. There are incidences where HCRW is found illegally dumped in communities, landfill sites and open spaces. The draft Health Care Risk Waste Management Policy encourages recycling of waste products based on separation at source. For instance X-ray developers, polymers, paper, glass, cardboard, etc. The authors further advised that the relevant stakeholders at national, provincial and local environmental health authorities must ensure that the public and workers do not cause unacceptable impacts by storage, transportation, treatment or final disposal of health care risk waste. Sedibeng District Municipality should have data of hospitals, clinics, private medical practitioners so that it is understood where their medical waste is disposed of and not mixed with the municipal solid waste system. Systems to support the proper separation of health care waste are not always in place in hospital wards and clinics.

5.13 TYPES OF MEDIA USED TO COMMUNICATE WITH SEDIBENG PUBLIC

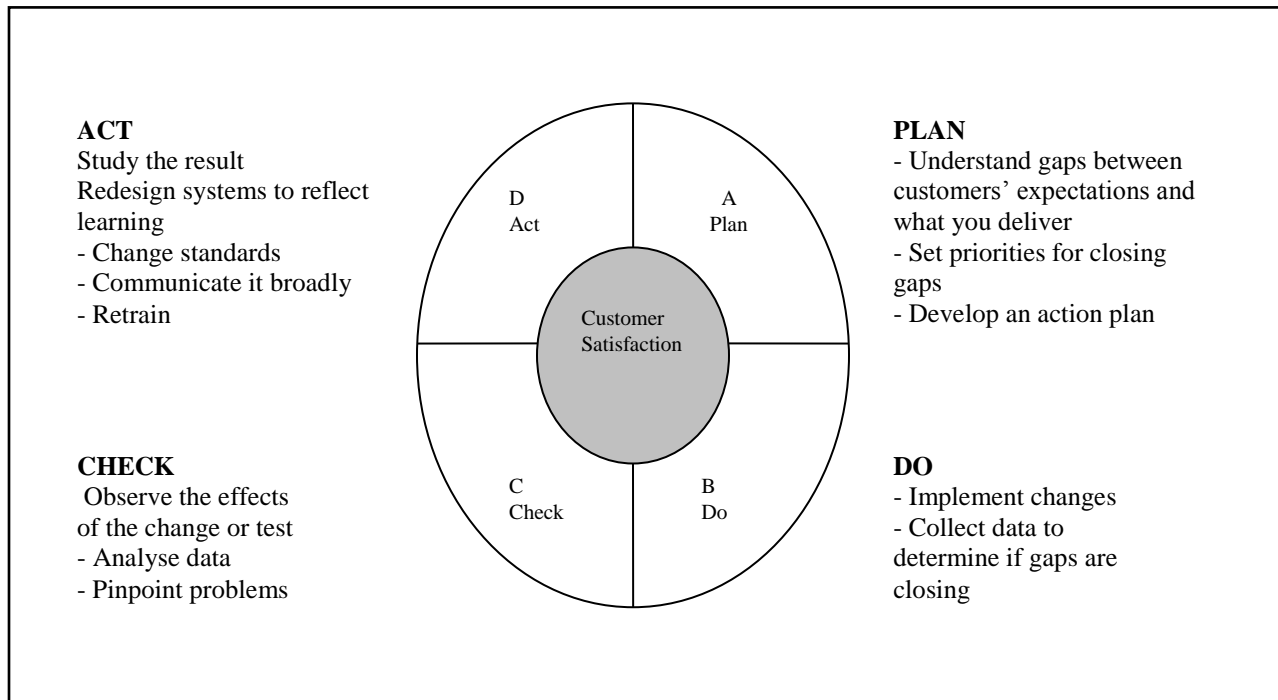
Nkuna (2007: 231) maintains that the effectiveness in service delivery is in the assessment tool for the South African Public Service to meet the basic needs of the citizens. Public participation solely depends on the participatory public administration. The services to be delivered should be

communicated through public participation that will ensure that goals are achievable. In terms of the Department of Local Government 2009 the media to use best to communicate with people should be the one that will correlate with the objectives to be achieved. For instance, if the municipality would like to overcome backlogs on waste management, invitation for public participation would be through tender advertisement and the request for proposals from communities. Public meetings will be convened by ward councilors in informal and formal settlements where local cooperatives are to collect refuse.

5.14 THE PLANNING ACTIVITY FOR PUBLIC PARTICIPATION

According to Erasmus (2012: 3) each municipality should develop local waste plans with the objectives to: establish means of ensuring that waste is collected, reused, recycled or disposed without causing human health and damage to the environment. Particular attention needs to be given to rural areas and areas of special interest such as rivers and landfill sites. Another objective to be accomplished through public participation is establishment of comprehensive and adequate basic and commercial services within the municipality and encouragement of the minimization or reduction of waste. Erasmus further proposes that the local plan should consider population development profile. Van Rooyen and Naidoo (2008: 741) identified a Deming environmental management system model for systematic environmental management and they believe it comprises an operational tool for strategic planning, organizational structure and implementation of the environmental policy. The figure below is a systematic presentation of the Deming model of total quality management that Sedibeng District and Local Municipality can use to promote public participation in Waste Management.

Figure 5. 2 The Deming Model of Total Quality Management



Extracted from van Rooyen and Naidoo (2008: 741)

The Deming Model if applied in Sedibeng District Municipality can be interpreted as follows:

- **Plan.** Municipality plans what needs to be done to close the gap of backlogs and must understand the areas affected and set priorities in conjunction with the community. Areas mostly affected are informal settlements, newly constructed houses and new business complex in previously disadvantaged areas where the challenge of waste collection is related to shortage of vehicles, personnel and budget. The planning process should be part of SDBIPs, budget and IDP.
- **Do.** Appoint private contractors to augment municipal personnel and vehicles. Monitor contractors and collect data if gaps or backlogs are closed. Conduct workshops to develop co-operatives and emerging contractors. Use municipal supervisors to ensure that the objective of a clean environment is accomplished.
- **Check.** If gaps are not closing, identify challenges with the community. Approach the Office of the Speaker to organize public meeting to solve the problem of service delivery and to motivate them to participate in waste management issues

- **Act.** Study the reports and results. Redesign the system to reflect the learning of the community. Change standards and communicate broadly with the community. Retrain contractors and strive for customer satisfaction through public participation in waste management (van Rooyen and Naidoo 2008:741).

5.15 MINIMUM REQUIREMENTS FOR PUBLIC PARTICIPATION

The level of public participation depends on the activity. In a municipality the Office of the Speaker conducts a public participation process. The Sedibeng District Municipality and its locals have Offices of the Speakers in terms of the flow chart in figure 5.1. The public participation process needs the preparation and use of the guidelines as follows:

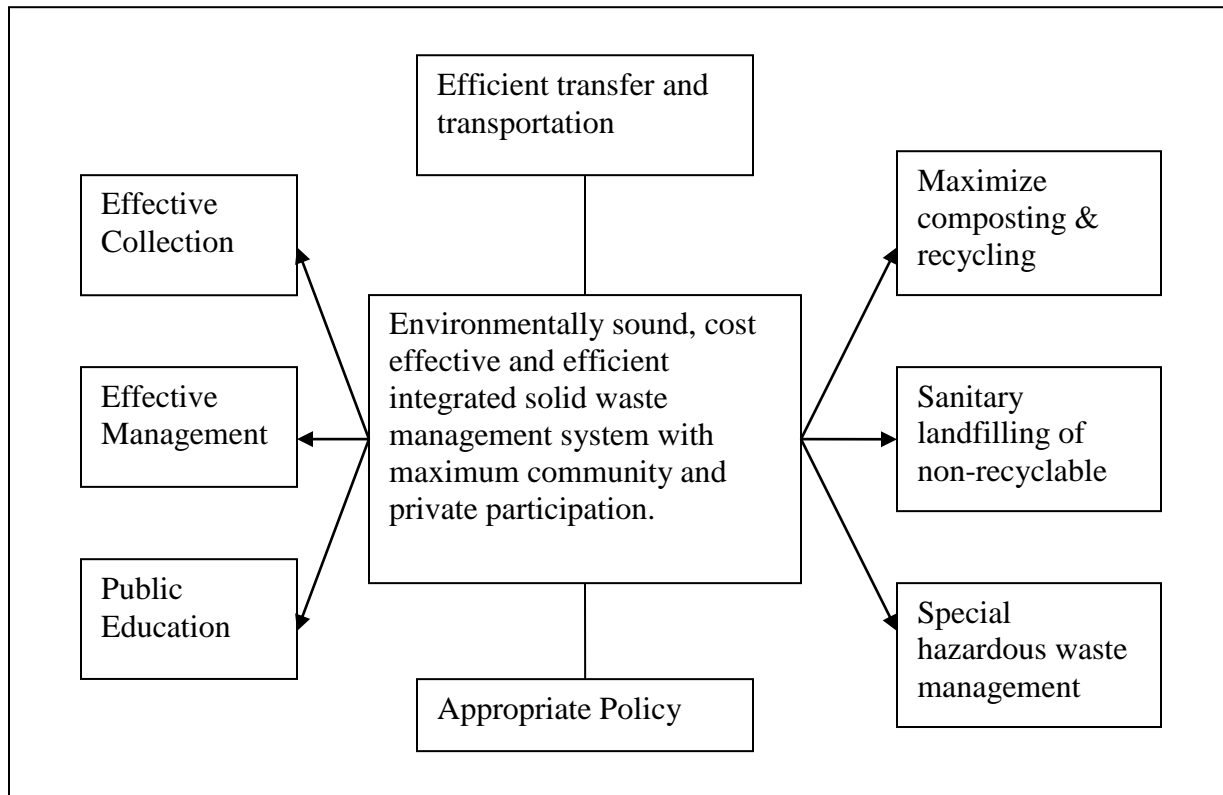
- Give notice to all potential and interested parties for the application which is subjected to public participation. For instance, Environment Impact Assessment for development of new landfill site. Sedibeng District Municipality IDP (2011/2012: 18) indicated that most of the time the community or public is not involved in the selection of the landfill.
- Fixing a notice board at a place conspicuous to the public at the boundaries of municipality or on the fence. The area where the new activity is to take place must be known.
- Give written notices to the owners of land or neighbouring wards where the activity is to take place. The owners and occupiers of land should be within hundred metres of the boundary of the site that may be directly affected by the activity. The municipal ward councilors, rate payers and community should be involved.
- Place the advertisement in local newspapers that are predominantly used in the region. One provincial and national newspaper may be used. Any official gazette may be used to publicize notices.
- The guidelines and requirements are to put written notices, notice boards and advertisements. Notice board should be 60cm x 42cm and should be displayed in the lettering and in the format determined by the communication department of the municipality publishing the notice. Advertisements and tender specifications should be approved by the Supply Chain Management department as tender documents will be purchased from this department. The process of public participation depends of the type of service that the municipality requires, for instance, public-

private-partnership and local cooperatives for waste management. In addition to this Imbizo and council meetings form part of public participation (Emfuleni Local Municipality Communication Strategy 2010).

5.16 NATURE CONSERVATION TO MITIGATE CLIMATE CHANGE

Garg (2006:7) conducted a study in India on the level of participation to conserve nature and discovered that the Valley of Flowers National Park was listed among heritage sites though the community dumped waste causing nuisance to the extent that the national park would lose its license. Public participation was the best recommended strategy in this nature conservation effort. Waste recycling and reuse before waste is deposited on landfill site was in the agenda of public awareness and education. This can be followed at the Sedibeng District to save natural resources like Vaal River and historical sites. The public participation process can be targeted to manufacturing companies to dispose their delisted products appropriately including chemicals, mercury, batteries and tyres. According to Scott (2009: 31) many societies have a high degree of apathy that makes participation as citizens difficult though public participation is increasingly becoming a standard practice to sustain service delivery projects. It is a characteristic of and condition for a successful modern democracy. There must be effective channels of communication to accomplish these objectives. Erasmus (2012:90) identified that companies, motor vehicle garages, informal vehicle repair workshops and municipal fleet management departments do not dispose their non-reparable tyres at properly designed areas. These tyres end up on landfill sites where they exhaust landfill space as they bubble to the surface, trap methane and become a risk for fires contributing to climate change impact. During compaction of waste they damage liners enhancing ground water pollution with toxic leachate. The figure below depicts the simple method of public participation that can be used by municipalities.

Figure 5.3 Public participation in waste management



Extracted from Maharjan (2005:3)

Maharjan (2005:3) explains that effective solid waste management is more than just cleaning the streets, collecting waste and dumping of the collected waste. Integrated solid waste management is a process of optimizing the waste management system as a whole with application of a variety of suitable technologies. This includes: reduction of amount of waste generated, proper waste segregation, efficient waste collection, daily street sweeping, waste transfer from preliminary collection vehicles to haulage vehicles, transportation of waste, waste composting, recycling, landfilling, hazardous waste management and public education and participation.

Waste management is a collection of various technologies, disciplines and informal processes. These are carried out within policies, legislation, municipal by-laws, standards, environmental health guidelines and provincial ordinances. In Sedibeng, a high density urban settlement and change in consumption patterns have recently accelerated the need for better waste management. The public needs to be involved to look at the best method in waste generation and disposal.

Vivanco, Ventosa and Dunarey 2012:2 maintain that when bio-waste is deposited on landfill sites, it contributes Green-House-Gas (GHG) emissions due to anaerobic degradation occurring in all landfill sites. To remedy this problem, public awareness campaigns need to be designed to capacitate householders to separate bio-waste from municipal waste and embark on home and community composting.

Blengini, Fantoni, Busto, Genon and Zanetti (2012: 1717) conducted a study on Life Cycle Assessment (LCA) to determine and quantify the relative importance of different waste subsystems such as recycling and separation of bio-waste. The authors established that carbon and bio-waste management contributes to climate change mitigation and reduce its impacts. The stakeholders and the public have to be involved in the waste separation and recycling. Public participation is a process that cannot be avoided by politicians and government officials. Hartely and Wood (2004: 319) view public participation in waste and environmental projects as a fundamental component but it must begin at the early stages of the project and be effective to benefit the project aims and objectives of the community and political offices. Sedibeng public participation increases the understanding of the objective to be achieved so that the community has freedom to express themselves on how they would see waste management happening in there are. The concerns of the people must be addressed. The authors identified some barriers of public participation such as poor planning knowledge by the public, legal waste licensing, poor provision of information, poor access to legal advice, mistrust of the waste disposal industry, people obsessed with illegal dumping, inability of officials and the public to influence decision-making processes, failure of officials to execute public participation method.

Goven and Langer (2008: 924) published their study on public engagement on the reuse of bio-solids from sewer sludge deposited onto landfill sites in order to convert methane to energy. The authors engaged various stakeholders, such as politicians, policy makers, business representatives, technical experts, citizens and NGOs. The objective of public engagement in the project was to raise awareness of the project planned to facilitate the presentation and sharing of knowledge by participants and to prepare the participants to come up with inputs so that the action plans developed is their product. Sedibeng District Municipality can involve ESKOM to be a business partner in the project because the three municipalities have got sewer plants.

Emfuleni Local Municipality is in the process of initiating waste to energy projects and tenders were advertised in September 2012 (Advert on Request for Proposal is attached as **Annexure D**).

Household and businesses waste consist of wet and dry components that get mixed before being transported by the municipality collection trucks. Brortman, Ayalon and Kan (2012:1980) maintain that wet and dry waste end up on the landfill site containing material that can be recycled. The authors proposed that municipality should establish infrastructure such as transfer stations, composting, drop off points and buy back centres. In Sedibeng District Municipality, infrastructure can be established in high density areas such as Evaton, Sebokeng, Bophelong, Sicelo and Ratanda.

5.17 COMMUNICATION INITIATIVES TO ENHANCE PUBLIC PARTICIPATION IN SEDIBENG DISTRICT MUNICIPALITY

Gauteng Department of Local Government (GDLG) (2009:79) discovered that Sedibeng District Municipality and Emfuleni Local Municipality had a communication policy and strategy in place whereas in Midvaal and Lesedi Local Municipalities it was unknown whether they have communication policy or strategy and channels to engage the public. There are common areas of public engagement in Sedibeng and Emfuleni such as public engagement by councilors. In some instances there is no uniformity in the application of communication used by both Sedibeng and Emfuleni. GDLG (2009:79) discovered that the type of public participation in these municipalities concentrates on public involvement in Mayoral Izimbizo, public participation events, stakeholder consultation on issues such as IDP and Service Delivery and Budget Implementation Plan (SDBIP). Sedibeng District Municipality needs to capacitate local municipalities to develop and implement public participation in waste management to be in line with the integrated waste management plans 2005.

According to Squires (2006:21) public participation in waste management is a developmental process amongst primary and secondary stakeholders. Participatory development requires effective development partnership between authorities and development agents and this can be accomplished through:

- **Listening to each other.** The municipality and stakeholders listen and learn from each other for instance, people living in informal settlements may help with designs of waste collection in their area and identify collection points including the risks associated with collection in between informal settlements. Listening to each other allows planners to learn the preferences, values of the people and the commitment level of the participants.
- **Piloting the projects.** When authorities agree with the public to start a new project, the chances of success are guaranteed if each party listened to the alternatives and there was joint preparatory work. The failure of the project may be due to the involvement of people at the very late stages with no alternatives proposed to each party.
- **Demonstrations on the proposed project.** The demonstration phase refers to the fine tuning and adapting of the project concept, wherein matters that relate to an efficiency, risk management, sustainability and ownership are determined. This phase will be completed only when consensus has been reached and appropriate participation has been undertaken to carry the project to its final stage.
- **Mainstreaming the programme.** When a programme and projects exist, there must be transparency and accountability by all parties. There should be continuous commitment of stakeholders and each party adapt to the changes as the project continues. Each party should accept that there is no project without hick-ups (Squires 2006:22)

Scott (2009: 69) identifies communication methods that a municipality can use as follows: personal visits to communities, constituency offices and municipality media, that is, use of local radio stations, national radio stations, printing, advertising and electronic media, community development workers and stakeholder briefing sessions and road shows. The author believes that when a political structure is limited to deal only with the petitions aspect of public participation, it leaves a huge gap in terms of political hearings, education, committee proceedings and house sittings. The solution, according to the author, is setting up cross functional teams to carry out projects which is a positive factor indicating the legislative sector's ability to keep up in a fast-paced and modern environment (Scott 2009:71).

Public participation in waste management contributes to the success of local municipality programs. Door-to-door awareness and education programmes, distribution of pamphlets and

newspaper adverts promote public participation in residential areas, thus increasing weekly tonnages of collected household and recycled waste. Read (1999: 228) advised that municipalities should design a communication strategy that is accessible and affordable to the public. The author proposes communication channels as follows:

-Advertisements in local newspaper should be in local languages such as English, Sesotho and IsiZulu in the case of local municipalities in Sedibeng District Municipality

-External and internal newsletter can be useful to reach communities that cannot buy newspapers

-Special government events such as World Environment Day, Bontle-ke-Botho launch, Arbor Day, National Council of Provinces and Peoples Assembly.

The author listed few guiding principles for planning and implementing municipal service promotion:

-Enhance motivation. This can be achieved by supplying transport for public meetings especially for poor communities and aged people. Target groups can be divided due to diversity of the population groups. During the public meeting an interpreter can be provided for physically challenged individuals and those who cannot speak other languages. This will be controlled by the chairperson of the meeting.

-Use the neighbourhood effect. Municipalities can learn from each other

-Provide effective information. Recycling tours can be undertaken, household leaflets distributed, stickers on waste vehicles, telephone hotlines, school presentation and seasonal promotions. The municipality can use private companies to assist and community to make public participation a reality.

5.18 INDUSTRIAL WASTE MANAGEMENT PLAN

The National Waste Management Strategy (2000) and the Department of Environmental Affairs (2010) require waste management plans for the following industries: e-waste, tyres, batteries, health care waste, power station waste, pesticide waste, oil and sewage sludge.

- **E-waste.** According to the National Waste Management Strategy 2000, e-waste is a relatively new waste category for which there is currently a lack of formal disposal mechanism. Materials and hazardous components used in manufacture of electronic

goods include mercury, brominated flame retardants which are considered as hazardous waste stream. Though there is significant job creation in recycling waste, its hazardous nature should be the priority of the producer, user and the recycler and safety precautions should be remembered.

