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UNIVERSITY OF THE WITWATERSRAND



FACULTY OF SCIENCE

SCHOOL OF GEOGRAPHY, ARCHEOLOGY AND ENVIRONMENTAL STUDIES (GAES)

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Title: The policy and practice of reclaimer integration in the City of Johannesburg.

A Dissertation submitted to the Faculty of Science, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Master of Science (Geography).

By

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DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the degree Master of Science at the University of the Witwatersrand, Johannesburg. I further declare that this dissertation has not been submitted before for any degree or examination at any other University.



_____ 2017/06/11

Signature Date

ABSTRACT

Reclaimer integration in South Africa has been identified as a priority, but how to integrate reclaimers remains a challenge. Crucially, there is not yet a coherent approach or a clear understanding of what reclaimer integration means in South Africa, let alone whether this same understanding of integration is shared by the reclaimers who are being integrated. By focusing on the integration initiatives of the Environment and Infrastructure Services Department (EISD) and Pikitup, this thesis conducts a comparative study of two reclaimer integration projects in Johannesburg. It investigates the breakdown and mismatch of understandings between social actors who do not share the same view of integration and implications thereof. In doing so, it contributes to discourse on the transformation of Johannesburg's waste management system. Social constructivism theory by Berger and Luckmann (1966) provides the theoretical grounding for this dissertation by exploring how different milieus and experiences shape people's understanding of realities. Findings illustrate that there is no clear conceptualisation of integration that underpins waste management policy. Drawing on social constructivism theory, the paper concludes that integration is a socially constructed and contested concept. Essentially, there are inconsistent understandings of integration among different groups of reclaimers as well as officials. For that reason, integration programmes created a new form of exclusion and imposed negative effects on reclaimers.

KEYWORDS: Integration, Reclaimers, Waste, Policy, Recycling, cooperatives

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To all my friends and members of the Sekhwela family, thank you for being such a supportive structure and always encouraging me whenever I felt overwhelmed.

LIST OF ACRONYMS

ARB – Asociación Cooperativa de Recicladores de Bogotá

BBC – Buy Back Centre

CoJ – City of Johannesburg

CSIR - Council for Scientific and Industrial Research

DEA – Department of Environmental Affairs

DED – Department of Economic Development

DST – Department of Science and Technology

DTI – Department of Trade and Industry

EISD – Environment and Infrastructure Services Department

EPWP – Extended Public Works Programmes

GDS – Growth Development Strategy

IP&WM – White Paper on Integrated Pollution and Waste Management

IWM – Integrated Waste Management

KKPKP – Kagad Kach Patra Kashtakari Panchayat

MRF – Material Recovery Facility

NWMS – National Waste Management Strategy

NEMWA – National Environmental Management: Waste Act

PPE – Personal Protective Equipment

PPP – Public Private Partnership

SALGA - South African Local Government Association

SAWPA - South African Waste Pickers Association

SMME – Small, Medium and Micro Enterprise

SWM – Solid Waste Management

S@S – Separation at Source

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CHAPTER 1:

1. Introduction to the study

Since the late 19th and early 20th centuries, reclaimers have played a crucial and central role in municipal waste systems by collecting and sorting recyclable materials disposed of as waste (Samson, 2010c). In the current period, this role is becoming increasingly important in cities in the south owing to the increase in urbanisation and changes in consumption patterns within cities (Wang & Geng, 2012). However, the informal waste sector and the work of reclaimers is misunderstood and often overlooked by local government and citizens. Since 2011, reclaimer integration in South Africa has been identified as a priority. But what does integration mean? Who is prioritised in this integration? And which form is integration supposed take?

The Polokwane Declaration of 2001 committed government officials to implement a policy that promotes an integrated waste management system. This approach was supposed to follow the waste hierarchy in order to achieve "zero waste" by 2022 while stabilising waste generation and reducing waste disposal by 50% by 2012. As part of this process, the National Waste Management Strategy (Department of Environmental Affairs, 2011) contains commitments to integrate reclaimers into municipal waste management systems. This raises the question of how reclaimers will be integrated into municipal systems.