Anderson (2012: 154) proposes that there should be two industrial sectors in the recycling and management of waste. These are e-waste, transport and e-waste processing. E-waste transport is to collect waste from cities and towns, urban and rural areas. The role of government is to establish transfer sites for e-waste processing. The processing of e-waste should be the responsibility of the private company. This stage needs subcontractors to be appointed to sort e-waste. Personnel needs to be trained in the sorting plant to ensure that only e-waste is loaded into the truck after separating appliances, greens and household solid waste. This can be a job-creation venture in Sedibeng District Municipality especially that there is high unemployment rate. Lawhon (2012:190) explains that the best solution is to manage e-waste by providing an informal sector and business dominating the formal waste sector. Challenges identified by the author are that e-waste projects are limited to those who provide new services; there is little control thus the business exists with minimum oversight from government and the existing alliance exists and competes with small recyclers. This makes awareness and education ineffective at household and industry level.

- **Batteries:** Rechargeable batteries and silver oxide batteries can contain heavy metals such as mercury and cadmium that are hazardous substances which have a potential of environmental threat when disposed of to landfill sites. Battery manufacturers in the region should submit their environmental management plans to Sedibeng District Municipality to ensure these batteries are not disposed to the landfill sites.
- **Florescent** lamps. Mercury is a neurotoxin which is harmful. Awareness and education to the public to make use of compact florescent lamps (CFLs) is promoted by government and Eskom. There are no facilities in the country for recycling florescent lamps.
- **Power station waste.** Coal-powered power stations generate large amounts of fly-ash which sterilizes the agricultural land and causes air pollution. The ash can be used as cement extender but the level of re-use of this by-product is very low.

- **Pesticide waste:** Pesticide waste has a potential to accumulate in the food chain. Awareness and education to farmers in the region is required.
- **Used oil.** Spilled oil accumulates in the environment and causes water and soil pollution.
- **Sewage sludge.** This type of waste is used as uncontaminated sewer sludge and can be recycled. If it is contaminated with heavy metals agricultural land can be barren and yield no crop (National Waste Management Strategy 2000).

5.19 CONCLUSION

This chapter focused on evaluation of public participation at Sedibeng D.M. The Integrated Waste Management Plan (IWMP) 2005 and Integrated Development Plan (IDP) 2010/2011 and 2011/2012 as the legal documents guiding operational plans of both district and local municipalities have been discussed and it was discovered that these municipalities endeavour to involve the communities in IDP, Budget, Service Delivery and Budget Implementation Plans. The strategies to turn around the public participation processes were listed in IDP document to involve community and promote public participation. The Executive Mayors and Council Speakers in the region endorse public participation as means of strengthening community synergies and identified the stakeholders in their regions with specific focus on designated groups, that is, women, youth and disabled; old people; business people; unemployed and general community. The IDP public participation meetings reveal that there is an outcry of excessive illegal dumping that undermines the objective of clean cities and a healthy environment. In public participation process it has been identified that there is no direct waste service provision and contracting by community to render waste removal services in their areas, that is, there is little or no public participation to sustain waste management service delivery. Informal settlements and densely populated areas can participate in material recovery in door-to-door waste collection of dry recyclable material, recover raw material from communal bins and municipal waste vehicles. The following chapter will concentrate on empirical study on the extent of public participation in waste management service delivery and interviews will be conducted to official of relevant departments and selected households of the three local municipalities.

CHAPTER 6

EMPIRICAL STUDY ON THE EXTENT OF PUBLIC PARTICIPATION IN WASTE MANAGEMENT SERVICE DELIVERY

6.1 INTRODUCTION

This chapter focuses on the analysis of the survey that was conducted to obtain the responses of the officials working in Waste Management, IDP, Supply Chain Management and Budget offices, in relation to the extent of public participation in waste management service delivery. These officials were target respondents because their departments are supportive to solid waste management and communities in the three local municipalities of Sedibeng District Municipality. The questionnaires did not take into account the factors of age, education and gender as service delivery is for all community members. The responses from the community were analyzed in terms of willingness and readiness to participate in the waste projects to sustain waste management services. Fifty households from Sebokeng and Sharpeville, twenty from Sicelo and thirty from Ratanda townships were randomly selected to participate in the study. Closed and open- ended questions were prepared. Two types of questionnaires were used, one for the officials and the other for the community. Similar structured questionnaires designed for the officials were developed by Nahman and Godfrey (2009: 527) and Scott (2007: 129). The questionnaire for the community was similar to one developed by Bernstein (2004: 162). The three questionnaires were adjusted to match the South African and Sedibeng District Municipality situation.

6.2 RESEARCH METHODOLOGY

The research study examines the extent of public participation in the three local municipalities comprising Sedibeng District Municipality. Willingness of the community to partner the municipality in waste management activities is the main focus to sustain waste management services. By using questionnaire, counting and measuring objects or people participating in the study data is produced.

6.2.1 Qualitative and quantitative methods

Qualitative and quantitative research methods were employed to enable the researcher to obtain the data to complete the study. According to Frick (1998:258) quantitative methods need qualitative methods for explaining the relations they find. Frick explains that in qualitative method the researcher using open interviews will precede the actual collection of data questionnaires. Qualitative and quantitative are complementary rather than competitive methods. In this study both qualitative and quantitative methods were used as questionnaires were used from which data was obtained to quantify the number of respondents.

6.2.1.1 Qualitative method

Qualitative method entails practical experience in applying methods and in the concrete research subjects. It is based on validated knowledge which has to be applied correctly. Qualitative data is characterized by observations, detailed inquiry interviews that capture direct quotations about peoples' personal perspectives and experiences, participant observation and engagement where the researcher has direct contact with and gets closer to the people. The researcher's personal experience and insights are important to the enquiry (Patton 2002: 40). Patton further explains that quantitative research has its domain based on statistics or numbers whilst qualitative research also involves the analysis of unstructured material including customer feedback forms, reports and video clips. It is used in open-ended survey responses, emails, notes, photos and videos. Qualitative analysis focusses on understanding rather than explaining social actions and events within their setting context (Mouton 2009: 168). Mouton commends qualitative method and explains that the investigator works with the wealth of rich descriptive data through methods such as participant observation, in-depth interviewing and document analysis.

Babbie (2013: 557) maintains that qualitative data analysis is a non-numerical and interpretation of observations to discover patterns of relationships. Greene (2007: 39) points out that qualitative methodologies were advanced for their perceived superiority as thoughtful studies of lived human experience, as intense and in-depth studies of a few people who have been purposefully

selected, not randomly selected. The author insists that qualitative methods have the following characteristics:

- Centre around the rational capabilities of the inquirer as the inquirer is the primary instrument of data generation, analysis and interpretation
- Are emergent and flexible as they endeavour to be responsive to what is learned as the study proceeds
- They fulfill the inductive, emergent and contextual challenges of understanding lived experience which is the primary purpose of social inquiry
- Endeavour to generate this understanding from the perspective of those living the experience interpreted through the lense of the observe- inquirer
- Distinctive characteristic of the qualitative methodology is the inevitable participation of the inquirer in the social reality being studied and the presence of inquirer's perspective and understanding of findings generated
- The interrelationships of what was investigated and the investigator cannot be separated.

6.2.1.2 Quantitative methods

Quantitative methods are interested in numbers and volumes. Yin (2009: 132) maintains that substantial amounts of quantitative data and during statistical analysis, qualitative data remains central to the entire case study. To explore, describe or explain events qualitative data is used, therefore the case study has used both quantitative and qualitative data. Greene (2007: 39) identified characteristics of quantitative methods:

- Quantitative methods control the bias of all kinds which is of vital importance to the quality of the study and a driving forces underlying advancement of methodology
- It is the method that protects the data and the inquiry finding of the enquirer

Quantitative method was applied in this study in order to measure the reaction of many people to the set of questions to facilitate comparison and statistical aggregation of data (Brynard and Hanekom (2006:37). Muhammad, Muhammad, Aijaz, Syeda and Kamal (2011: 2082) agree with Henning, van Rensburg and Smit (2004: 42) that a group of people is clearly identified so that typical activities are captured in qualitative research. Babbie (2013: 557) describes quantitative

analysis as a numerical presentation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect.

6.2.2 Research data instrument

Research instrument is the most vital tool in research. Mouton (2009: 67) explains that data collection involves applying the measuring instrument to the sample or cases selected for the investigation. The instrument should be properly constructed and validated over time so that it assists the researcher in collecting data that are more likely to be reliable than they would be if no instrument was used. Such instruments are questionnaires, and observation schedules which must be more valid and reliable.

6.2.2.1 Validity

Kvale (2009: 149) refers to the validity as the strength and soundness of a statement and whether a method investigates what it purports to investigate. Gray (2005: 1991) defined validity as the ability of the instrument to measure what is was intended to measure. The author identified seven types of validity and not all of them will be applicable to this study:

- **Internal validity**

Internal validity refers to correlation of questions of cause and effect variables and to the extent to which causal conclusions can be drawn, for example lack of awareness and education campaigns to Sedibeng communities leads to recyclable material deposited on landfill sites.

- **External validity**

External validity is the extent to which it is possible to generalize from the data to a larger population or setting, for example the data collected from household representative sample and officials in waste management.

- **Criterion validity**

Criterion validity compares how people have answered a new measure of a concept with existing widely accepted measure of concept, for example the percentage of people who are

separating waste as a new concept in waste management and people who use municipal truck for waste disposal.

- **Construct validity**

Construct validity is concerned with the measure of abstract concepts and traits such as anxiety, attitude, ability and knowledge. This is not applicable to this research as it is mostly applicable in the school of psychology.

- **Content validity**

This type is used to validate the contents of a test and cannot be applied in this study (Gray 2005: 90-92).

Babbie (2013: 353) refers to validity as the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. It describes a measure that accurately reflects the concept it is intended to measure. The author recommends field surveys to be relatively less costly because the research is undertaken by one researcher. Denzin and Lincoln (2011: 122) support the assessment of the validity of a tool which should measure the variable it should measure and emphasize that omission of stakeholders as participants is a form of bias because all stakeholders' views, claims and concerns should be considered.

6.2.2.2 Reliability

Reliability is a matter of whether a particular technique applied repeatedly to the same object yields the same results each time. Kvale, and Brinkmann (2009: 327) warns that whether a method investigates what, the tool should investigate what it purports to investigate. The author defined reliability as the consistency and trustworthiness of the research account, intra- and inter-subjective reliability refer to whether a finding can be replicated at other times by other researchers using the same method. Throchim (2006: 1) describes reliability of the tool as consistency and accuracy of the actual measuring instrument or procedure. If the instrument is reliable it will generate the same results if the survey can be replicated over a period of time. Questionnaires were used for structured and unstructured questions for both community and the officials in waste and relevant departments. Kvale (2009: 149) maintains that reliability pertains

to the consistency and trustworthiness of the research account. This also refers to the reliable knowledge which is checked, controlled and undistorted by personal bias and prejudice.

Gray (2005: 344) explains that reliability refers to the stability of findings and a reliable observation is one that would have been made by any similarity situated observer. The author identified some reliability problems

- **Time**

A single record of events taking place in an organization may be either unenlightening or completely misleading if those events do not represent what typically happens not of the time. Reliability will improve with subsequent visits and recordings.

- **Ambulatory events**

This refers to the movement of people who do not show on video or audio recordings. This can be solved by setting multiple cameras, for example, public meetings in a community hall.

- **Documentary realities**

Some conversations, for instance IDP meetings may be influenced by the document. The researchers must have access to these documents.

- **Subject error**

Robson (1997: 67) insists that the problem of subject error should be avoided as it predisposes the study findings to unreliability. Cresswell (1994: 159) maintains that no study is original, therefore the study has a chance of being replicated in another setting

6.2.2.3 Sampling and Population

Babbie (2013: 115) advises that when the concepts and measurements are refined whom or what to study. The author defines the population for a study as that group of people about whom we want to draw conclusions because it is not all the members of the population that interest us and make every possible observation of them. Purposive or judgemental sampling is a type of non-probability sampling in which the units to be observed are selected on the basis of the researcher's judgment about which ones will be the most useful or representative. The study population has aggregation of elements from which a sample is actually selected. In the random

sampling of study population each element has an equal chance of selection independent of any other event in the selection process (Babbie 2013: 135). Good sampling reduces the chances of the researcher picking the wrong people or unit. It reduces error and maximizes validity (Balnaves and Caputi 2001: 92).

Sampling population was chosen for the purpose of the study. The empirical study was conducted within the areas of Emfuleni, Midvaal and Lesedi Local Municipalities. Systematic sampling is also called interval sampling, meaning that there is a gap between each selection (Australian Bureau of Statistics 2004:1). Fifty households were interviewed in Sharpeville and Sebokeng, 20 from Sicelo in Midvaal and 30 from Ratanda in Lesedi L.M. The study also included judgemental sampling because waste officials and relevant departments were readily available. Silverman (2008: 306) indicates that purpose sampling permits the researcher to choose a case because it demonstrates some feature or process in which we are interested and a sample case was chosen based on the parameters of the population. During field survey every fifth house was interviewed. The process and procedure followed in the household was that the head of the family was interviewed. The total number of family members was considered to determine the extent of waste generation. The officials interviewed as target participants were those capable of facilitating public participation.

6.2.2.4 Interviews and questionnaires

Interviews are completed by the interviewer based on what the respondent says, they are a far more personal form of research than questionnaires where the interviewer works directly with the respondent. In this way, the interviewer has an ample opportunity to ask follow-up questions. Though they are time consuming, they are resource intensive. The interviewer is considered as part of the measuring instrument. During the field survey informal conversational interview was conducted in order to remain as open and adaptable as possible. General interview guide approach was applied in order that same general areas of information are reflected from each interviewee and still allow a degree of freedom and inadaptability in obtaining the information. The interviewee is given an opportunity to express him/herself and questions are repeated when there is no clarity, McNamara (1999: 1) insists that interviews may be useful as a follow-up to certain respondents to questionnaires, for instance to further investigate their responses.

Standardized open-ended interview implies that same open-ended questions are asked to all interviews, so as to facilitate faster interviews that can be more easily analyzed and compared, for example the residents in their homes. Closed, fixed response interviews refer to a process where all interviewees are asked the same question and to choose answers from among the same set of alternatives, for example alternative methods of waste disposal; some people may choose to use the municipal trucks only and other may choose to recycle. The interviewer needs to be trained in interviewing processes, organize and rehearse the interviewing (Valenzuela and Shrivastava 2007: 7).

Joint interviews were avoided because Arkse and Knights (1999: 76) identified disadvantages directly related to joint interviews as follow:

- There is a risk of starrng up antagonism and conflict of interest, for instance people recycling and separating at source may feel better than the people who recycle at landfill sites
- Groups may withhold information form the interviewer
- Interviewees may not concentrate as well when two people are present

Good questionnaires include clear and concise instruction on how to complete the questionnaire. The researcher should use a simple and direct language, short sentences and well understood basic vocabulary.

6.2.2.5 Ethical issues

There are ethical issues surrounding the use of questionnaires. Bailey (2007: 17) identified eleven forms of information to make potential participants aware of various forms of information:

- Participants must know that they are participating in research
- They must know the purpose of the research
- They must know the procedure used during the research
- The risk and benefits of the research include successful communication with the respondents
- Their rights to stop research at any time and the researcher to consider these rights

- Voluntary nature of research participation because other participants may expect payment, which is not an issue at this moment
- The procedure used to protect confidentiality so as to protect the integrity of the respondent
- The group's right to have all questions answered because respondents must make a meaningful contribution to the study
- Other information relevant to participants and the information should disseminated to avoid suspicion
- They must know what is required of them if they consent to participate
- If they withdraw there will be no foreseeable consequences

6.3 CONDUCTING INTERVIEWS USING QUESTIONNAIRES

6.3.1 Questionnaires and interviews conducted to officials

During the survey procedure, the respondents were assisted with the interpretation of each question as proposed by Jenkins and Dillman (1995: 3) that the interviewer must play a critical role in the perceptual process in interviewer- administered questionnaire. The questionnaires were distributed to Finance, IDP, Supply Chain Management, Communication, Office of the Speaker and waste management officials. The other departments that were interviewed directly support waste management department. Questionnaire for officials is attached as (**Annexure F**).

Question A1 The question related to waste collection in the municipality

The question was asked to determine if municipality as a license holder of waste management renders sustainable services and encourages other stakeholders to be part of waste management. All officials responded and indicated that only the municipality is responsible for waste collection in their areas. There are no public-private-partnerships, local cooperatives, NGOs and private sector programmes. Midvaal indicated that waste vehicles are an asset to the municipality; there is no way that the private sector can come in.

Question A2 Total number of household receiving services.

The question was meant to understand if there are any backlogs with an aim to close them with the maximum participation of the community.

Household receiving services were as follows:

Emfuleni LM – 174,904

Midvaal – 18 000

Lesedi – 18600

Emfuleni L.M. increased from 174,217 achieved in the second quarter to 174904 in the 2012/2013 financial year due to incorporation of newly developed houses in Tshepiso North Phase 5.

Question A3 Number of houses not receiving waste collection

The question seeks to know the areas that do not have collection services so that if there is no municipal capacity what alternative service delivery methods can be procured.

Emfuleni – 10,000

Midvaal – 270

Lesedi – 6000

Emfuleni has the highest number of un-serviced areas. The official interviewed indicated that these are the areas of informal settlements which do not have road infrastructure and are densely populated with no streets making it difficult for municipality trucks to drive through. These areas are: Boiketlong, Sonderwater in Sebokeng; Joko Tea in Bophelong; Barrage; Malgere in N1 rural settlement and Lybia in Sharpeville. In Lesedi the official indicated that the un-serviced areas include farms, informal settlements and agricultural holdings.

Question A4 Services to informal settlements

The question was meant to find out if informal settlements are serviced and if not what can be the reasons preventing municipality from servicing the areas. Emfuleni and Midvaal agreed that they service informal settlements by removing illegal dumps. Emfuleni indicated that they clear all dumps every fortnight with the aid of Expanded Public Works Programme (EPWP) and Community Work Programme (CWP) litter pickers and machinery. Midvaal has skip bins and

dedicated teams. Lesedi has EPWP beneficiaries cleaning the informal settlements and ensuring that refuse thrown outside the skip bins is cleared.

Question A5 The types of vehicles used in waste collection

The question relates to waste transportation for safe disposal on to the landfill site, avoidance of spillages and reduce cost of transportation due to incompatible waste collection equipment. Types of vehicles used in the three municipalities are compactors for household collection, tipper trucks and front-end-loaders for illegal dumps and transfer stations. There are skip trucks to empty skip bins.

Question A6 Affordability of collection fees

The question seeks to establish if the municipality does not render waste collection services that the public cannot afford. The fee for collection was assessed to be affordable and reasonable. Midvaal waste department identified the new farmers who are serviced and indicated that the fee is not always affordable to pay for waste collection services. Each emerging farmer depends on the crop production, type of farming and number of households.

Question A7 Collection time that suites user needs

Some working people would like to put their refuse out for Kerbside collection in the morning to ensure that their waste is also removed. Collection timing does not fit with the user's needs because the compaction trucks are irregular and do not adhere to the collection schedule. The reason given for this irregular schedule is that trucks are delayed during their routine service and maintenance and no back-up is provided.

Question A8 Waste transfer stations in municipality

The question seeks to find out if the municipality is ready to modernize waste management by establishing facilities for recycling and composting of greens to reduce waste deposited to landfill sites. Transfer stations are placed at Roshnee/Rustervaal, Arconpark, Sonlandpark and Springbok Avenue in the case of Emfuleni. The municipality is in the process of establishing transfer stations in Sebokeng, Bophelong and Vaal Oewers. Permit is attached as (**Annexure H**)

In Meyerton, they are placed at Galloway, Kliprivier and Blackwood at Midvaal. Lesedi LM uses skip bins.

Question A9 Recycling centres in the community

The question was to test if there are facilities for sorting waste and buying waste from the community. Recycling centres are available in Midvaal but are privately owned. At Emfuleni these are established in Evaton/Mafatsane and Evaton West.

Question A10 Municipality assisting recycling groups

The question assesses the level of support offered by the municipality to recycling groups that are committed to minimize waste. The municipality assists recyclers. At Emfuleni there are two 5-tonne trucks that were purchased with the Gauteng Provincial Bontle-Ke-Botho prize money to assist recyclers to sell recycled material to waste buyers and reduce poverty and unemployment rate. Midvaal recyclers are given an opportunity to collect paper from all municipal buildings.

Question A11 Composting plant in the municipality

The question is directed to activities that reduce waste at source with the assistance of the community. Midvaal and Lesedi Local Municipalities do not have composting plants. Emfuleni has a shredder which trashes garden waste and tree logs into manageable small pieces to save the landfill air space. The municipality aims to involve the community and nearby farmers to compost at Waldrift landfill site. The advantage of this exercise is the increased life time of the landfill sites, mitigation of climate change impact and waste minimization.

Question A12 Collection schedule at transfer stations

The question seeks to identify the availability of resources to keep transfer stations clean without nuisance and offensive odours. Schedule to clean dumps is accomplished at Emfuleni as transfer stations are cleaned every Monday and Friday. In Midvaal, these are cleaned by a dedicated team and machinery. Kliprivier, Galloway and Blackwood transfer stations are serviced every day. The community was requested to cut wood logs into one meter size to fit in the skip bins. Their problem is that when skip bins overflow, residents throw waste on the adjacent property.

Question A13 Different places for illegal dumping

The question seeks to establish if the community illegally dumps waste on open spaces.

Waste is illegally dumped in various places despite regular refuse collection. In Lesedi, areas that have excessive littering are serviced twice a week but the community continues to dump because they think they give jobs to municipal workers. A serious challenge facing waste officials is that waste management is not well marketed because people do not attend meetings. At Midvaal, skip bins were placed next to the stadium to curb illegal dumping but the community abused the facility. At Emfuleni dumps are found in all forty-five Wards.

Question A14 Hazardous waste put on the side walk

The officials may have read reports from waste supervisors that community places expired medicines, batteries and globes outside for municipal collection which necessitates public awareness and education. The officials did not experience any hazardous waste placed on the streets.

Question A15 Re-use, reduce and recycle awareness campaigns

The question aims to test if densely populated areas are prioritized on awareness and education about waste minimization. There are re-use and recycle awareness campaigns. Target groups and areas are informal settlements, low income areas, RDP houses and in Midvaal organized conservancies.

POLICIES, BY-LAWS AND LEGISLATION

Question A16 Environmental legislation in the municipality

The question was to find out if the operations are based on National, Provincial and Local Government policies and legal framework. The response was that there are policies, by-laws and legislation such as waste management by-laws promulgated on 9 February 2005 at Emfuleni Local Municipality. In Midvaal and Lesedi local municipalities, by-laws are available but need revision. In the three local municipalities, all by-laws need to be revised to accommodate the newly enacted National Environmental Management: Waste Act 2008 which requires municipalities to promote recycling, re-use, reduce and recover waste at household level.

Question A17 Policies and by-laws communicated to the public

The question was asked because people must know about “Polluter Pays” principle in illegal dumping. Policies and by-laws are communicated to the public. The three municipalities hold public meetings and Ward committees are trained on governance issues to capacitate them in communication strategies. Emfuleni gave an example of training that was conducted to Ward committees by the North -West University. The course content included Public Participation in Governance; Meeting Procedures; Community Diversity; Communication and Dealing with conflict. When Ward Committees are capacitated it will be easy to communicate information to the public.

Question A18 Practice of law enforcement

The question was to assist the study to know if by-laws are available and are implemented. Law enforcement is practiced in the three local municipalities. Emfuleni L.M. has a By-law Unit and the officials in waste management were trained on issuing of fines to enforce “Polluter Pays” principle. The challenge is that there is lack of funding to expand the programme to all waste management officials.

Question A19 IWMP in the Municipality

IWMP is a legal document for waste operations and must be implemented and aligned to IDP. The three local municipalities have Integrated Waste Management Plans.

Question A20 Does municipality implement recommendations of IWMP

The municipalities implement the recommendations of IWMP in the areas of waste separation at source, recycling, re-use, reduce, recover, composting and household collection. These are included in the SDBIPs. Emfuleni and Lesedi local municipalities do not have local cooperatives and public-private-partnerships. Midvaal and Lesedi do not have composting activities and the challenges are that there are no resources and no sufficient funding to appoint additional staff to implement approved programmes of the IWMP.

Question A21 Coordination among departments

The departments are interrelated and all submit IDP aligned to Budget and procure goods and services for the public. There is coordination among IDP, finance, procurement, Council Speaker and communications department.

Question A22 Interest of political authorities in Solid Waste

The question refers to the ability of ward committees, community development workers and ward councilors being able to organize public meetings and involve community to keep their places clean. There is interest of political authorities in Solid Waste Management because waste management is part of the agenda in public meetings, according to the officials interviewed. In Midvaal the Ward 10 councillor requested officials to respond to public complaint within seventy-two hours and if they go beyond, officials must motivate so that he can inform the public as a feedback strategy. Emfuleni and Lesedi participate in the Gauteng Bontle-ke-Botho Clean and Green programme where ward councilors develop business plans on environmental programmes such as: waste management, agriculture, water conservation, energy saving and climate change.

Question A23 Existence of partnerships in waste management

The question was to test if the municipality involves public and private partners to close the gap of backlogs and un-serviced areas. There are no private and tri-partite partnerships except EPWP and CWP beneficiaries who are selected from wards and directly paid by the Department of Environmental Affairs. Private contractors are appointed by the municipalities to operate landfill sites. They bring their own machinery, operators and superintendent who have the expertise on the operation of landfill sites. The weigh bridge computer is operated by a local person and the spotter at the tip-phase of landfill site is sourced from the community

Question A24 Co-ordination between service user and service provider

The question aimed to understand if the municipality signs service level agreement with the service provider. There is cooperation between service user and service providers. Service providers are paid every month and therefore are committed to their contracts

Question A25 Do partners have equal power in service delivery?

The question relates to the ability of appointed partner to render services to the public for customer satisfaction. Partners have equal power because they have signed a contract and terms and conditions for the job to be done on behalf of the municipality.

IMPORTANT STAKEHOLDERS IN WASTE**Question A26 Important stakeholders in waste management were identified as follows:**

- Householders - 80%
- Office of the speaker – 80%
- Municipal officials – 79%
- Executive Mayor – 60%
- Ward Committees – 20%
- School Principal – 4%
- Community development worker – 3%
- Businesses – 2%
- NGO – 0%

Sustainable projects in waste through public participation**Question A27 Community members prepared to participate in waste projects**

The question was to find out if community is willing to participate in waste projects. According to the responses, community members are prepared to participate. The officials cited the attendance register in various meetings. The register proves that the community is prepared to be part of discussions by asking questions to officials and politicians.

Question A28 National and Local Government support for public participation

The question relates to the support given by governments in all spheres to ensure maximum participation of the community in waste management. National support is through EPWP and CWP. Emfuleni assists recyclers to transport recycled waste to buyers.

Question A29 Private sector participation in waste management

The question focused on the projects designed by the municipality in which private sector contribution has a stake in waste management and reduce backlog of service delivery. Private sector participates as appointed contractors on landfill sites. In Midvaal they run buy-back centres as they are not owned by the municipality.

Question A30 Third party financing waste management

The question was to inquire if there are any funding agencies that assist the municipality in the projects that are not municipal core functions such as waste to energy. There is no third party financing in waste management services in the three local municipalities.

Question A31 Stakeholders willing to participate in waste management solutions

The question was to find out the level of readiness of the public to assist the municipality in solving the challenges of waste management. Stakeholders are prepared to participate in waste management solutions.

Question A32 Collaboration among stakeholders

The question was to find out if the community is prepared to work as collective towards a common goal of a clean environment. There is collaboration among stakeholders through ward councilors.

Question A33 Active participation platforms in the community

The question was to find out if the residents are given an opportunity to participate in their Wards. There are public platforms in the community because there are ward committees, community development workers, ward councilors, community radios and local newspapers.

Question A34 Designated groups to be involved in PPP

The question was to inquire if the officials are aware of the conditions of the National Treasury in approving funding for PPP that designated group should not be omitted in business plans. The officials considered to involve the following in PPP in waste management:

Women - 95%

Youth	– 74%
Disabled	– 55%
Men	– 5%
Business	– 2%

TYPES OF SERVICES RENDERED BY MUNICIPALITY

Question A35 Officials are to choose which service is rendered by the municipality

The question is based on the premise that there are rural, semi-rural, urban and informal settlements. Officials in the three municipalities indicated that municipality renders services on household domestic collection, transfer stations, operates landfill sites and renders city/town centre cleansing services. In the three local municipalities there is no service for storm water drains as this service falls under Roads and Storm Water departments.

Question A36 Refuse removal charges

The question was related to the previous one where tariffs will be structured according to the type of service rendered and the respondents chose what was applicable to their municipality. The officials indicated that waste tariffs are charged based on fixed municipal tariffs that are revised annually. Prepaid services are charged per load or per skip bin on garden refuse and builders' rubble. Indigent policy is based on the municipal indigent register and waste is included in the calculation of formula as it is done for water and electricity.

Question A37 How income generated is used

The respondent was requested to choose the option according to his/ her opinion on how income generated from waste removal services could be utilized to benefit waste removal. All officials were of the opinion that income generated from waste tariffs should be re-invested into the waste management activities. Only one official felt that waste tariffs should augment other municipal services.

LOCATION OF THE PUBLIC PARTICIPATION OFFICE

The aim of the question is to find out if the PP Office is centrally situated. In the three local municipalities the programme on public participation is located in the Office of the Speaker.

Question A38 POLITICAL OFFICE RESPONSIBLE FOR PPP

The objective of the question was to establish which of the political offices is responsible for public participation. The Council Speaker takes ultimate responsibility

Question A39 Which political structure deals with public participation implementation?

The question was to inquire a responsible office that has been delegated by a political mandate to implement public participation. There is a political structure, at Emfuleni. The name is Public Participation Unit in the Office of the Speaker.

Question A40 Other units involved when conducting public participation.

The question seeks to understand if the officials are aware that public participation process is cross cutting through all departments. Other units are involved and these are service delivery cluster; Mayor's Office; IDP; Procurement and Finance departments.

Question A41 Where public participation office is physically located

The question is asked to assess the level of accessibility of the public participation office. Emfuleni Local Municipality: Office of the Speaker, Corner Frikkie Meyer & Klasie Havenga Street, Vanderbiljpark. Midvaal: Midvaal Municipal Offices, Meyerton. Lesedi: Lesedi Local Municipality offices, Heidelberg.

Question A42 Extent of accessibility of the public participation office to the public

The question assesses the extent of community communication with the public participation office. The offices are very accessible. At Emfuleni Local Municipality, the officials indicated that there are sub-regions of public participation offices in the communities as follows: Tshepiso Library, Mafatsane offices in Evaton, Bophelong municipal building and Boipatong community hall.

Question A43 Present structure effective for public participation

The question seeks the opinion of the officials which may help in the identification of gaps in the process of public participation. At Emfuleni, one official indicated that it seems public participation is done for compliance purposes because the Auditor General enquired if public participation is conducted otherwise it is not effective because people still dump despite

education and awareness programmes such as Restore Dignity in Waste. Other officials indicated that it is effective especially when they have to attend and respond to community petition.

Question A44 Description of how public participation works in the municipality

The question seeks to understand how the need for public participation is identified. Officials described and outlined how the public participation works as follows: When there is a need to communicate with the community, present IDP, projects, budget and their concerns; the Office of the Speaker communicates with the community through loud hailing, notices put in public spaces, radio stations like Thetha and VUT FM, Sedibeng Ster, Loxion News, Short Message Services and emails.

Question A45 Existing policy for public participation

The question seeks to understand the legal framework for public participation. The officials indicated that there is existing policy relating to public participation

Question A46 Public participation as part of strategic plan

The question is asked to understand the short, medium and long-term plans for public participation. Public participation is the integral aspect of the Municipality Strategic Plan.

Question A47 Provide short description of what municipality public participation program involves

The question would like to establish if in public meetings challenges of waste management are mentioned. According to officials, public participation involves soliciting IDP priorities from community and to share information. Waste management is amongst the issues that are discussed in the public participation meetings. Lesedi L.M. official gave an example of public participation meeting to provide interested and affected parties (I&Aps) with information to allow them to meaningfully contribute by way of:

- Identifying issues of concern, provide suggestions for enhanced benefits and alternatives
- Contribute local knowledge and experience and
- verify that their issues have been considered

Question A48 Explain what outreach programs target rural communities

Official indicated that there are petition outreach programmes to communicate with the community and municipality in a civil manner. Ward councilors plan with rural residents and the IDP office ensures that they form part of the IDP and other public participation processes. Other outreach programmes are clean and green programmes for environmental protection and EPWP job creation programmes

Question A49 How under-resourced and unorganized communities are encouraged to participate

This question seeks to understand what can be done if there is no plan to assist the unorganized communities. In Emfuleni, officials indicated that transport is organized on public participation day so that community feels part of the municipality. In Midvaal the community is collected to the Sicelo Community Hall. In Lesedi, they converge in a small hall because the two new big halls were burnt down during service delivery protests.

Question A50 Methods to categorize submissions or participants

The question is asked because stakeholders differ according to their needs. The officials indicated that there is a method of categorizing participants depending on the agenda and target group. In townships the areas are divided into regions for easy access of Emfuleni L.M. residents.

Question A51 Are PPP records available for public scrutiny?

The question is asked to understand if the follow-up on submissions of the community is being done. Public records are available for scrutiny. This will help in reporting back what has been done and what could not be done

Question A52 Participation of the disabled

The question seeks to know if provision is done for the physically challenged stakeholder. The officials indicated that it is easy for the disabled people to participate as municipal buildings have been upgraded to accommodate the disabled.

Question A53 What methods or strategies are in place for public participation

The question seeks to find out if public participation methods are user-friendly. The officials indicated that there are press conferences in radios, public notices, local newspapers, leaflets, invitation to council seating and loud hailing. There is additional technology like twitter, WhataApp and Facebook.

Question A54 Where are public notices placed

The question is seeks to find out if public notices are visible to the public eye. Public notices are placed in all municipal buildings, libraries, notice boards and community halls.

Question A55 Are public notices available in the relevant languages of the area?

The officials indicated that public notices are available in common languages such as English and SeSotho.

Question A56 Who is targeted for public participation meetings

The question is asked to find out how the general public is reached. The officials explained that the whole community is targeted depending on the issues to be discussed. This is where the system of categorizing the target groups comes in.

Question A57 How is target group reached

The question is asked to understand the various ways used to reach the target groups. The officials have a common approach on how to reach the target group though advertisements, notices that are fixed in conspicuous places and targeting the areas where the meeting or activity will be undertaken. If it is related to landfill site land owners and occupiers of the adjacent land are informed. Ward councilors are advised to facilitate the organization of the meeting. The officials went on further to propose that there should be an initial data base compiled as the first step in the process of public participation. Transport is organized for those who live farther from the venue.

The sessions have the Executive Mayor or council Speaker chairing the meeting. There is an interpreter to clarify the agenda. The politician delegated outlines and conducts the meeting. The officials in various departments were present to answer technical and operational questions. The

public is given an opportunity to respond or to ask questions. In public participation meeting an official records all comments and allow departmental officials and Members of Mayoral Committee to respond to each comment of the public. All concerns are noted for the follow-up meeting. The records of minutes and attendance register are kept at the Office of the Speaker as portfolio of evidence and reference purposes.

Question A58 Mention the challenges experienced in terms of conducting public participation meetings

The question was to find out if officials experience problems in conducting public participation meetings. The officials pointed out that in some areas there is poor attendance of the public to the meeting, as well as disruption of the meeting by some individuals; some ward committee members do not attend.

6.3.2 Questionnaire for community

The interviews were conducted to residents at Emfuleni, Midvaal and Lesedi Local Municipalities. There were fifty householders in Sebokeng, Zone 11 and Sharpeville areas. There were twenty households for Sicelo in Midvaal and thirty households for Ratanda in Lesedi. Questionnaires were directed to the head of the family, male, female or any other person who is given custody of the household. Questionnaire for community is attached as (**Annexure G**).

Sharpeville is an old township situated on the western side of Vereeniging. It is divided into Ward 12, Ward 13 and Ward 14 and each ward has a ward councillor. The study was conducted in ward 12 where there are: a clinic, primary school, shops, various religious denominations and informal vehicle repair workshops. These amenities qualify this area to be targeted for awareness and education campaigns in waste management. There is an open storm water channel on which community dumps waste regularly and cause severe blockages and flooding of the lower areas towards the Dlomo Dam. Sebokeng Zone 11 is a developed area with a stadium, schools, clinic and churches. It was supported by the Department of Environmental Affairs to develop a park adjacent to Zone 11 Clinic where the community used to dump all types of waste. The advantage of this development is that the neighbouring school and church had started to realize that a clean environment is possible with the assistance of the community. Sicelo township, Ward 10, has a

library, a stadium, community hall and a neighbouring school. These are in one place making public participation venues fairly accessible to the community and placement of public notices. In Ratanda, Extension 3, the area has no community hall as it was burnt down during service delivery protests. The ward councilors use an old, small hall for public meetings.

Family Profile

It was established that 30% in the households were 3 to 4 in number, whilst 70% were 5 to 8 in number.

Waste in your community

Question B1 and B2 asked if the community stays in urban or rural area respectively

The question was asked so that the type of waste collection service can be determined. It was established that the householders believed that they reside in an urban community as they have community amenities like stadiums, community halls, schools, libraries, clinics, a mixture of gravel and tarred roads and municipal services.

Question B3 Waste separation by householder

It was asked to find out if the community has knowledge on waste minimization activities such as separation of organic and recyclable material like bottle, tins and plastic waste. Waste separation was practised by 35%, whilst 65% did not separate waste but promised to do so if there is awareness and education, support from the municipality and market for selling recyclable material.

Question B4 The question asked which of the listed waste material do they separate.

Those who separate waste concentrated on bottles and tins as they have small yards to include plastic waste.

Question B5 The question asked what the family does with used batteries

Batteries are to be disposed separately. The residents indicated that they have electrical equipment, therefore they do not have batteries at their homes. The residents agreed to separate batteries in future if there is a company to collect them.

Question B6 The family was asked if they mix medical waste with municipal waste.

The question aimed to bring new knowledge to the community to take cognizance that it is wrong to mix used syringes and blood soaked bandages with municipal waste. The householders pointed out that they do not have medicines to throw away and mix with municipal waste.

Question B7 Frequency of waste collection

Community must participate in the municipality's programme of household collection in a sustainable manner. At Emfuleni and Midvaal local municipalities waste is collected once a week. At Lesedi in Extension 23 and 26 waste collection is done once a week but in Extension 1 and 3 household collection is done twice a week on Tuesdays and Fridays to curb illegal dumping.

Question B8 The family was asked if the collection schedule meets their needs

In terms of collection time, some residents leave their homes for work early and would like refuse to be removed regularly. The householders are content with the collection schedule, but waste trucks do not have fixed collection time. The reason for this irregular waste removal is related to availability of collection vehicles and that on pay-days municipal employees collect waste very early in the day and during other days they arrive very late.

Question B9 asked the community if they have transfer stations in the area

The question is asked to gather information on recycling, possible availability of facilities for shredding greens and composting. The municipality in Midvaal has established transfer stations at Galloway, Kliprivier and Blackwood. Emfuleni Local Municipality has four transfer stations at Sonlandpark, Roshnee/Rustervaal, Springbok Avenue and Arconpark. At Emfuleni LM townships there are no transfer stations but there is a plan to establish them in Sebokeng, Bopheleng and Vaal Oewers (**document attached as annexure H**). Lesedi has skip bins at strategic areas.

Question B10 asked if there is a schedule to keep transfer stations clean

The schedule would keep facilities free from offensive odours. The schedule is maintained by the municipalities with their own resources. At Midvaal, the waste department maintains the transfer

stations with a dedicated team. At Emfuleni transfer stations are maintained on Mondays and Fridays.