In South Africa, urban population increase has led to an unexpected increase in waste generation and management (Wilson & Velis, 2014). In response, South Africa developed a waste policy in order to move waste from the service chain to the value chain through the implementation of the waste hierarchy (Department of Science and Technology, 2014). Yet 90% of waste generated in South African cities remains in landfills, regardless of the policy approach of diverting waste from landfill sites to recycling and recovery of waste (Godfrey *et al.,* 2016). Importantly, the increase in solid waste generation in urban cities has become a social and environmental concern which Sentime (2011) observes to have very few sustainable waste management solutions. Effectively, according to Blaauw *et al*. (2015), the South African government

appears to neither have effective waste management strategies, nor is it ready to accommodate waste pickers in waste management strategies.

Given that space in landfill sites is becoming scarce while waste generation in cities is increasing, it is often the informal economy – mostly unemployed people – that leaps to reclaim recyclable materials to generate incomes (Beall, 1997; Sembiring & Nitivattananon, 2010; Schenck & Blaauw, 2011; Sentime, 2011; Wilson & Velis, 2014; and Topic & Biedermann, 2015). This has become easier since inadequate collection of waste, its improper disposal in open landfills, and uncontrolled kerbside points make waste readily available for reclaimers to salvage (Wilson *et al*., 2006). Waste picking is typically associated with an unhygienic environment and reclaimers are considered a public nuisance (Bari *et al*., 2012, Samson, 2009; Sentime, 2011), whereas the informal waste sector is currently playing a significant role in waste management in the waste hierarchy (Godfrey *et al*., 2016; Samson, 2009; DST, 2014).

1.1. Problem statement

Although many municipalities are attempting to integrate waste pickers in South Africa, there is not yet a coherent approach to that effect (Godfrey *et al.,* 2016). Furthermore, there is no clear understanding of what waste picker integration means in the City of Johannesburg and South Africa as a whole. The City of Johannesburg (CoJ) and the National Department of Environmental Affairs (DEA) recently started recognising the important contribution of informal reclamation in the South African economy, consequently developing initiatives to integrate them in municipal waste management (DST, 2013; DEA, 2011; CoJ, 2011). However, the major challenge that the government is still entangled in is <u>how</u> reclaimers can be integrated (Godfrey *et al*. 2016).

1.2. Aims/objectives of the study

By focusing on Johannesburg, this study explores integration initiatives of the Environment and Infrastructure Services Department (EISD) and Johannesburg's waste management utility, Pikitup. The study investigates how different understandings of "integration" by Pikitup and reclaimers shape integration programmes and their perceived successes and failures. It begins by exploring how

Pikitup and reclaimers understand integration. This elucidates how meaning is constructed: how reclaimers and municipalities conceptualise integration and its importance. The study reveals the implications of integration projects on the City's waste management systems and reclaimers, and contributes to debates on the transformation of the City's waste management system.

This study was designed to address how different understandings of integration by Pikitup and reclaimers shape integration programmes (and their perceived successes and failures). The study is based on two different integration initiatives implemented at Linbro Park Sorting Facilities and Robinson Deep landfill site respectively. Through semi-structured interviews, observation and focus group discussions, the study uses the theory of Social Constructivism coined by Berger and Luckmann (1966) to argue that, because integration is a socially constructed and contested concept and is not defined on policy, the various understandings among different stakeholders imposed negative effects on reclaimers' work and ultimately the work of reclaimers. It seems that, Pikitup developed its own understanding of integration and imposed the programmes on reclaimers.

Crucially, if integration is to succeed, it is of great importance to understand how reclaimers are affected by it and how they understand it as compared to how municipalities understand it. The study contributes towards understanding integration and how different meanings are constructed. More effective approaches to integration can be developed based on this varied understanding.

1.3. Research questions

The study sought to answer the following overarching question:

- ✓ How do different understandings of integration by Pikitup and reclaimers shape integration programmes?