Questions B11 asked about different places for illegal dumping

The question focusses on the extent of the community willingness to keep their places clean. There are different places used as illegal dump. In Midvaal, dumps are found at the corner of the stadium where skips bins were removed because the community did not use them appropriately. Other areas mentioned as illegal dumping sites were Walkerville, Riversdale quarry, Noldick, Kookrus, De Deur and Meyerton farms. At Emfuleni LM all wards are contaminated with illegal dumps and Lesedi experiences these in various areas.

Question B12 was asked to find out if there are composting activities

The programme would minimize waste that is disposed on to the landfill sites. No householder is practising composting because according to the responses from the three local municipalities, officials did not inform them on how composting is done.

Question B13 was asked if the municipality has a composting plant

The question wants to establish if the municipality assists the community in waste minimization efforts and is willing to create partnerships with the community. Householders are not aware of any composting plant in their municipalities.

Question B14 asked on the education and awareness campaigns on recycling, reduce and re-use of waste

The question was to find out if the municipality educates the community on the requirements of the National Waste Management Strategy on waste minimization. There were 85% of householders who indicated that they are informed about recycling by the municipality officials. 15% did not know anything about the education and awareness campaigns.

Question B15 asked about municipality support to the community interested in recycling, re-use and reduce concept

The householders participating in recycling mentioned that private companies help them to buy their material and the municipality allows them to recycle on landfill sites and collect paper from offices in Midvaal.

Question B16 asked about problems experienced by the community in waste collection system

The reason is to find a solution for the community if there are any backlogs in waste management. Householders indicated that they do not have any problem with the waste collection system.

Question B17 enquired if there are any services rendered by the private sector in waste

The question is related to services that have a potential for job creation in waste. The householders explained that there is no private sector providing waste collection in their areas.

Question B18 asked if there are NGOs participating in waste management

The question is related to partnerships with the municipality to sustain waste management service delivery. There are no NGOs participating in waste management.

Question B19 was posed to find out if there are citizens who participate in decision making

The aim is to establish if the municipality gives the community an opportunity to participate in waste issues. The respondents indicated that there are no citizens participating in decision-making process but they are available to participate in waste management issues.

Question B20 asked about the market for composting

This question aimed to determine if facilities were available for the community to embark on composting projects as job creation activity. All respondents indicated that there is no market for composting.

Question B21 asked if there is private sector participation

The aim was to find out if municipality had alternative methods of service delivery to curtail challenges of service backlogs. Private sector does not participate in waste management services.

Question B22 asked the community if they are willing to participate in waste management solution

The question wanted to establish the extent of willingness and engagement of the community to waste projects. 92% of the respondents were willing to participate in the waste management solutions. The remaining 8% cites various reasons of not participating. These are: they are already engaged in other social projects, unemployment hinders participation and attendance of meetings. There is less interest in government programmes as they do not have financial support. Further they take care of children in the household.

Question B23 asked if the community has public platforms in their area

The question wanted to establish if the community has opportunities to voice out their needs. Those who responded to the question constituted 82% of respondents who indicated that there were public platforms in the community. The householders quoted community radios, free local newspapers, Ward meetings convened by Ward Councilors and mass meetings in community halls, stadia and church halls.

Question B24 wanted to know if there are any partnerships involved by the municipality in waste management

The question seeks to understand if municipality manages waste alone or if there were other partners. Householders indicated that they do not know any partnerships in waste management

Question B25 asked if the activities of recyclers are supported or assisted in the area

The question was asked to find out if community supports recyclers. 75% of respondents were aware that recyclers are assisted in the area. People separate bottles and tins for the recyclers to collect. 25% did not have any idea about recycling.

Question B26 asked the householders if they recycle at home

The question wants to establish if the home participates in waste minimization. Those who said they recycle were 35% and those who do not were 65%. The reasons for not recycling were that: they work far from their homes; boarding busses and trains and that they are willing to recycle but must be given sufficient time to reorganize themselves.

Commercial risks of commercial stakeholders in partnership**Question 27 asked if the community is aware of environmental laws governing waste management.**

The question wants to establish if the community is aware of the laws in waste management. Householders were not aware of environmental legislation for waste.

Question 28 asked if there are law enforcement activities

The question was to find out whether the control of illegal dumping is accompanied by sanctions and fines to offenders. Householders said that they are not aware of law enforcement being practised. In Midvaal, householders indicated that they police people themselves and prevent mushrooming of illegal dumps.

Existing situation regarding solid waste disposal**Question 29 The question was interested in waste collection methods in the areas**

Respondents confirmed that waste is mainly collected at the sidewalk. They confirmed that illegal dumps are cleaned and are bothered by the people who dump at night as these dumps cause unpleasant odours and invite rodents

Question 30 The question asked the householders how they discard waste that has no value

The question seeks to know if community is aware of waste reduction methods. Waste that has no value was discarded as follows:

- Throw it in open space – 20%
- Store it for municipal day – 78%
- Bury it in the backyard – 2%

Question 31 The question asked what is done with organic waste

It wanted to establish if community mixes their wet and dry waste for municipal collection. All householders left organic waste for municipal collection day.

Question 32 The question asked what is done with recyclable waste

The question was to find out the extent of waste minimization as an area of public participation in waste management. The householders responded as follows:

- Separate waste and give it to others – 35%
- Discard with other solid waste – 55%
- Separate plastic bottles for own use – 10%

Question 33 asked about skip bins in the area if they are placed and their significance in the area

This question focused on the alternative waste collection method that suites the population density and settlement pattern of the community. Householders indicated that they are too far from their houses and they do not want skip bins, they cause nuisance. In Midvaal Ward 10, respondents mentioned that they cause unpleasant smell.

Question 34 The question solicited inputs on solutions from householders to improve service delivery in waste

The aim is to reduce waste generation through their opinion. The respondents gave various types of solutions to community awareness: inform community about their services and how they can help the municipality, telephone numbers must be displayed on the municipal trucks, skip bins and municipal offices so that community can phone, adults must not send children to empty waste into the skip bins, people who dump must be arrested and fined to clean the dump in the ward, municipality must budget for local law enforcement officers.

Question 35, 36 and 37 refer to waste separation at source

The questions are interlinked as they all refer to the activity of family members at household level. 75% indicated that though they separate bottles and tins they are not regular in this activity, because people who collect are not diligent enough to come every week. 25% said that they need to be motivated to join other people in waste separation and need more information.

Householders indicated that they are willing to separate recyclable goods at home but must be assisted by having collectors at an agreed time as their yards are small. All respondents indicated that they do not separate compostable goods.

Question 38 The residents were asked about the obstacles in participating in waste management

The question was open to allow respondents to list all the limiting factors that prevent them from participating. The responses were listed as follows:

- Lack of knowledge
- No law enforcement
- Lack of awareness and education especially on composting
- Poor mindset that if people do not dump, municipal workers will not have anything to do
- Unemployment made people to lose hope

Question 39 The question asked the participants what they see as an opportunity for them to participate

The question allowed respondents to think about the strengths and weaknesses in waste management that can help the municipality to change service delivery methods through community involvement. Opportunities to participate were listed as follows: educate people first then they will participate, call meetings and inform people on what to recycle, by putting refuse outside the community is already participating, municipality should introduce programmes where community can participate meaningfully.

Question 40 Asked about companies collecting tyres in the area

The question was interested in the new developments that improve environmental management. Respondents do not know any company collecting tyres.

Question 41 The question asked about local people involved in waste management

It was interested to know if there are any local co-operative involved in waste. Respondents indicated that there are no local people who have entered into agreements with the municipality

except Expanded Public Works Programme (EPWP) and Community Work Programme (CWP) who are funded by the Department of Environmental Affairs (DEA).

Question 42 The question asked about disposal of old television set and electrical appliances

The question is related to management and disposal of e-waste. Respondents indicated that they repair television sets, keep them in the backyard or separate it and sell parts to a scrap yard.

Question 43 The question asked about disposal of batteries

The question was to find out if people are aware of hazardous household waste. The question is related to question 1.5 above and the respondents indicated that they do not have battery equipment, they were not aware of the hazardous nature of the old batteries.

Question 44 The question asked about the collection of used oil

The question wants to establish if there is any company collecting used oil in the area. All respondents indicated that they do not know any company, informal and formal recyclers who collect used oil.

6.5 CONCLUSION

The questionnaires and interviews designed for householders of Emfuleni, Midvaal and Lesedi local municipalities revealed that separation of waste was done by 35% of households while 65% did not separate waste but promised to do so provided they are given sufficient information of how, where and what to separate. Householders indicated that in their areas there are no public-private-partnerships and local cooperatives in waste management to partner the municipality to curb household collection backlogs and excessive illegal dumping. The majority of respondents are willing to participate and the minimum number needs motivation to participate as part of the group. There are no composting activities. This is the area that needs attention in order to mitigate climate change impact and greenhouse gas emissions. The questionnaires and interviews for officials revealed that the three local municipalities have their public participation offices in the Offices of the Speakers. Public participation offices are accessible to the public and public

participation is part of the public participation strategic plan. Public participation meetings are conducted by ward councilors and Office of the Speaker. In the next chapter, findings, recommendations and conclusions are discussed.

CHAPTER 7

FINDINGS, RECOMMENDATIONS AND CONCLUSION

7.1 INTRODUCTION

The aim of chapter six was to investigate the extent of public participation in waste management in the Sedibeng District Municipality. The empirical research was conducted to determine the ability of local municipalities to involve local residents and private partners in waste management. The field survey was conducted to determine if the community is willing to participate in waste management issues if they are given an opportunity to do so in their wards. This chapter reviews the previous chapters and will outline the findings, recommendations and conclusion.

7.2 REALIZATION OF THE OBJECTIVES OF THIS STUDY

The first objective of this study was to identify challenges of waste management in Sedibeng District Municipality and determine if the three local municipalities comprising the district have public participation programmes that involve the community in waste management services. Public participation in waste management is guided by legislation as outlined in Chapter one.

The second objective was to discuss the concept of public participation and this was done in Chapter two with the identification of important stakeholders involved in waste management. Sustainable waste management concept and waste management hierarchy in the National Waste Management Strategy were discussed. The NWMS requires public participation in waste minimization through waste recycling, re-use, reduce and recover in terms of Waste Act.

The third objective was to explore what models other municipalities have on public participation in South Africa and this was discussed in Chapter three. The fourth objective was to find out what the international countries do to promote public participation in waste management in order to adopt best practices in Sedibeng District Municipality and this was discussed in Chapter four. The fifth objective was to identify public participation methods in Sedibeng District Municipality

and this was fulfilled in Chapter five. The sixth objective was to conduct an empirical research. The questionnaires were compiled and data was obtained through interviews using closed- and open- ended questions in order to obtain data from officials and community.

7.3 TESTING OF HYPOTHESIS

The fundamental objective of this study was to test the preliminary statement that was formulated in Chapter one:

- When public -private -partnership is implemented, waste management service delivery is likely to be sustained; a process that the Sedibeng District Municipality has not fully activated.

Findings from the literature review and empirical research support the stated preliminary statement. There is no public- private- partnership involvement in waste management service delivery in Sedibeng District Municipality

7.4 FINDINGS OF THE INVESTIGATION

The study explored the extent to which Sedibeng District Municipality involves community in waste management service delivery. Public participation concept was implemented at Sedibeng District Municipality and the three local municipalities, depending on the agenda, target groups and objective to be achieved. The findings are based on the analysis of questionnaires, interview responses, and data obtained during surveys. Questionnaire responses from officials yielded these findings:

7.4.1 Sustainable household collection

The three municipalities in Sedibeng District Municipality had sustainable household collection as well as areas that have no waste collection at all.

Table 7.1 Serviced areas and those with backlogs

Municipality	Sustainable Collection	Houses with no collection
Emfuleni	174 904	10 000
Midvaal	18 000	270
Lesedi	18 600	6 000

The officials indicated that there is no partnership with the other stakeholders to assist the municipality to reduce backlog of the household waste collection services. It was found that the officials are prepared to engage the designated groups in waste management. In the study, women had the highest number of 95% followed by the youth with 74% and the disabled had 55%.

7.4.2 Waste minimization facilities

The officials from the two local municipalities indicated that waste facilities such as buy-back centres, transfer stations and mini recycling facilities are available in their areas. The table below shows the number of transfer stations and buy-centres.

Table 7.2 Waste minimization facilities

Municipality	Transfer stations	Buy-back centres
Emfuleni	4 3 are underway	1 1 mini-recycling facility
Midvaal	3	4 privately owned

Waste minimization needs maximum participation of the community to reduce waste generation at household level. In public participation, officials identified important stakeholders. Householders and Office of the Speaker shared the highest number of 80% followed by municipal officials with 79% and executive Mayor 60%. To the officials these are very important stakeholders in public participation in waste management.

Findings from the community responses were based on the areas where a specific community can participate as citizens of Sedibeng District Municipality.

7.4.3 Waste separation

It was found that only 35% of the household participants were separating waste while 65% did not, due to some reasons they listed as obstacles. All householders had sustainable household collection except informal settlements and farm areas. There are no private waste removal services. There are no composting activities of organic waste at all. This means that re-usable waste material ends up on landfill sites daily. Awareness and education in recycling was received by 85% of the householders and this demonstrates that people know about recycling but they need to put it into practice.

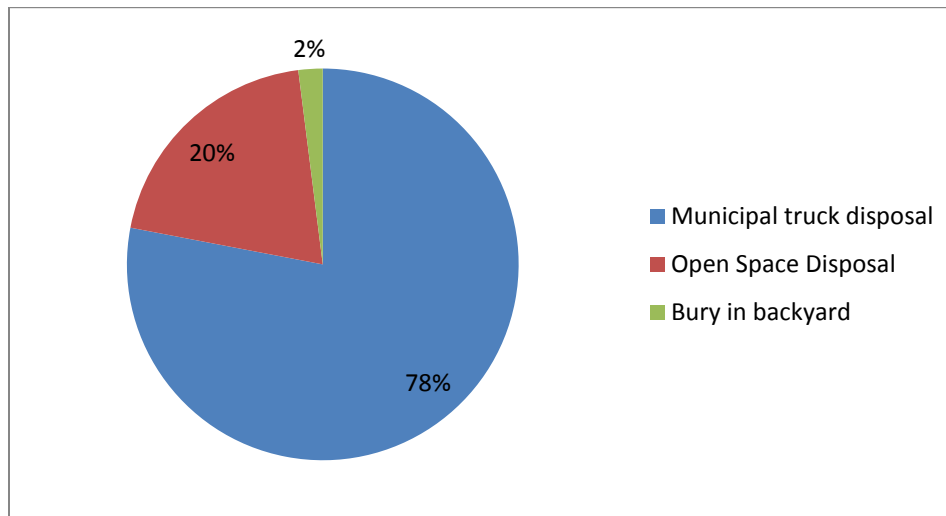
7.4.4 Participation in decision-making.

The majority of 92% householders reported that they participate in decision-making, 82% agreed that they have public platforms. This is an opportunity for the municipality to design projects for public participation in waste. It was found that citizens are willing to participate in waste management issues. People who are accustomed to throw garbage on the streets and open spaces can stop the practice and bring their waste to waste collection truck. Functioning platforms for public participation can be achieved if people, politicians, officials and service providers face one another in discussion platforms.

7.4.5 Alternative methods of disposal

It was found that 78% of mixed waste is disposed with the municipal truck whilst 20% is deposited on the open spaces and 2% is buried in the backyard. Bulk household refuse is still transported to landfill sites instead of being separated at household level and recycled to minimize waste that is deposited to landfill sites. The pie chart below shows that more people need to separate, re-use, reduce and recover waste and need to change their alternative methods of waste disposal.

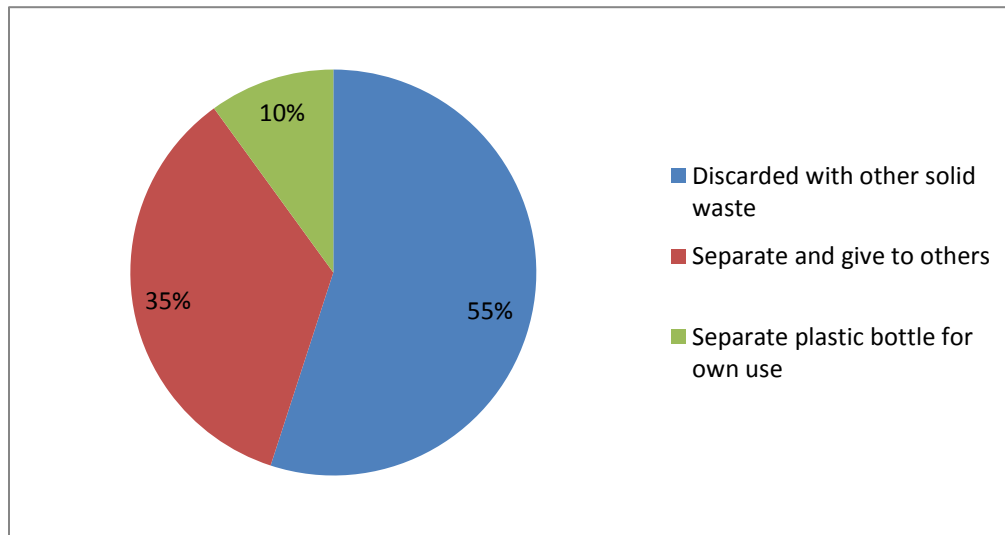
Figure 7.1 Alternative methods of disposal



7.4.6 Management of recyclable waste

The pie chart below shows that 55% of recyclable waste is discarded with other solid waste to be ultimately deposited on landfill site. The 35% of householders separate waste and give it to others. The percentage of people who are separating waste must be increased so that waste is minimized by all residents in the area. The 2% needs awareness to be part of proper waste disposal method. The pie chart below describes the level of waste disposal by community members when they separated recyclable material at home.

Figure 7.2 Community disposal method of recyclable waste



7.4.7 Composting of organic waste

Composting of organic waste is not practised at domestic level. A community needs to be capacitated on how to compost bio-degradable waste to improve the soil content in their gardens. Emfuleni L.M. has a shredder as the first phase towards the composting project and this project should be communicated to the community and neighbouring farmers.

7.4.8 Medical and hazardous waste

In the Sedibeng District, it was found that there are no awareness and education campaigns to support the National Waste Management Strategy of 2012. Electronic waste and tyre recovery and recycling is non-existent due to lack of public awareness and companies that re-use these types of wastes. There is also no project on waste conversion to energy to reduce methane concentrations in landfill sites and prevent greenhouse gas emissions which influence climate change impact.

7.5 RECOMMENDATIONS

The study revealed that there is no public participation and a small number are participation in waste separation, minimization, recycling, reuse and recovering of waste. The following recommendations are listed with the objective to improve public participation in waste management:

- The Sedibeng District Municipality needs to improve the public participation strategy by promoting maximum involvement of the community in waste management
- Local municipalities in Sedibeng District Municipality should design operational plans that describe how the backlogs will be bridged with the maximum public participation in the region. There is need to revise their Integrated Waste Management Plans to be in line with the National Environmental Management: Waste Act,2008
- Officials of Sedibeng District Municipality are advised to guide local municipalities on the establishment of local cooperatives and public-private-partnerships to eradicate backlogs in waste management as a mechanism to reduce the unemployment rate and poverty levels. Local municipalities should develop a model of public-private-partnership that will provide a scope for employment
- Local municipalities should solicit approval of business plans; feasibility study and draft agreement from National Treasury to establish public-private-partnerships as per guidelines of the Public-Private-Partnership Unit of the National treasury. Local municipalities should include women, youth and disabled in their business plans to facilitate approval of funding by the National Treasury
- It is imperative for Sedibeng District Municipality to assist local municipalities to establish more buy-back centres, mini-recycling facilities and transfer stations that are accessible to densely populated sections of human settlements. This will encourage

people to recycle at source and prevent mixed waste deposited on landfill sites. Annual budget should be aligned to IDP and the public informed about the planned projects

- Awareness and education campaigns on waste minimization should be intensified at schools, churches, universities, technikons, places of accommodation and public meetings to increase the level of people who are recycling
- Income generated from waste tariffs should be re-invested to waste budget to improve waste management activities
- All ward councilors should participate in the provincial Bontle-ke-Botho clean and green programme as a starting point in public participation in waste management to encourage ward members to keep their areas clean. Each ward councilor could keep a database of important stakeholders to be involved in waste management and submit the list to the Office of the Speaker.
- Local municipalities need to involve private business agencies for door-to-door collection of segregated waste and informal sector for sorting. The finance and supply chain management departments should play a leading role in the engagement of these stakeholders in waste.
- There is need to support the national government initiatives designed to provide an employment safety net. Expanded Public Works Programme (EPWP) and Community Work Programme (CWP) target unemployed and underemployed people of the working age, reducing poverty and lifting the quality of life of the citizens. Sedibeng District Municipality should benchmark with the other municipalities to learn new strategies and modernization of waste management and public participation. They should compare their model of PPP in waste management with the municipalities that have existing PPP projects in waste management.

7.6 AREAS FOR FURTHER RESEARCH

The topics below are recommended for further research to promote sustainable waste management service delivery.

7.6.1 The role of the private sector in waste minimization in a municipality

The objective of the topic is to improve the quality of information on waste generated by the industries and to supply this information on the Waste Information System as required by the Waste Act, 2008.

7.6.2 Integrated Waste Management Plans as tools to promote public participation in Sedibeng District Municipality

The objective is to determine the extent to which the national, provincial and municipal Integrated Waste Management Plans have been implemented to improve waste management service delivery.

7.6.3 Education and awareness to the public as a strategy to promote sustainable development in waste management in Sedibeng District Municipality

The objective is to capacitate the public to recognize waste as a resource in terms of the National Waste Management Strategy, 2012 and the Waste Act, 2008

7.6.4 The impact of waste storage containers in the prevention of illegal dumping in local municipalities

The objective of the topic is to solicit public participation commitment in maintaining litter-free areas in the municipality.

7.6.5 The role of environmental committees within the municipality in waste management and public participation

The objective is to facilitate community participation in waste management in a local municipality and promote compliance to waste legislation.

7.7 CONCLUSION

The existing situation in the Sedibeng District Municipality is that door-to-door collection cannot be provided to a substantial part of the households that have backlogs in waste collection services. The habit of re-using or recycling waste material needs people's cooperation to implement the rule of compulsory segregation at the source level. A small number of people are participating in waste separation and this number needs to be increased. As more waste is bio-degradable at homes, there is excellent opportunity for composting with this segregated waste to improve soil content for food security gardens. The Municipality can budget for separate dumping of bio-degradable and non-bio-degradable waste by establishing transfer stations with a sorting facility where people can reclaim. In this way, there will be no need for reclaimers to clean the dumping site and there will be less waste deposited to landfill sites. This approach is an advantage to private companies to be part of the integrated solid waste management of the municipality.

Local municipalities have a range of roles in respect of public participation including policy-making to legitimize and support the role of communities, support participation in information dissemination, awareness raising campaigns and management of landfill sites. Waste prevention and recycling rely most heavily on household participation and this is underdeveloped. Medical, hazardous and electronic waste need outreach programmes to prevent contamination of leachate and waste-related green-house gas emissions in landfill sites. Conversion of waste to energy needs to be initiated with private companies to reduce methane concentrations in landfill sites. For public participation to be successful, the community, Office of the Speaker, municipal officials and Executive Mayor play a very important role in the municipality.

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ANNEXURES



DEPARTEMENT VAN WATERWESE EN BOSBOU: GAUTENG
DEPARTMENT OF WATER AFFAIRS AND FORESTRY: GAUTENG
KGORO YA TSA MEETSE LE KAGODIKGWA: GAUTENG
UMNYANGO WEZAMANZI NEZAMAHATHI: GAUTENG
SITA GEBOU/BUILDING
ANDREAS VAN DER MERWE: JOHN VORSTERRYLAAAN-SUIDDRIVE SOUTH CENTURION

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R. Munnik
(012) 672 2994
16/2/5/C222/D3/Z1

ANNEXURE A
23 July 2001

CITY MANAGER
Emfuleni Municipality
P O Box 3
Vanderbijl Park
1900



ATTENTION: MR SHONGWE

**COMPLIANCE WITH SECTION 20 OF THE ENVIRONMENTAL
CONSERVATION ACT (ACT 73 OF 1989): ZUURFONTEIN LANDFILL**

The letter from the Department dated 14 June 2001, addressed to Mr Van der Merwe, regarding the complaints received from the residents adjacent to the Zuurfontein landfill refers. Attached is a copy of the letter.

On 20 July 2001 the Department received more complaints regarding the poor operation of the site, the windblown litter, the safety and health risk imposed by the squatters and the lack of access control.

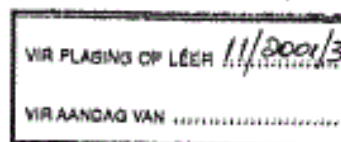
It seems that the operation of the site has not improved since the letter sent by the Department on 14 June 2001.

This Department requests the Emfuleni Municipality to give written acknowledgement of receipt of this letter, as well as a firm commitment for the immediate improvement in the operation of the site. All the issues raised by the residents need to be addressed.

The Department trusts that you will give this issue the necessary attention.

Yours sincerely


REGIONAL DIRECTOR





DEPARTEMENT VAN WATERWESE EN BOSBOU: GAUTENG
DEPARTMENT OF WATER AFFAIRS AND FORESTRY: GAUTENG
KGORO YA TSA MEETSELE KAGODIKGWA: GAUTENG
UMNYANGO WEZAMANZI NEZAMAHATHI: GAUTENG
SIFA GEBOUW BULDING
AND SITE IN CCS CENTRAL JOHN VORSTER LAAN SUIDDRIVE SOUTH CENTURION



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HENNOPSMEER

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16/2/7/C222/D003/Z1

The Chief Executive Officer
Emfuleni Municipality
P. O. Box 3
Vanderbijl Park
1900

14 JUN 2001

KS701(a).

FOR ATTENTION: MR. HENDRIK VAN DER MERWE

Sir

ZUURFONTEIN LANDFILL: COMPLIANCE WITH SECTION 20 OF THE ENVIRONMENTAL CONSERVATION ACT (ACT 73 OF 1989)

The residents of SW2 Vanderbijl Park had lodged a complaint to this Department through Mr. Paul Fouche concerning the poor operation of the Zuurfontein landfill. Mr. Thya Pather in a telephone conversation to you on 14 June 2001 appealed for action to address these concerns.

To reiterate, the concerns raised by Mr. Fouche are as follows:

- × Zuurfontein landfill must be closed immediately because of the poor operation, safety and health risks imposed by scavengers. Boishepi landfill must accommodate refuse from Zuurfontein.
- × Scavengers on the site are ripping open the refuse bags and hence plastic packets and paper together with other wind-blown litter have spread not only within the site but also into the adjacent residential areas.
- × There is no security and access control at the site and the site is not properly fenced.
- × Only garden refuse is acceptable at the site.

The operation and management of the Zuurfontein landfill do not comply with the standards set in the Minimum Requirements (2nd Edition) documents issued by the Department in 1998.

In your response to these concerns you mentioned that tenders are out to subcontract the operation and management of the site and by the end of August 2001 the site will comply with these regulations. This Department has no objections to out source the operation of the landfill.

In the interim period this Department requires that the Emfuleni Municipality take the necessary corrective measures.

If there are any queries, then please contact this office.

Yours faithfully



REGIONAL DIRECTOR- GAUTENG REGION

cc. Mr. Paul Fouche – (Fax: 016-9333237)

**SUMMARY OF MEETING HELD
AT ZUURFONTEIN DUMPSITE**

DATE: 17-07-2001

TIME: 11:00

PARTIES PRESENT

- 1) Representative of S.W.2 Residents
- 2) Representative of Dept. Water affairs – THYA PATHER
- 3) Representative Emfuleni Local Municipality – JP. SQUIRRA(Roads)
- 4) Representative Emfuleni Local Municipality – Willie Louw(Health)

INTRODUCTION

The Resident of S.W.2 called the meeting because of the poor state of the Zuurfontein dumpsite and the subsequent health hazards.

The site was inspected by the parties present and the following misdoings was observed:

- 1.) Upon arrival there was no access control enforced nor where there any screening of material to be dumped .This lack of control leads to illegal dumping of domestic refuse as this site is designated for garden refuse and building rubble only.
- 2.) Burning piles of rubbish was found at at least four places at the entrance inside the dump.The smell of burning plastic was overwhelming and with the prevailing wind direction this smog is blown right into the residential area, which according to the health department is causing a health hazard and is totally against air pollution regulations. According to resident of S.W.2 this is an ongoing practice 24 hours a day.
- 3.) The entrance area was almost totally covered with litter that eventually landed up in the residential area.
- 4.) A shelter has been erected inside the boundaries of the dumpsite which is contradictory to regulations and furthermore this leads to unauthorized people occupying the dumpsite during the day as well as people squatting on the premises that is also contradicting regulations. These unauthorized occupants is the cause of the fires as well as the litter problem at the

entrance as they grab refuse bags from vehicles as they enter the premises they then rip open the bags to collect valuables whereafter the rest of the contents of the bags are left there and then either gets set alight or is left there and eventually gets spread all over the area and into the residential area.

- 5.) At the tipface more illegal occupants was found causing the same problems then at the gate.

It was clear after the inspection that the conditions poses a health threat to the residents of S.W.2, furthermore the conditions also poses a security threat to people using the facility as a assault and robbery incident during the weekend was reported by a member of the public.

Subsequently the department of Water affairs instructed the Emfuleni Local Municipality to start these following remedial actions immediately:

<u>ACTION</u>	<u>DEADLINE</u>
1) The burning of any refuse must be prohibited	With immediate affect
2) Clean up dumpsite entrance	20-07-2001
3) Remove shelter	27-07-2001
4) Remove squatters & unauthorized recyclists	27-07-2001
5) Establish a security system to enforce access control and the screening of refuse to prevent the illegal dumping of domestic refuses.	27-07-2001
6) Tip face to be compacted and covered with Suitable soil.	27-07-2001
7) Close up ally way at the gate to prohibit illegal dumping.	27-07-2001
8) Final closure of dumpsite	01-12-2001
9) Final rehabilitation of dumpsite	30 - 07 - 2003

CONCLUSION

It is clear that the main cause of the problems stipulated in this report is due to the lack of control which started when the security guards where removed from the premises around 5 months ago.

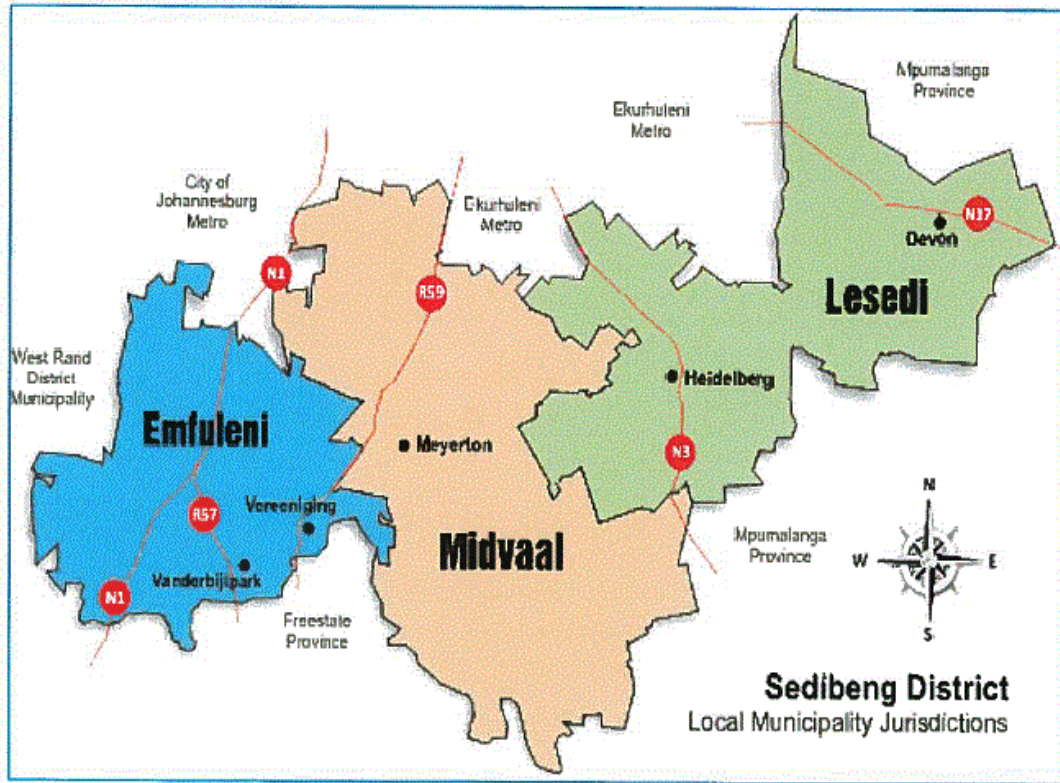
The Town Engineers department will start a power clean-up operation in order to get the dumpsite back to an acceptable standard, but if the security issue is not resolved the dumpsite will fall back to the status qua. The reason being that this clean-up operation cannot be maintained permanently as this is occupying personnel and equipment that is used for service delivery on the roads already in a poor state.

RECOMMENDATION

It is recommended that the contract for the maintenance of the dumpsite by private contractors be approved with the understanding that the dumpsite should be closed and finally rehabilitated by the end of JULY 2003, at which time a current ongoing project for the establishment of a privately managed mini dumpsite or sites should be in place.

In the interim or alternatively the instructions of department Water Affairs should be carried out with the understanding that a proper security system will be established.

GEOGRAPHICAL MAP OF SEDIBENG DISTRICT MUNICIPALTYANNEXURE AB



Sedibeng District Municipality Map and Local Municipalities that were included in the study

Public Participation Indaba

PURPOSE:	To review, align and implement Public Participation process as per Cabinet decision and learn best practise model as exchange programme with Capricorn District Municipality, Limpopo Province
TARGET GROUP:	Sedibeng District Municipality, Local Municipalities Speakers, Executive Mayors, Mayoral Committee Members, Directors, Public Participation Practitioners/Coordinators, Managers, CLO's Office of the Executive Mayor's, Chief Whip Office CLO, External Communication CLO, LED CLO, CDW's Supervisors, PCO Coordinators and YAC Coordinator, Centre for Public Participation, IDASA, Mangaung Local Municipality, Capricorn District Municipality, Ethekwini Municipality, NWU, VUT, Telkom, Eskom, Mittal,
THEME:	"Working together we can do more through public participation"
DATE:	Wednesday, 24 th –Thursday, 25 th November 2010
TIME:	07h00-17h00
VENUE:	NWU Vaal Campus, Samancor Hall

INTRODUCTION

Public Participation is in bedrock of South African participatory democracy. Therefore it is in the interests of the Sedibeng District Municipality and its local municipalities namely Emfuleni, Midvaal and Lesedi to synchronise public participation in executing this legal mandate deriving from the constitution and on myriad of legislation. Public Participation has two (2) components namely community participation and stakeholder participation.

BACKGROUND

In 2009 the District Municipality hosted a Public Participation Summit involving stakeholders from various backgrounds where its deliberations ensued amongst other:

- Solidifying Social Cohesion
- Development aspect of Public Participation

Public Participation Indaba 1st draft

PURPOSE:	To review, align and conduct public participation at local government level within the intergovernmental context to achieve the key tenets of a developmental state as per Cabinet decision in order to derive at a best practise model for district municipality
TARGET GROUP:	Sedibeng District Municipality, Local Municipalities Speakers, Executive Mayors, Mayoral Committee Members, Directors, Public Participation Practitioners/Coordinators, Managers, CLO's Office of the Executive Mayor's, Chief Whip Office CLO, External Communication CLO, LED CLO, CDW Supervisors, PCO Coordinators and YAC Coordinator, Centre for Public Participation, IDASA, Mangaung Local Municipality, Capricorn District Municipality, Ethekewini Municipality, NWU, VUT, Telkom, Eskom, ArcelorMittal,
NUMBER OF PARTICIPANTS:	81 people
DATE:	23-25 November 2010 (TBC)
TIME:	08h00-16h00
VENUE:	Council Chamber, 1 st Floor, Municipal Building, Vereeniging

INTRODUCTION

Public Participation is the bedrock of South African participatory democracy. Therefore it is in the interest of the Sedibeng District Municipality and its local municipalities namely Emfuleni, Midvaal and Lesedi to synchronise public participation in executing this legal mandate deriving from the constitution and a myriad of legislation. Public participation in the context of the two-tier system of local government i.e. district v/s local municipalities inherently has two (2) components namely community participation and stakeholder participation.

BACKGROUND

In 2009 the District Municipality hosted a Public Participation Summit involving stakeholders from various backgrounds where its deliberations ensued amongst other:

- Solidifying Social Cohesion
- Development aspect of Public Participation
- Two-tier system of Public Participation
- Governance aspect of Public Participation

This deliberation includes both horizontal (District to District) as inter relation and vertical alignment (District to locals) as intra relation.

WORKSHOP OBJECTIVES:

1. To have a deeper understanding of Public Participation Programme as per Cabinet decision and realignment thereof.
2. To review, realign and implementation of institutionalisation of Public Participation Coordinating Forum in line with Public Participation Programme per Cabinet decision.
3. To review Public Participation Coordinating Forum Terms of Reference and mandate
4. To ensure an integrated, coordinated and strategic role of the Councillors, Office of the Speaker and Office of the Executive Mayor and locals during IDP Public Participation process.
5. To ensure ward based planning during IDP Public Participation process in Sedibeng region.
6. To ensure an integrated and coordinated approach on ward committees and ward committee coordinators capacity development programme.
7. To review and ensure improvement of Sedibeng Mobilisation Strategy.
8. To learn best practise on Public Participation

PROGRAMME: DAY 1, Tuesday 23rd November 2010

OBJECTIVE: Focus on Public Participation broad understanding and situation Analysis (swot)

No.	TIME	PROGRAMME	SPEAKER
1.	07h00-07h30	Breakfast/Tea	
2.	07h30-08h00	Registration	
3.	08h00-08h05	Opening and Welcome	Programme Director
4.	08h05-08h10	Introduction	All

This deliberation includes both horizontal (District to District) as inter relation and vertical alignment (District to locals) as intra relation.

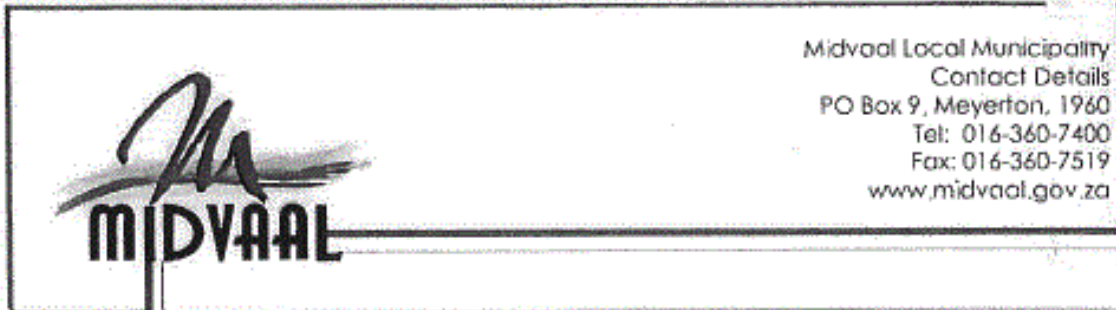
WORKSHOP OBJECTIVES:

1. To have a deeper understanding of Public Participation Programme as per Cabinet decision and realignment thereof.
2. To review, realign and implementation of institutionalisation of Public Participation Coordinating Forum in line with Public Participation Programme per Cabinet decision.
3. To review Public Participation Coordinating Forum Terms of Reference and mandate
4. To ensure an integrated, coordinated and strategic role of the Councillors, Office of the Speaker and Office of the Executive Mayor and locals during IDP Public Participation process.
5. To ensure ward based planning during IDP Public Participation process in Sedibeng region.
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NOTICE OF DRAFT ANNUAL REPORT 2011/12

Notice is hereby given in terms of Section 21A of the Local Government Municipal Systems Act, Act 32 of 2000, read with Section 127(5) of the Municipal Finance Management Act, Act 56 of 2003, that Midvaal Local Municipality at its meeting held on 6 December 2012, approved the 2nd draft Annual Report for 2011/12.