The study was further guided by the following sub-questions that are closely related to each other:

- ✓ How has participation in the integration project affected reclaimers' livelihoods and working life?

- ✓ What does “integration” mean to Pikitup and reclaimers?
- ✓ What are the successes and failures of Pikitup’s integration projects according to Pikitup and reclaimers?
- ✓ What are the factors that can contribute towards the success of integration while ensuring sustainable livelihoods?

1.4. Background and contextualisation: a history of waste management and integration of reclaimers in South Africa

Reclaimers are defined as people who make a living informally by selling recyclables found in trash (Marello and Helwege; 2014). Reclaimers are the vulnerable, poor and marginalised individuals in societies who choose to salvage recyclables from landfills and the kerbside. According to a number of scholars, reclaimers are often unskilled in their labour and thus resort to alternative means of sustaining their livelihoods (Sentime, 2011; Theron & Visser, 2011; Velis *et al.,* 2012; Ezeah *et al*., 2013). Arguably, reclaimers do not always have low levels of education. Samson (2010b) highlights that many educated people are not able to get other jobs due to the decimated economy and forced migration owing to economic and political reasons.

DEA (n.d) estimates that in 2014 there were approximately 62 147 reclaimers in South Africa, with 36 680 operating in landfill sites and 25 467 operating on the kerbside in Gauteng, Western Cape and Kwa-Zulu Natal (DEA, n.d). Reclaimers in South Africa include people from other African countries such as Zimbabwe, Lesotho, Mozambique and Botswana (DEA, n.d). According to the DEA (n.d), 83% of reclaimers in Gauteng originate from outside South Africa, with black Africans being 94.5%, coloureds 5.1%, whites 0.2% and indians 0.1% (DEA, n.d).

Reclaimers are linked to buy back centres (BBCs) which function as a link between reclaimers and recycling companies and facilitate the recycling potential of the informal sector (Schenck *et al.*, 2012). Until 2011, the contribution that reclaimers make towards waste management was unrecognised (Samson, 2009; Velis *et al*., 2012; DST, 2013). According to DEA (n.d), reclaimers operating on kerbside and landfill comprise 50.7% men and 49.3% women.

Annepu *et al*. (n.d) highlight that countries in the global South allocate inadequate financial resources towards implementing plans devised to achieve integration of reclaimers. Arguably, in South Africa's legislation and its strategies for waste management, any layman can discern mishaps in the policies, strategies and incomplete implementations and delivery (Lowitt, 2007). Blaauw *et al*. (2015) share the same sentiment, arguing convincingly that the legislation and policies which the South African government has developed have been improperly articulated such that the activities of reclaiming and reclaimers' income have been subjected to vulnerability due to uncertainty, misunderstanding of their work, and ever-changing legislation.

Many scholars hold the view that informal reclaimers have only started gaining recognition over the last 20 years for the impact that their work has on the environmental, social and economic spheres (Wilson *et al*., 2006). South Africa has a long standing history of reclaiming and municipal provision of waste management services. It is important to note that waste service provision in South Africa was highly unequal and inadequate during apartheid and at the time of its democratic transition in 1995 (Samson, 2009). It is only relatively recently that the City of Johannesburg began to provide proper waste management services to urban areas and informal urban settlements through its subsidiary Pikitup (DEA, 2011). In South Africa, recognition of reclaimers can only be traced back to the 21st century with the history of reclaiming traceable to the apartheid regime, although restricted by government (Samson, 2009 and 2010c). Under the apartheid government, the relationship between reclaimers and the municipality was very hostile and did not permit reclaimers to operate at landfills (groundWork, n.d; Sentime, 2011).

Drawing on a report by Benjamin (2007), Samson (2010c) argues that South Africa's stance towards recognising reclaimers in municipal waste management by highlighting that waste management policies have been highly inconsistent concerning reclaiming. Mention of reclaimers in South African policies was first made in the 1999 National Waste Management Strategy (NWMS). Even then, the NWMS only stipulated that reclaiming would be phased out while separation at source would be promoted by 2003 (Godfrey *et al*., 2016). Policies developed between the year 2000 and 2007 only made mention of reclaimers and did not provide a clear mandate regarding the government's plans for reclaimers, whether in the short or long term. Criticism around

these policies, including of the Waste Bill (RSA, 2007a and 2007b), is that the policies do not explicitly speak of reclaimers but speak of waste management practices to be employed. This is why reclaimers existed nonetheless (Samson, 2010).