The said document will be available for inspection and submission of representations by no later than 16:00 on Wednesday 16 January 2013 at Room 201, Midvaal Municipal offices, Cnr Junius and Mitchell str, Meyerton, as well as satellite offices at De Deur, Randvaal and Vaal Marina and all libraries and clinics. It is also available for inspection on Council's website (www.midvaal.gov.za).

Any representations must be forwarded in writing to the Municipal Manager on or before the date set out above.

Any person who cannot write will be assisted at the said office during office hours (7:30 – 13:00; 13:30 – 16:00) by having his/her comments or representations transcribed. Further information is also available at the said office.

Midvaal Municipal Offices
P O Box 9
MEYERTON
1960

ASA DE KLERK
MUNICIPAL MANAGER

MN 823/12

10

Vaalweekblad, 11 - 13 Julie 2012

nr 77

PUBLIC NOTICE
**SERVICE DELIVERY & BUDGET IMPLEMENTATION PLAN
2012/2013**
**INVITATION FOR COMMENT(S) FROM ALL STAKEHOLDERS
AND INTERESTED PARTIES IN THE MIDVAAL JURISDICTION**

The Midvaal Local Municipality calls upon all interested and concerned parties to scrutinise and comment on the completed Service Delivery & Budget Implementation Plan 2012/2013 (SDBIP) as compiled according to the stipulations of Section 53 of the Municipality Finance Management Act, 56 of 2003.

The purpose of the Service Delivery and Budget Implementation Plan is to give effect to the Integrated Development Plan (IDP) and budget of the municipality. The budget gives effect to the strategic priorities of the municipality. The Service Delivery and Budget Implementation Plan serves as a contract between the administration, Council and community expressing the goals and objectives set by the Council for the next twelve months. This provides the basis for measuring performances in service delivery against end-of-year targets and implementing the budget.

In complying with the stipulations of Section 53(3)(a) of the Municipal Finance Management Act, Act 56 of 2003 as well as the Municipal Systems Act, Act 32 of 2000, Section 21A(2) the said document will lie open for inspection at the Office of the Municipal Manager (Room 104c), Municipal Offices, Mitchell Street, Meyerton for a period of 21 days.

For further information, please contact the Municipal Manager at (016) 360-7518. Official working hours are 07:30 to 16:00, Monday to Friday.

A.S.A. DE KLERK
MUNICIPAL MANAGER
9 July 2012

MN 778/12

MR.
Midvaal Local Municipality
P.O. Box 9
Meyerton
1960

Sedibeng District Municipality



Service Delivery and Budget Implementation Plan (SDBIP) 2010/2011

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ANNEXURE CB

VOTE/ INDICATOR	UNIT OF MEASUREMENT	ANNUAL TARGET	REVISED TARGET	QUARTERLY TARGETS								EXPLAN- VARIANCE
				1 ST QUARTER		2 ND QUARTER		3 RD QUARTER		4 TH QUARTER		
				Project	Actual	Project	Actual	Project	Actual	Project	Actual	
	Ward 10 Ward 11 Councillors Register Telephonic complaints and walk-ins	Submit Report to Council Monthly		100%		100%		100%		100%		
	LEGAL CONTRACTUAL AGREEMENTS Ensure lease, deeds, service and servitude agreements are timeliness projects and finished LLM budget R 500 000											
REVISION OF BY-LAWS & POLICIES												
Ensure the revision of By-Laws, Policies and report to Mayoral Committee & Council for approval.	The following by-laws be revised 2007 to reflect the following: <ul style="list-style-type: none">Standard Building By-LawsStandard Water Supply By-LawsReduce Solid Waste By-LawsDetermination of charges for supply of sewerage servicesAmendments and Determination of tariffs for Refuse, special services and fire prevention servicesStandard By-Laws relating to keeping of animalsPoultry By-LawsHandling of farmable land By-LawsNoise AbatementElectricity By-LawsHire of Council, Halls, Indian Area By-LawPublic Venues and Beer Drivers By-LawStandard Traffic By-LawAmendment to determination of charges in terms of sec 41 of the duties of land ordinance, 1956Revocation and determination of charges in terms of sec 135 of the town planning and township ordinance 1956Standard public amenitiesStandard Drainage By-LawControl handling of food etcStandard Milk By-LawBuilding By-Laws	Table for approval by Council Sept 2009		100%								
Revision of by-laws, formulation of By- laws and policies	<ul style="list-style-type: none">Public Health By-LawFire Department By-LawStandard Boring By-LawsStandard Financial By-LawsBy-law for the levying of fees relating to the inspection of any business premises as contemplated in sec 14(6) of license ordinance, 1974Determination of charges, Dog TaxLicensing of electrical contractors By-LawStandard by-law relating to cafes, restaurants, eating houses,Hire of hallsStandard street and miscellaneous by-lawsStandard by-law regarding the consequences of	Table for approval by Council Nov 2009			100%							

VOTE/ INDICATOR	UNIT OF MEASUREMENT	ANNUAL TARGET	REVISED TARGET	QUARTERLY TARGETS								EXPLAN VARIANC	
				1 ST QUARTER		2 ND QUARTER		3 RD QUARTER		4 TH QUARTER			
				Project	Actual	Project	Actual	Project	Actual	Project	Actual		
	Meetings	25 August 2009 Special 22 September 2009 Ordinary 20 September 2009 Special 20 October 2009 Ordinary 27 October 2009 Special 17 November 2009 Ordinary 24 November 2009 Special December 2009 Special (deal with the increase in the remuneration (upper limit) for Councillors as envisaged by the Minister and the concurrence of the MEC for Local Government in Gauteng falling not in the schedule but anticipated as office). 12 January 2010 Ordinary 19 January 2010 Special includes the approval of the Mid year SDBIP by the 25 as required s. 72 (1) b MFMA and submit to province 16 February 2010 Ordinary 23 February 2010 Special New schedule in Feb 2010: March 2010 Ordinary March 2010 Special April 2010 Ordinary April 2010 Special May 2010 Ordinary May 2010 Special June 2010 Ordinary June 2010 Special											
	SECTION RECOMMENDATIONS & MEETINGS Preserve, distribute and attendance of Section (8) Meetings Distribute notices at least 48 hours in advance	The Information Section (6) Distributors Finance and Corps (6) 7 July 2009 4 Aug 2009 8 Sept 2009 8 Oct 2009 3 Nov 2009 6 Feb 2010 Dev & Planning (6) 7 July 2009 4 Aug 2009 8 Sept 2009 8 Oct 2009 3 Nov 2009									25%	25%	25%



West River City, the Cradle of Human Rights

INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE EMFULENI LOCAL MUNICIPALITY AS OUTLINED BELOW:

Bid Number	Bid description	Compulsory briefing/site clarification date & time	Bid document fee	Other requirements	Closing date	Contact person
11/2012/56 No 103/2012	CONSTRUCTION OF KLIPRIVER DRIVE WEST, GEN HERTZOG (FROM NILE TO BLACKWOOD STREET) AND GENERAL HERTZOG AND INTERSECTION IN THREE RIVERS	9 May 2012 at 10:00, Mayor's Parlour, ELM offices	R250	7CE OR HIGHER	29 May 2012 at 12:00	Mr Musa Ngweni 016 950 5587
11/2012/97 No 104/2012	REMOVAL, INSTALLATION AND MAINTENANCE OF PASSENGER LIFTS AT EMFULENI LOCAL MUNICIPALITY'S OFFICE IN VANDERBIJLPARK	25 April 2012 at 10:00, Mayor's Parlour, ELM offices	R250	4CE OR HIGHER	11 May 2012 at 12:00	Mr Polo Mmapulane 016 950 6396
11/2012/98 No 105/2012	EXPRESSION OF INTEREST PHASE 1 - FOR TREATMENT OF COMMERCIAL, INDUSTRIAL GENERAL AND GARDEN WASTE STREAMS AND PHASE 2 - WASTE TO ENERGY IN ALL OPERATIONAL LANDFILL SITES OF EMFULENI LOCAL MUNICIPALITY	8 May 2012 at 10:00, Mayor's Parlour, ELM offices	R250	TENDERS WITH SPECIFIC EXPERIENCE OF WASTE TREATMENT AND ENERGY GENERATION	17 May 2012 at 12:00	Dr K E Masindi 016 986 8446 082 616 0465

Bidders must comply with the following minimum requirements: Failure to comply will lead to non-consideration of tender (non-responsive). Additional requirements will be stipulated in the bid document.

1. Original valid tax clearance certificate issued by South African Revenue Services (SARS) must be submitted.
2. Proof indicating that your municipal account is paid up to date.
3. Certified copy of letter of good standing in respect of Workmen's Compensation (COIDA) must be submitted.
4. Copy of company profile & proposal must be submitted with contactable reference to work done previously.
5. A compulsory briefing session will be held as stipulated above.
6. AB-BBEE certificate must be submitted.
7. Bidders must comply with all terms and conditions as outlined in this tender document.
8. A compulsory attendance register must be signed by all bidders' JV PARTNERS AND CONSORTIUMS.

Collection of bid documents: bid documents may be purchased during office hours between 08:00 to 15:15 from Monday to Friday, excluding public holidays, at Emfuleni Local Municipality Offices, Vanderbijlpark, cnr Klasie Havenga Street & Frikkie Meyer Boulevard, Vanderbijlpark, Ground Floor.

Availability of bid documents: bid documents will be available from 16 APRIL 2012 at 10:00 until THE DAY OF COMPULSORY BRIEFING at a cost of R250 which is non-refundable (payable in cash or bank-guaranteed cheque) before collection of the bid document.

Returning and closing date and time of bid: Sealed marked bids must be placed in the Bid Box (First Floor) at the Municipal Offices, Vanderbijlpark, cnr Klasie Havenga Street & Frikkie Meyer Boulevard, no later than 12:00 on the closing date whereafter it will be opened in public in the Committee Room, First Floor, Municipal Building, Vanderbijlpark.

Evaluation and adjudication of bid: bids will be evaluated and adjudicated in terms of Emfuleni Local Municipality Supply Chain Management Policy and Preferential Procurement Policy Framework Act No 5 of 2000. The 90:10 or 80:20 in preferential procurement points system as outlined in the bid document will apply.

Please note: No bid will be accepted from a person in the service of the state.

- The municipality reserves the right to accept or reject any bid or part thereof and is not obliged to accept the lowest bid.
- The municipality reserves the right to accept a bid in part.



Vaal River City, the Cradle of Human Rights

Public Notice

Public Participation Meetings 2012

The Executive Mayor of Emfuleni Local Municipality, Cllr. N G Hlongwane invites all the Community Members to take part in the Integrated Development Plan (IDP) and Budget Public Participation Meetings as required by the Sections 28 (3) and 21 of the Municipal Systems Act, 2000 (Act 32 of 2000) as well as Section 21 (1) (a) of the Municipal Finance Management Act, 2003 (Act 56 of 2003). The purpose of these meetings is to give progress report on the implementation of the IDP projects for 2011/12, to discuss the draft IDP for 2012/13-2016/17 and inputs from all stakeholder within Emfuleni Local Municipality.

Region	Ward No	Date	Venue	Time
Region 1	18, 19, 20, 24, 26, 43	17 April 2012	Palmsprings Hall	15h00
Region 2	4, 5, 6, 7, 8, 9, 10, 23 & 25	19 April 2012	Bophelong Community Hall (Bophelong)	15h00
Region 3	1, 11, 15, 16, 21, 45	24 April 2012	Vereeniging Banquet Hall (Vereeniging)	15h00
Region 4	2, 17, 27, 28, 30, 31, 32, 33, 34, 35, 36	26 April 2012	Saul Tsotetsi Sports Complex (Sebokeng)	15h00
Region 5	3, 8, 12, 13, 14, 22	02 May 2012	Boipatong Hall	15h00
Region 6	29, 37, 38, 39, 40, 41, 42 & 44	08 May 2012	Tshepo Themba Hall (Residensia)	15h00
	Business people, NGO's & Sector Departments	04 May 2012	Riverside Hotel (Vanderbijlpark)	08h00



If you have any queries please contact the IDP Manager or Budget Manager at the following numbers, (016) 950-5439 and (016) 950-5184.

Kindly note that the transport to the meetings will be arranged by the Council and members of the community will be informed of the logistics in due course.

Office of the Executive Mayor

Tel no: 016 950 5439 Fax no: 086 555 5556

E-mail: hulisani@emfuleni.gov.za

Cllr NG Hlongwane

Executive Mayor of Emfuleni Local Municipality

MINUTES OF THE IDP/BUDGET PUBLIC PARTICIPATION MEETING

Palm Springs Hall

17 April 2012, 15H00

Present

The Executive Mayor: Cllr NG Hlongwane

Councillors in Attendance

Councillor Ranake
Councillor Mtombela
Councillor Mcera
Councillor Seshauke
Councillor Ngubane
Councillor Radebe
Councillor Godoli
Councillor Khubeka

Apologies

Apology fro the Speaker due to poor health

Available Papers

Presentation
Programme

Programme

1. Opening and Welcome
2. Purpose of the Meeting
3. Presentation of the Draft IDP and Budget
4. Questions ,Inputs ,Comments and Responses
5. Inputs by executive Mayor and Closure

Opening and Welcome

The meeting was officially opened at 15h30 by the programme director Cllr Ranake and requested the ward councillor, Cllr Ngubane to present a welcome address. The programme director then introduced the executive Mayor, members of the mayoral committee and the officials present.

Purpose of the meeting

The programme director informed the community members that the purpose of the meeting was to update the community on the progress made by the municipality on the implementation of 2011/12 projects. Secondly she said it was to present the 2012/213 projects and give members of the community an opportunity to input on IDP.

Presentation of the Draft IDP and Budget

The Executive Mayor in her opening remarks thanked community members for attending the meeting. She explained that it is a legislative requirement that the municipalities conduct public participation in their communities. This will ensure that a community takes part in the process of planning for development of their areas; hence it is important that the community attend meetings in large numbers. She further emphasised that, poor attendance by community contributes to wasteful expenditure because buses are hired yet they arrive empty at the meetings.

The Executive Mayor presented the 2012/2013 projects.

Questions, Inputs, Comments

Ward 19

- People living at the nearby shacks were promised to be rezoned but till date nothing has been done.
- Concern over the status of Evaton North multi purpose community hall

Ward 20

- Concern over people involved in projects yet not residing in Palmsprings
- The ineffective Evaton Park near the cemetery remains a concern
- Sewer Spillage threatens the community 's health
- The recently constructed library has become a white elephant
- Poor service by ESKOM is encouraging the community to connect illegally
- Assist the cooperatives so that women can be empowered because they are willing to work
- The contractors who constructed Eagle Street have left their rubble on the children's playing grounds.
- Bad Roads Conditions
- Is proper monitoring done to service providers?
- What criterion is used to consider one an indigent?
- Concern over today's public participation meeting that was not properly communicated to the community.
- The smell from Palmsprings landfill site is unbearable.
- The municipality should utilize the unemployed to develop parks and other amenities to the advantage of the community.
- Illegal dumping.
- Need for Information on Municipality bursaries

Responses

Cllr Ronyuza

The eligible indigent is someone earning less than R2200 per month, but the municipality is in the process of reviewing the policy.

Cllr Khubeka

The Council need to meet with the new manager of Evaton Renewal to discuss way forward regarding the park that is near the cemetery. Many RDP houses have defects and all those ones with defects will be addressed.

Cllr Ranake

To address unemployment, the LED and Environmental Health can assist together with the Mayors office. Rats are a problem and are caused by illegal dumping; she also encouraged eligible indigents to register.

Cllr Radebe

The multi purpose community hall of Evaton North is still in the hands of the provincial government, it is not yet handed over to ELM. The Palmsprings library will be converted to a study centre because it does not meet the requirements of a library according to the South African library standards. The Ward 20 Councillor need to provide the specific location where the children's playing grounds are filled with rubble by the contractors.

Executive Mayor

She said that, they have just arrived from Spain to acquire knowledge about metering and acknowledged some irregularities in metering by the ELM. Water metres will be monitored before people are billed and also emphasised the need to correct stormwater channels that are a major cause for sewer spillages in Palmsprings, but she reminded the community that the correction of stormwater channels also requires money. Therefore urged the community to pay for their services. The Executive Mayor told the community that programmes are coming to address unemployment, but also urged the community not to wait for government but instead they should utilise the skills that they have to create employment. More emphasis was made to parents to help their children to pass matric because bursaries will be made available to the most deserving students by the office of the Mayor.

Closure

The meeting was adjourned at 17h45

MINUTES OF THE IDP/BUDGET PUBLIC PARTICIPATION MEETING

Bophelong Community Hall

19 April 2012, 15H00

Present

The Executive Mayor: Cllr NG Hlongwane

The Speaker: Cllr MP Gqelosha

Councillors in Attendance

Councillor Ntombela	Councillor Moleko
Councillor Ranake	Councillor Godoli
Councillor Mokoena	Councillor Tshabalala
Councillor Khubeka	Councillor Radebe
Councillor Mahlase	Councillor Kele
Councillor Nkosi	Councillor Rani
Councillor Bikitsha	
Councillor Tshabalala	

Available Papers

1. Presentation
2. Programme

Programme

1. Opening and Welcome
2. Presentation
3. Questions, inputs and Responses
4. Closure

Opening and Welcome

The Speaker asked community member to open the meeting in prayer, thereafter Councillor Bikitsha welcomed everyone present. Cllr MP Gqelosha encouraged the community members to state issues that affect them. He then introduced the Executive Mayor of Emfuleni Local Municipality, the members of Mayoral Committee, Councillors and Officials.

Presentation of the Draft IDP and Budget

Councillor Godoli did the presentation.

Questions, Inputs, Comments and Responses

Ward 6

- Need short cut routes in the form of passage
- Storm water channels are dirty, need to be cleaned
- Contractors are not hiring local people during implementation of projects

- Procedures for payments of rates and municipal services for new house occupants
- There is no dumping area and have to phone always for a garbage pick ups
- There are no playing grounds
- Lots of potholes
- Need police mobile to patrol the area
- Water logged houses during rainy season especially in ext 11
- Need speed humps in ext 12
- No recreation facilities
- Need for housing
- Construction of Mthimkhulu Street is not totally complete, there are no sidewalks.
- There is a dangerous open trench in extension 14
- There are lots of snakes in extension 14, it will be appreciated if the grass could be cut
- Suggestion that one of the budgeted project ward in 6 be changed, and do stormwater
- Community members are not receiving account statements on municipal services

Ward 7

- Need for a naming of streets,
- Need maintenance of street lightening
- Satellite municipal office is necessary to focus on queries
- Cooperatives exists in the ward, but are not recognised
- Clarification on who take decisions regarding the community needs

Ward 23

- Speed humps are needed
- Water logging on the streets during rainy season due to a lack of stormwater system
- Community members need to be considered for jobs when awarding tenders for projects taking place in their wards
- IDP Presentation handouts are not user friendly, fonts are too small. Elderly people should be considered during preparation of the presentation
- Contractors implementing projects in the wards should consider the people with disabilities when employing workers
- Request to erect four way stop in Dube street
- Dissatisfied with the municipal billing system

Responses by MMC 's

- Cllr Radebe said there is an agreement with the main contractors building the hall in progress, that some work be sub-contracted to local people. He made the community members aware that the people of Bophelong have been benefiting mostly on seven days notice tenders.
- In response to a question about who make decisions regarding the projects and the community needs, he then explained the process of Public participation in which ELM facilitate annually as legislated by the Municipality Systems Act of 2000. ELM involves community members in matters that affect them.
- Cllr Ranake urged the community members to keep the environment clean, in order to keep things like snakes away.

- Cooperatives that exists were also invited to register on the ELM data base
- Cllr Khubeka, in regard to the new occupant of the house, said that the process of change of house ownership takes long and there is also verification involved before a new occupant is being billed. However, the complainer should contact the ELM offices as soon as possible. She further enlightened the community members on the housing offices that are found in Vereeniging Market Street. She explained a procedure for application of a house, and warned those who have been using fraudulent methods to provide housing.
- The issue of passage will be investigated

Closing remark by Executive Mayor

- She warned the community members who extended their houses by closing the passages that they will be dealt with, the same with those who build on municipal pipes.
- She assured the community members that ELM will ensure that the municipal presentations are user friendly and are translated on the local language.
- She announced Smart meters system is underway
- Elucidated the subject matter of free 6 KL of waters that will be provided to indigents and R9.00 that is payable for those who are working.
- Notified the community on the formally known department called PMU which is now IPAM, and thus where projects are being managed.
- Encouraged payment of services.

The meeting was adjourned at 17:27

MINUTES OF THE IDP/BUDGET PUBLIC PARTICIPATION MEETING

Vereeniging Banquet Hall

24 April 2012, 15H00

Present

The Executive Mayor: Cllr NG Hlongwane

Councillors in Attendance

Councillor Ntombela	Councillor Mzangwa
Councillor Ranake	Councillor Ragebalt
Councillor Godoli	Councillor Skelm
Councillor Thulo	Councillor Rensburg
Councillor Ronyuza	Councillor Coertze
Councillor Radebe	Councillor Lots
Councillor Pitso	Councillor Morolong
Councillor Khubeka	Councillor Rani
Councillor Moera	Councillor Venter

Available Papers

3. Presentation
4. Programme

Programme

5. Opening and Welcome
6. Presentation
7. Questions, Inputs and Responses
8. Closure

Opening and Welcome

Councillor Ranake apologised for starting the meeting late. She then asked Cllr Morolong to open the meeting in prayer. She introduced the Executive Mayor, Mayoral Committee, Councillors and Officials present.

Cllr Radebe informed the community members that the purpose of the meeting was to present the five year plan and report on the 2011/12 progress. He said that the meeting was a platform whereby the community members are given an opportunity to input, comment and ask questions regarding issues that affect them within the municipality. He further shed light on the process of public participation as legislated in the Municipal System Act (2000) and notified the community that the

Presentation

The executive Mayor did the presentation.

Questions, Inputs

Ward 1

- Need meetings with a councillor
- The 500 thousand Rand allocated for the development projects of Three Rivers is not enough, especially that community members are paying their services

Ward 11

- It is no longer comfortable to live in containers allocated, they are in bad condition
- The presentation does not reflect projects budgeted for ward 11
- High rate of crime
- There is illegal electricity connection
- Water meters are leaking
- No public transport
- It was suggested that unemployed youth voluntarily collect waste, in order to curb illegal dumping and keep the area clean
- Water logged in Pitseng Street(phase 3)
- Waste is not collected on scheduled dates
- The road K59 is not safe for pedestrians
- RDP houses are being illegally sold and waiting list is not used during allocation of those houses
- There is no electricity in phase 3
- Need grass cutting
- No sports facilities
- High Unemployment rate

Ward 15

- There is illegal electricity connection
- It is unacceptable that the bills be based on estimation on water consumption
- Concerned about management of water metres, readings are not taken.
- No maintenance of street lights in Peacehaven

Ward 16

- Area around RDP houses is dirty due to illegal dumping
- No police station
- Need for rubbish bins

Ward 21

- Concerned that no projects budgeted for Debonaire and Iron side in 2012/13
- Need information on where to report mainhole in the yard
- Leaking Water meters
- Road conditions in Bop street are bad
- RDP houses, Solar geysers and Bins are appreciated
- Billing statements are not received
- Fairness should be practised when employing people to work in the projects
- Need help from the council to remove difficult rocks in the residential yards
- Need grass cutting
- No clinic in Ironside
- There are illegal occupants next to the township
- Waste is not collected on scheduled dates

Ward 45

- Houtkop road is not safe, it has killed many people
- Need Recreational facilities
- Need street lights between Sonlandpark and Unitaspark
- Ward members be given work opportunities during projects implementations

Closing Remark by Executive Mayor

- The Executive Mayor thanked the community for coming and making their inputs on the draft five years IDP and budget. She said all the issues, questions and comments were noted and will be addressed. The mayor requested councillors and ward committees to hold meetings with community members in order to prioritise projects
- In her response to issues mentioned by the community, she said Projects for Ironside and Debonnaires will be identified and included in the 5 year IDP, and illegal occupants near their township will be removed. Secondly, people who were living in old hospital were not forgotten, proper housing is underway and they will soon be relocated from the containers and Bob Road issue was noted.
- She announced that Bulk Water Scheme project is on track, and it is major milestone in an effort for creation of jobs in the area of Emfuleni.

The meeting adjourned at 17:18

MINUTES OF THE IDP/BUDGET PUBLIC PARTICIPATION MEETING

Boipatong Hall

2 May 2012, 15H00

Present

The Executive Mayor: Cllr NG Hlongwane

Councillors in Attendance

Councillor Ranake
Councillor Mtombela
Councillor Moera
Councillor Mbele
Councillor Mathibela
Councillor Tatae
Councillor Rani
Councillor Phume
Councillor Radebe
Councillor Godoli
Councillor Khubeka
Councillor Ronyuza
Councillor Malindi

Apologies

No formal apologies

Available Papers

Presentation
Programme

Programme

6. Opening and Welcome
7. Purpose of the Meeting
8. Presentation of the Draft IDP and Budget
9. Questions ,inputs ,Comments and Responses
10. Inputs by executive Mayor and Closure

Opening and Welcome

The meeting was officially opened at 15h30 by the programme director Cllr Radebe and also made a welcome address. The programme director then introduced the executive Mayor and members of the mayoral committee.

Purpose of the meeting

The programme director informed the community members that the purpose of the meeting was to update the community on the progress made by the municipality on the

implementation of 2011/12 projects. Secondly he said it was to present the 2012/213 projects and give members of the community an opportunity to input on the IDP.

Presentation of the Draft IDP and Budget

The Executive Mayor in her opening remarks thanked community members for attending the meeting. She explained that it is a legislative requirement that the municipalities conduct public participation in their communities. This will ensure that a community takes part in the process of planning for development of their areas; hence it is important that the community attend meetings in large numbers. She further emphasised that, poor attendance by community contributes to wasteful expenditure because buses are hired yet they arrive empty at the meetings.

The Executive Mayor presented the 2012/2013 projects.

Questions, Inputs, Comments

Ward 13

- Concern on the project named 'develop and investigate landfill site', explanation to be provided whether that will be another 'matiki' because it pose danger to the community.
- The problem of leaking taps in Sharpeville and the pensioners ignorance regarding that.

Ward 03

- Concern over public participation meeting time.
- Dissatisfaction concerning housing project.
- Contrary to what is written on the project list, nothing has been done in Leshoboro Street.
- Apostolic churches are not provided access to council stands in Boipatong.
- Dysfunctional high mast lights.
- Sports centre is needed in Boipatong.

Ward 08

- High rate of unemployment
- Lack of water in Boipatong crèche since February, and the matter has been reported several times without any assistance.
- Street lights are needed at the bridge.
- Overcrowding at Mahareng school.
- Lack of dustbins
- What will happen after the closure of landfill site?
- Problem over late son's house that is currently occupied by somebody illegally.
- Problem of water that goes into people's houses
- Flowing water that is also destroying the street.

Ward 12

- Proposal that unused school be converted into skills development centre.
- Speed humps are needed next to Immanuel school
- Undeveloped dam is a concern.

Ward 22

- Sectors need to be involved in the formation of the IDP

SANCO

- People with disabilities are not considered in all available government facilities in Boipatong.
- Most of the people occupying RDP houses have no title deeds.
- Some of the Boipatong massacre victims are still living in shacks.
- There is a computer centre but children are still not computer literate.

Responses

Cllr Mcera

Sectors should be revived to create programmes to tackle crime. Forums will be created and become effective so that police can be accountable. He promised to visit Boipatong police station to discuss policing issues.

Cllr Khubeka

Construction of backyard rooms was to try to eradicate shacks. Another reason was for people to have tenants so that it becomes easier to pay municipal services. People in water logged areas will be relocated to other dry areas. She also emphasised that people should stop buying houses without title deeds.

Cllr Thulo

She pleaded with the community to save water and use it wisely because it has become a scarce resource. She said that, regional sewer scheme will address some of the water and sanitation problems, and Sedibeng sewer plant has started with upgrading.

Cllr Ronyuza

He pleaded with the community to pay their services and those who are indigents should come and register. He said that, the current landfill site will be closed, however the new landfill that will be developed should follow certain procedures. Not all townships have dustbins, it is only in Evaton and it was through Evaton Renewal programme that it became possible. There is a need to raise funds so that other townships can have dustbins. According to Cllr Ronyuza, ten houses were allocated to Boipatong massacre victims, therefore, if there were people left behind their names should be forwarded to the council.

Cllr Malindi

He said that, there is a huge demand for churches yet council land is very limited. Robust discussion is needed to find a lasting solution to churches. Job creation and skills development should be tackled by all stakeholders which include chamber of commerce, Mittal and other institutions. He further said that we need to acknowledge that people in the region do not have education but despite all that, investors are drawn into the region.

Executive Mayor

The Executive Mayor told the community that programmes are coming to address unemployment, but also urged the community not to wait for government but instead they should utilise the skills that they have to create employment. More emphasis was made to parents to help their children to pass matric because bursaries will be made available to the most deserving students by the office of the Mayor. She further pleaded with the community to pay for their services and disputed rumours that the municipality is on the brink of provincial administration.

Closure

The meeting was adjourned at 17h55

MINUTES OF THE IDP/BUDGET PUBLIC PARTICIPATION MEETING

Tshepo Themba Hall

08 May 2012, 15H00

Present

The Executive Mayor: Cllr NG Hlongwane

Councillors in Attendance

Councillor Mphuting
Councillor Ndindwa
Councillor Mushoaba
Councillor Morolong
Councillor Mosebi
Councillor Lehlaka
Councillor Godoli
Councillor Ranake

Available Papers

5. Presentation
6. Programme

Programme

9. Opening and Welcome
10. Presentation
11. Questions, Inputs and Responses
12. Closure

Opening and Welcome

Councillor Pitso asked community member to open the meeting in prayer. *Ms Mphahlele*
the Executive Mayor, Mayoral Committee, Councillors and Officials present.

Presentation

The executive Mayor did the presentation.

Questions and Inputs

Ward 40

- Zone 6 Extension 5 is a hazard place, it is filthy
- Road Conditions are bad
- There is high unemployment rate
- No sports ground and recreational facilities
- Bad roads condition in zone 6 extension 3 as a result, waste truck and *services* cannot access it.
- Need for grass cutting near train station
- No enough schools

MINUTES OF THE IDP/BUDGET PUBLIC PARTICIPATION MEETING

Tshepo Themba Hall

08 May 2012, 15H00

Present

The Executive Mayor: Cllr NG Hlongwane

Councillors in Attendance

Councillor Mphuting
Councillor Ndindwa
Councillor Mushoaba
Councillor Morolong
Councillor Mosebi
Councillor Lehlaka
Councillor Godoli
Councillor Ranahe

Available Papers

5. Presentation
6. Programme

Programme

9. Opening and Welcome
10. Presentation
11. Questions, Inputs and Responses
12. Closure

Opening and Welcome

11:40 Councillor Pitso asked community member to open the meeting in prayer. He then introduced
11:50 the Executive Mayor, Mayoral Committee, Councillors and Officials present.

Presentation

The executive Mayor did the presentation.

Questions and Inputs

Ward 40

- Zone 6 Extension 5 is a hazard place, it is filthy
- Road Conditions are bad
- There is high unemployment rate
- No sports ground and recreational facilities
- Bad roads condition in zone 6 extension 3 as a result, waste truck and other cars cannot access it.
- Need for grass cutting near train station
- No enough schools

- Churches have occupied empty spaces, including soccer ground
- Need for a clinic
- There is no monitoring of work done by contractors in the wards

Ward 42

- Need housing title deeds
- Orphans are increasing in the community, more help is needed from the council

Ward 38

- There are livestock kraals in Zone 6 and that threatens community health and housing value, therefore for the bylaws to be implemented
- Waste not collected on scheduled dates

Ward 39

- There is corrugated building that distract visibility of the road and other cars, and may possibly cause accidents.
- Cinderella road needs attention
- Need for stormwater drainage system
- Need funding for existing old age(Elderly People) project
- No clinic in Eatonside
- Signed a EPWP contract last year in November 2011, but still awaiting a call to start to work

Ward 28

- Need for a ward community members to be given jobs during projects implementations

Ward 29

- No developments in Small farm, the place has been neglected

Response

- Cllr Ranake acknowledged that clinic in zone 3 is too small and that upgrading it will be done soon. She also said that community of zone 6 should be aware that planning regarding building of clinics is done in conjunction with the province. She announced that mobile clinics are underway and its visit schedule will be distributed, furthermore ELM is also planning to implement ward base services in the future
- Cllr Ranake encouraged people who are not working to register as indigents. In regard to the issue of Cattle Kraal meetings, she said those meetings will be held to discuss the issue and identify a common place where livestock can be kept.
- She encouraged the management of Old Age project to contact Social development Department which will assist and check if the project complies.
- Cllr Radebe warned the people who are spinning cars that it's illegal and the law will take its course against them. In regard to occupied spaces by churches, he said that his department will verify if part occupied by church is part of the ground, if found truthful then appropriate action will be taken.
- He notified the community that investigations are in progress regarding the court that should be converted into museum. He also encouraged community members to attend

important community sectors/ward committee meetings; in order to stay updated with new developments. Lastly Grass cutting will be done

- Cnr Godoli encouraged community members to keep environment clean by abstaining from littering. She said community members should take out their garbage bins on waste collection days.
- Cnr Pitso explained the reasons why there was a delay in issuing of title deeds. He made the community members aware that there was no township register from the very beginning (during apartheid era), and the matter is being attended. He explained ELM tender procedures to the community members

Closing remark by Executive Mayor

The Executive Mayor apologised to the community members for being late. She said winter was approaching and she intend to revive the practice of Besa nje ga Magogo workshopped in wards.

The Mayor encouraged women to tender with ELM and that they should register their business on the database. She notified the community on the SMME workshop to be held in June 2012.

She proudly announced on the Skills Development Project underway, and that it is an initiative to decrease unemployment and skills shortage in ELM

The executive Mayor thanked everyone present for attending the meeting

The meeting adjourned at 17:55

MINUTES OF THE IDP/BUDGET PUBLIC PARTICIPATION MEETING

Saul Tsotetsi Sports Complex

10 May 2012, 15H00

Present

The Executive Mayor: Cllr NG Hlongwane

The Speaker: Cllr MP Gqelosha

Councillors in Attendance

Councillor Ranaka	Councillor Seisa
Councillor Khubeka	Councillor Jantjie
Councillor Pitso	Councillor Thulo
Councillor Tsabalala	Councillor Hlongwane
Councillor Malisa	Councillor Rapakeng
Councillor Mooko	Councillor Khoali
Councillor Mphuting	Councillor Mtamba
Councillor Nthebe	Councillor Malindi

Available Papers

7. Presentation
8. Programme

Programme

13. Opening and Welcome
14. Presentation
15. Questions, Inputs and Responses
16. Closure

Opening and Welcome

The Speaker asked community member to open the meeting in prayer, and welcomed everyone present. Cllr MP Gqelosha encouraged the community members to freely state developmental issues that affect them. He then introduced the Executive Mayor of Emfuleni Local Municipality, the members of Mayoral Committee, Councillors and Officials.

Presentation

The Executive Mayor did the presentation.

Questions and Inputs,

Ward 16

- Need Progress report on Street 1 and Missisipi project

Ward 17

- Need Electricity in the hostel

- There are people receiving grants illegally

Ward 28

- Need garbage bins
- No achievements stated for this ward
- No projects budgeted for this ward
- Need Clinics and Schools in Sonderwater
- It's been almost 15 years waiting to be provided with RDP house in Sonderwater
- Boitumelo Clinic is too Small
- Need a library
- There is no Public transport
- There is no remuneration for people working in an agricultural project
- Receiving bad services from nurse at the clinics

Ward 30

- Need for tarring of Roads
- Budget allocated for electricity projects is too much, should be cut for doing other projects like job creation
- Projects should be executed by people living in that ward.
- There are lots of potholes
- Water logged streets
- Commence date for the implementation of presented projects

Ward 31

- High Mast light in zone 14 is not functional since 2004

Ward 34

- Need for a stadium

Ward 36

- Electricity cuts without warnings
- No projects budgeted for this ward
- Hazard Soil in the ward
- Unfulfilled promises of housing in New Village by the Council

Responses by MMC's

- Cllr Ranake said that the community member who received badly service at the clinic to contact her so that they can resolve the matter. In regard to the need for clinic in Boitumelo, she said that the council in conjunction with the province are looking for land where they build it.
- Cllr Pitso responded to an issue of uncompleted Missisipi Road Project, he said it was one of the flagship projects that could not be completed due to shortage of funds. He said the council has applied for a grant for the completion of those projects. He further enlightened the community members that the Emfuleni financial year start on the beginning of July thus when the presented projects will start. He mentioned that all tenders are advertised on papers and people are welcomed to apply.

- Cllr Malindi promised that he will organise meeting with the owners of agricultural project in order to resolve the mentioned remuneration matter. He highlighted that, everyone in Emfuleni is entitled to work in any ward of their choice if projects are taking place. He stated the council intention of attracting more investors in Emfuleni in order to combat unemployment.
- Cllr Thulo said it is difficult to respond on behalf of Eskom regarding electricity issues, although the municipality will further engage with Eskom to highlight community concerns. She encouraged community members to save water since it is a scarce resource.

Closing remark by Executive Mayor

- The executive Mayor informed the community members that there is newly established Monitoring and Evaluation Unit, and she will make follow up regarding progress of the mentioned projects. She asked the councillors and community members to come together to prioritise the projects of their wards and submit them to speaker's offices. The aim is ensure that every ward is included in the budget during planning.
- She said housing is the competence of the province; however the council will make a follow up with them. Regarding the issue of upgrading hostels, the province withdrew funding due to community member's disagreement on how the project should be implemented. She promised to contact province to reinstate the funds. The executive Mayor thanked everyone for attending the meeting.

The meeting was adjourned at 17:27

MINUTES OF THE BUSINESS BREAKFAST MEETING
STONEHAVEN ON VAAL
4 MAY 2012, 08h50

Present

Executive Mayor: Cllr G Hlongwane
Speaker: Cllr M Gqelosha
Chief Whip: Cllr E Tshabalala

Councillors in Attendance

Cllr K J M Ranake
Cllr V Mcera
Cllr S Pitso
Cllr K Malindi
Cllr S Radebe
Cllr M Khubeka
Cllr K Ntombela

The meeting was attended by 39 Stakeholders

Available Papers

Programme
IDP & Budget Presentation

Agenda

1. Programme Director: Cllr K Malindi
2. Opening & Welcome
3. Purpose of the meeting
4. Address by Executive Mayor
5. Presentation
6. Questions & Comments
7. Closing remarks

1. **Programme Director**

MMC: LED, Development Planning & Tourism, Cllr K Malindi introduced the Executive Mayor of Emfuleni Local Municipality, Speaker, Chief Whip, Mayoral Committee, Miss Emfuleni, DMM's and officials on duty.

2. Opening and Welcome

MMC : Housing, Clr M Khubeka welcomed, VUT, North West University, Executive Managers, officials, and other stakeholders present.

3. Purpose of the meeting

- Clr Radebe informed the business community that the municipality planning is guided by the Chapter 4 and Section 17(2) of Local Government Municipal Systems Act No.32 of 2000, which indicates that each municipality must establish appropriate mechanisms, processes and procedures to enable the local community to participate in the affairs of the municipality
- He said The executive Mayor before she could table IDP/budget she should be confident enough to do it because she has consulted the community and all different stakeholders
- The purpose of the meeting therefore is to give to present the IDP and Budget for 2012/13- 2014/17 as well as to give the business community to input on the development of the municipality.

The programme director also made the business community aware that the process of consultation does not only take place during Mayor road shows, it continues even outside public participation meetings.

4. Address Executive Mayor: Clr G Hlongwane

Clr Hlongwane thanked distinguished guests, MMC's, Councillors present, Chief Whip & Senior Management Team. She also acknowledged the presence of the following departments:

Miss Emfuleni, Business Forum, NGO's, Business people from the private sector and the Media.

She then presented the draft IDP & Budget for 2012/13 - 2113/17.

5. Questions & Comments

Sedibeng Military Ex combatant Organization

- Protested that they have been neglected by the local government. The speaker mentioned that the organisation members have potential and skills, and he suggested that the council treat them as vulnerable group.



Stonehaven Vaal Management

- Need to know the time frame for the commencement of Sewerage infrastructure project

Emfuleni Youth Academy

- Advised ELM to invite all commercial Banks in future business meetings

Rand Water

- Urged ELM to investigate the cause of high rate of unemployment and if the higher learning institutions are producing relevant skills.
- Clarified that Increasing of water tariffs was 11.3% and not 13.5% as mentioned in the presentation

Emfuleni Construction Forum

- Concerned that nothing was mentioned regarding SMME's Turnaround Strategy in the Mayor's presentation.
- Need clarification on 30% local empowerment
- Suggested that there should be other forms of business meetings or forums that will allow business to be heard

ELM Responses

- Cnr Malindi said ELM is currently auditing Service Providers who have been in ELM Supply Chain Database in the past three years. The action will ensure fair awarding of tenders. Secondly ELM is in Partnership with Institution of Higher learning, the purpose is to research on the market demands versus skills that exist in Emfuleni. He said the council is also aware of the high number of people who do not have tertiary qualifications.
- DMM Nxumalo commented on the issue of timelines and said the construction-submitted their interests in regard to the Sewerage infrastructure project. The challenge so far was businesses that are not meeting minimum requirements and lack of administrative papers.
- DMM Dr Wiese - informed the business community that all banks were invited to attend business breakfast meeting

7. Closing Remarks by the Executive Mayor

- Thanked all who were present for coming
She proudly announced that Skills Development Project was underway, and that it is an initiative that will decrease unemployment and skills shortage in ELM

- The issue of Veterans was noted
- In regard to awarding 30% empowerment for local companies, she said there is a process to be followed. She encouraged business community to liaise with Local Economic Department and to register in Emfuleni database.

Closure

The meeting closed at 10h45

ANNEXURE F

Dear Sir/Madam

The questions that follow are meant for your frank and voluntary completion. The student is a PhD candidate of North-West University, Vaal Campus. The research is on public participation in waste management in the Sedibeng District Municipality. The exercise is purely academic, and you are assured of your utmost confidentiality.

QUESTIONNAIRE FOR OFFICIALS

DESCRIPTION

ANSWERS

Date

.....
.....

Name of District/Local
Municipality.....

Province.....

.....

City/ Town/
Village.....

.....

Total number of persons employed in the
department.....

Name of
department.....

.....

Position of official interviewed in the
municipality.....

Waste in your municipality

A1. Collection of waste is done by;

Municipality.....

.....

Municipality and

NGO.....

Municipality and private business

sector.....

Private sector

only.....

Local co-

operative.....

A2. How many households receive waste collection service?

A3. How many households are without waste collection?

A4. Do you service informal settlements? YES/ NO

If no please explain why?

.....

A5. What type of vehicles are used to collect waste?

(you can write more than one).....

A6. Is the fee for collection affordable to all? YES/ NO

A7. Does collection timing fit with users' needs? YES/ NO

A8. Has the municipality placed waste transfer stations? YES/ NO

A9. Are there recycling centres in your municipality? YES/ NO

If yes how many are they and the areas they are situated?

.....

.....

A10. Does the municipality assist recycling groups YES/ NO

If yes in what ways?

A11. Does the municipality have composting plant? YES/

NO

If "yes" how does community and municipality benefit?

A12. Is the schedule for waste collection at transfer stations accomplished? YES / NO

If “yes” explain how

If “No” what are problems and challenges

A13. Are there different places used as illegal dumping sites in the municipality area? YES/
NO

A14. Is hazardous waste placed on the streets? YES/
NO

A15. Are there reuse, reduce and recycle awareness campaigns? YES/
NO

If “yes” which areas are your priority?

.....
.....

2. Policies, By-laws and Legislation

A16. Does environmental legislation exist? YES/NO

A17. Are Policies and by-laws communicated to the public? YES/
NO

A18. Is law enforcement practised in solid waste management? YES/ NO

A19. Does the municipality have integrated waste management plan
YES/NO

A20. Does the municipality implement recommendations of IWMP?
YES/NO

If “yes” which of the following is used?:

Waste separation at source?

Recycling, reuse, reduce and recover?

Composting?

Household collection services?

Local co-operatives?

Public-private- partnerships in solid waste management(SWM)?

Service delivery and budget implementation plans ?

If “No” what are the challenges of the municipality in implementation of IWMP recommendations

A21. Is there coordination among the following departments? YES/

NO

IDP

Finance

Procurement

Council Speaker

A22 Is there any interest of political authorities in Solid Waste Management? YES/

NO

A23 Do partnerships exist for waste service delivery? YES/

NO

If ‘yes’ how are they involved in waste management?

If ‘no’ what are the challenges that prevent the municipality from having partnerships?

A24 Does coordination and cooperation exist between service user and service providers appointed by the municipality?

YES/NO

A25 Do partners in partnerships have equal power YES/NO

3. Important stakeholders in waste

A26 Who are the important stakeholders in waste management? Mark with **X**

Householders

NGOs

Municipality Officials

Executive Mayor

Municipal manager

School principals

Businesses

Ward Councillor

Ward committees

Community Development Workers

4. Sustainable Projects in Waste through public participation

A27 Are community members prepared to participate? YES/

NO

A28 Is there national government support and financial support from the Municipality? YES/

NO

A29 Does the private sector participate in the waste management services? YES/ NO

A30 Does 3rd party finance capital investments for waste management services? YES/

NO

A31 Are the stakeholders willing to participate in the waste management solution?
YES/NO

A32 Is there collaboration among stakeholders? YES/ NO

A33 Are there active public platforms in the community? YES/ NO

A34 Who do you consider to be most actively involved in public-private partnership in waste management?

Women

Youth

Disabled

Men only

Business people only

5.Types of waste service delivery by your municipality. Please mark with X

A35 Does your municipality render the following services:

- Kerbside domestic waste collection?
- Communal domestic waste collection?
- Recycling/transfer stations?
- Commercial waste collection?
- Landfill site operation?
- Storm water drains and canals?
- City/Town Centre cleansing?

- If other, please
list.....

A36 How does the municipality charge for waste collection?

- Charges per bag/per container
- Fixed municipal tariffs
- Variable municipal tariff (low cost housing, suburbs and previously disadvantaged groups)
- Policy on Basic Refuse Removal for Indigent Households

- If other, please
indicate.....

A37 How would you like income generated for waste services used?

- Income re- invested into waste management activities
- Used to compliment waste management policies
- Income incorporated into overall municipal revenue

A38 In which office is the programme on public participation located?

A39 Who takes ultimate responsibility for public participation at your institution?

- Speaker
- Secretary
- Various committee chairpersons
- Other

A40 When conducting public participation events, are other units also involved in the process?

YES/ NO

If yes please mention them and the role they play in the process

A41 Where is the public participation office physically located? Please describe the place.

A42. How accessible is the office to ordinary people?

- Very accessible
- Fairly accessible
- Not very accessible
- Not accessible at all

Please explain your choice

A43 Is the present structure for public participation effective? If no what structural changes do you suggest for greater effectiveness?

A44.How does the public participation process work in your institution, please describe

A45 Do you have a existing policy relating to public participation?

YES/ NO

A46 Is public participation an integral aspect of Municipality Strategic Plan? YES/
NO

A47. What does your municipality's public participation involve? Provide short description

A48. Do you have outreach programmes targeted at rural communities? If yes please explain what it entails. YES/ NO

A49 How do you encourage participation from under-resourced and unorganized communities?
Please explain

A50 Do you have any method for categorizing submissions or participants, example business, nonorganized groups or by a sector. If yes, please mention how you categorize.

A51 Are the public participation records available for public scrutiny? YES/
NO

A52 How easy is it for physically impaired people to participate?

- Very easy
- Easy
- Not easy
- Impossible

A53 Which communication strategies are in place or methods that are used for public participation?

A54. Where do you place public notices? State the media

A55 Are public notices available in the relevant languages? YES/
NO

A56. Who is targeted to attend public meetings?

A57 How do you go about informing or reaching the target groups?

A58 Mention the challenges experienced in terms of conducting public participation meetings or sessions?_____

THANK YOU FOR THE INPUTS; THEY ARE APPRECIATED_

ANNEXURE G

QUESTIONNAIRE FOR COMMUNITY

Dear Sir/Madam

The researcher is a doctoral candidate in Public Management with her studies focused on public participation in waste management. You are kindly invited to support the study by completing the questions below as frank as possible. You are assured that your participation is not only voluntary, your comments and identity will remain anonymous. The objective of the study is purely academic.

CHARACTERIZATION OF WASTE MANAGEMENT PRACTICES

Description

Responses/Answers

Date

Municipality of residence

Province

District

City/Town

Total number of persons inhabiting the house

Head of family

Mother

Father

Other Male Female

Name (Optional)

1. Waste in your community

B1 Is your community urban? Yes No Not Sure

B2 Is your community Rural?.... Yes No Not Sure

B3 Do you separate waste? Yes No Will do

B4 If Yes to 1.3 which of the following applies/

Tin Bottle Plastic

B5 Do you separate unused batteries Yes No Will do

- B6** Do you mix medical waste with household
for municipal collection? Yes No
- B7** How often is your waste collected in your area? 1x 2x Not sure
- B8** Does collection time meet your needs? Yes NO
- B9** Has the Municipality established waste transfer station in your area? YES /
NO
- B10** Is the schedule of waste collection at transfer stations accomplished? YES /
NO
- B11** Are there different places used as illegal dumps in your area? YES /
NO
- B12** Do you practise composting in your area? YES /
NO
- B13** Does the municipality have composting plant? YES /
NO
- B14** Are there recycling, reuse and reduce awareness and education campaigns? YES/
NO
- B15** Does the municipality support recycling, reuse and reduce awareness campaigns?
YES/ NO
- B16** Do you have problems with waste collection system in your area? YES/ NO
- B17** Is there private sector providing waste collection in your area? YES/
NO
- B18** Are NGOs participating in waste management? YES/
NO
- B19** Are there citizens participating in the decision making process? YES/
NO
- B20** Is there a market for composting? YES/ NO
- B21** Does the private sector participate in waste management services? YES/ NO
- B22** Are you willing to participate in the waste management solutions? YES/ NO
- B23** Are there public platforms in the community?
YES/NO
- B24** Do partnerships exist for service delivery? YES/NO

B25 Are the activities of recyclers assisted in the area?

YES/NO

B26 Do you recycle?

YES/NO

2. Commercial Risks of commercial stakeholder in partnerships

B27 Are you aware of environmental legislation for waste?

YES/NO

B28 Is law enforcement practised by the municipality ?

YES/NO

3. Existing situation regarding solid waste disposal

B29 Is there solid waste collected from your curbside?

YES/NO

B30 How do you discard waste that is of no value to your household?

Throw it in open spaces?

Leave it on the street?

Bury it in the back yard?

Take it to pick up point?

Store it for municipal collection day?

Other

B31 What do you do with your organic waste? Mark with X

Use it as compost?

Leave for municipal collection day?

Discard in the communal containers ?

Other? Explain

B32 What do you do with your recyclable waste? Mark with X

Discard with other solid waste?

Separate them for selling to junk or
shop collector ?

Separate them for own reuse?

Separate it and give it to others who will use it again

B33 What is your opinion about the current green containers in your area? Mark with X

They are too small to contain all solid waste

They are too far away from the house

They produce unpleasant smell

B34 What would you prefer as a solution?.....

.....

B35 Are you currently separating recyclable goods at home? YES/

NO

B36 Are you willing to separate recyclable goods at home? YES/

NO

B37 Are you currently separating compostable goods? YES/ NO

B38 What do you see as being an obstacle in participating in waste management service delivery?

B39 What do you see as an opportunity to participate in waste management service delivery

B40 Do you have private companies collecting tyres in your area? YES/

NO

B41 Are local people involved in waste collection in the area? YES/ NO

If 'yes' what do they do?

If 'no' how can local people participate?

B42 What do you do with your old television set, globes,
or any old electrical appliance?

B43 What do you do with exhausted batteries?

B44 Do you know any formal or informal recyclers who collect used motor oil? YES/

NO



GAUTENG PROVINCE

AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

ANNEXURE A

Reference: Gaut 002/12-13/W0010
Enquiries: Pertunia Ramalla
Email: Pertunia.Ramalla@gauteng.gov.za

Emfuleni Local Municipality

P.O. Box 3
Vanderbijlpark
1900



Attention: Mr. Thinus Kedinghuys

GDARD
Office of the HOD

12 -12- 19 0000 00

Fax: (016) 986 8441

Tel: (016) 986 8471

PER FACSIMILE / REGISTERED MAIL.

FILE 4/17/1
FOR ATTENTION
RECORDS OFFICE

Dear Sir

GRANTING OF A WASTE MANAGEMENT LICENCE FOR THE VAALOEWER NEW WASTE TRANSFER STATION ON A PORTION OF STAND 910 VAALOEWER VANDERBIJLPARK, EMFULENI LOCAL MUNICIPALITY

With reference to the abovementioned application, please be advised that the Department has decided to grant your waste management licence. The waste management licence and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulation, 2010, you are instructed to notify all registered and affected parties, in writing and within twelve (12) calendar days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the EIA Regulations, 2010 (Government Notice R543) which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*,

Department of Agriculture and Rural Development
Waste Management Licence Ref. No. 002/12-13/W0010

By facsimile: (011) 333 0620;
By post: P.O. Box 8769, Johannesburg 2000;
By hand: 16th Floor, Diamond Corner Building, 68 Eloff Street, Johannesburg.

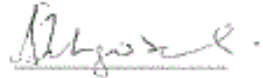
Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection. The main appeal must be lodged on the prescribed form with the MEC within 30 (thirty) days of the date of lodging of a notice of intention to appeal.

The prescribed appeal form can be obtained from the Department's website: www.gdard.wa.gov.za or by contacting the Appeals Administration and Coordination Office on (011) 355 1380.

Yours faithfully

GDARD
Office of the HOD

12 -12- 13 000000



Ms. S. Sekgobela

Head: Agriculture and Rural Development

Date: 19/12/2012

CC: Green Environmental Consulting

Attn: Mr. P. Colyn
Tel: (011) 454 4566
Fax: (008) 6225 552

GDARD Compliance Monitoring

Attn: Ms. C. Petlane
Tel: (011) 355 1993
Fax: (011) 355 1850

GDARD: General Waste Management

Attn: Ms. N. Rammbasa
Fax: 086) 630 2252



GAUTENG PROVINCE

AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

Reference: Gaut 002/12-13/W0009
Enquiries: Mpho Rabambi
Email: Mpho.Rabambi@gauteng.gov.za

Emfuleni Local Municipality

P.O. Box 3

Vanderbijlpark

1900

Attention: Mr. Thinus Redelinghuys

Fax: (016) 986 8441

Tel: (016) 986 8471

FILE #117/1
Waste & Landfill Site
FOR ATTENTION
EMFULENI LOCAL MUNICIPALITY
RECORDS OFFICE

GDARD
Office of the HOD

12 -10- 13 0000 10

PER FACSIMILE / REGISTERED MAIL

Dear Sir

GRANTING OF A WASTE MANAGEMENT LICENCE FOR THE SEBOKENG NEW WASTE TRANSFER STATION ON PORTION OF STAND 934 SEBOKENG, VANDERBIJLPARK, EMFULENI LOCAL MUNICIPALITY

With reference to the abovementioned application, please be advised that the Department has decided to grant your waste management licence. The waste management licence and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulation, 2010, you are instructed to notify all registered and affected parties, in writing and within twelve (12) calendar days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the EIA Regulations, 2010 (Government Notice R543) which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the MEC, within 20 (twenty) days of the date of this letter, by means of one of the following methods:

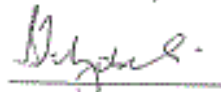
Department of Agriculture and Rural Development
Waste Management Licence Ref. No. 002/12-13/W0009

By facsimile: (011) 333 0620;
By post: P.O. Box 8769, Johannesburg 2000;
By hand: 16th Floor, Diamond Corner Building, 68 Eloff Street, Johannesburg.

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection. The main appeal must be lodged on the prescribed form with the MEC within 30 (thirty) days of the date of lodging of a notice of intention to appeal.

The prescribed appeal form can be obtained from the Department's website: www.agrd.gov.za or by contacting the Appeals Administration and Coordination Office on (011) 355 1380.

Yours faithfully



Ms. S. Sekgobela

Head: Agriculture and Rural Development

Date: 19/10/2012

GDARD
Office of the HOD

12-13-13 0000 10

CC: Green Environmental Consulting cc

Attn: Mr. P. Colyn
Tel: 011 454 4566
Fax: 0866 22 55 52

GDARD Compliance Monitoring

Attn: Ms. C. Petlane
Tel: 011 355 1993
Fax: 011 355 1850

GDARD: Hazardous Waste Management

Attn: Ms. N. Rammbasa
Tel: 011 355 1657
Fax: 086 632 2017



GAUTENG PROVINCE

AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

Reference: Gaut 602/12-13/W0008
Enquiries: Mr. Mufunhu Lihuwani
Email: Mufunhu.Lihuwani@gauteng.gov.za

Emfuleni Local Municipality

P.O. Box 3
Vanderbijlpark
1900



GDARD
Office of the HOD

Attn: Mr. Tinus Redelinghuys

12 - 11 - 09 000010

Fax: (016) 986 8441

Tel: (016) 986 8471

PER FACSIMILE / REGISTERED MAIL

4/17/1
FILE
FOR ATTENTION
EMFULENI LOCAL MUNICIPALITY
RECORDS OFFICE

Dear Sir

GRANTING OF WASTE MANAGEMENT LICENCE FOR THE BOPHELONG WASTE TRANSFER STATION ON PORTION OF PORTION 45/583 BOPHELONG, VANDERBIJLPARK, EMFULENI LOCAL MUNICIPALITY

With reference to the above-mentioned application, please be advised that the Department has decided to grant your waste management licence. The waste management licence and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulation, 2010, you are instructed to notify all registered and affected parties, in writing and within twelve (12) calendar days of the date of this letter, of your application as well as the provisions regarding the making of appeals that are provided for below.

Your attention is drawn to Chapter 7 of the EIA Regulations, 2010 (Government Notice R543) which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the MEC, within 20 (twenty) days of the date of this letter, by means of one of the following methods:

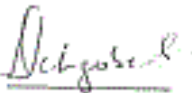
Department of Agriculture and Rural Development
Waste Management Licence Ref. No. 002/12-13/W0008

By facsimile: (011) 333 0620;
By post: P.O. Box 8769, Johannesburg 2000;
By hand: 16th Floor, Diamond Corner Building, 68 Eloff Street, Johannesburg.

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection. The main appeal must be lodged on the prescribed form with the MEC within 30 (thirty) days of the date of lodging of a notice of intention to appeal.

The prescribed appeal form can be obtained from the Department's website: www.gdard.gpg.gov.za or by contacting the Appeals Administration and Coordination Office on (011) 355 1380.

Yours faithfully



Ms. S. Sekgobela

Head: Department of Agriculture and Rural Development

Date: 08/06/2012

GDARD
Office of the HOD
12 - 11 - 29 000010

CC Green Environmental Consulting

Attn: Ms. P. Colyn
Tel: (011) 454 4566
Fax: (086) 622 5552

GDARD Compliance Monitoring

Attn: Ms. C. Petlane
Tel: (011) 355-1993
Fax: (011) 355-1850

GDARD: Waste Management

Attn: Ms. N.E. Ramnabasa
Fax: (086) 630 2252