While some municipalities had been running projects and initiatives to try to integrate reclaimers, this was only encoded in policy in 2011, when the national government, led by the DEA, recognised reclaimers and mandated municipalities to formulate policies that would fully recognise and support reclaimers in its National Waste Management Strategy, or NWMS (DEA, 2011). Following that, the City developed its Integrated Waste Management Policy in an attempt to recognise and support reclaimers within the City. Additionally, Pikitup included plans to enforce and implement Separation at Source (S@S) (Pikitup, 2015), and other programmes to integrate reclaimers in municipal waste management. Although reclaimers are still facing challenges, the government has begun to make efforts to integrate them.

In order to develop the argument of this study, the thesis is divided into nine chapters. This first introductory chapter is followed by a review of literature on reclaimer integration, which discusses four key themes. First, it conceptualises "waste". Second, it looks at reclaimers, the informal sector and the stigma attached to the work of reclaimers. The third section of the literature review discusses different conceptualisations and a typology of integration models. The fourth section traces the development of inclusive waste management practices in South Africa. This will be discussed while considering the effects of informal reclaiming on reclaimers and their livelihood. It is followed by a theoretical framework which presents the conceptual structure in which this dissertation is theoretically grounded.

The theoretical framework is followed by Chapter Three on methodology. The methodology chapter looks at the geographic context and methodology of the study. It describes the area of study and the methods that were adopted to collect data. It also discusses ethical consideration and limitations to the study.

Chapter Four discusses the legislative route that South Africa has undertaken in an attempt to deal with the challenges of growing solid waste generation and integration of reclaimers, particularly within the City of Johannesburg. It deliberates on waste

management approaches that South Africa has adopted, namely the cradle-to-cradle approach as well as the waste hierarchy. It further looks at national policy and local plans and frameworks on waste management to trace the history of integration in South Africa.

Chapters Five and Six present the case studies of Linbro Park Sorting Facilities and Robinson Deep Landfill Site, respectively. Each chapter provides a historical context which highlights the key factors that distinguish each site. They provide an overview of the reclaimer integration initiatives implemented by EISD and Pikitup. The chapters then discuss factors which contributed towards integration programmes falling short of their intended objectives. Further, the chapters present data on how reclaimers understand integration and how it has affected their livelihood and working life.

Chapter Seven is a comparative analysis of Linbro Park sorting facility and Robinson Deep Landfill Site integration programmes. It focuses on identifying the similarities and differences of the integration programmes presented and discussed in the preceding chapters. Through the lens of social constructivism theory (Berger & Luckmann, 1966), this chapter discusses different understandings of integration and the implications of such integration when different parties have different understandings of what the term means. Chapter Eight wraps up the study by outlining the argument and findings of the study as well its contributions to broader academic debates. The chapter concludes by highlighting the importance of the study and areas for further academic pursuit. The list of references and sources used in the study is provided in Chapter Nine. This is followed by an addendum.

CHAPTER 2

2. Literature review and theoretical framework

2.1. Introduction

This chapter reviews local and international literature on solid waste management and waste picking relevant to the study. First, it conceptualises the notion of waste. Second, it explores the social issues of reclaiming. It also discusses the informal sector and describes how the sector functions, as well as how reclaimers cope with the challenges of working in the informal waste sector. Third, it looks at how integration has been conceptualised by different scholars in the international landscape. It looks at different models of integration by developing a typology of different meanings and objectives of integrating reclaimers and considers distinguishing aspects and key factors that shaped integration. Further, the chapter discusses the theoretical framework which underpins this study. Lastly, it concludes by highlighting key points from the review of literature and how the study will address the gaps identified.

2.2. Conceptualisation of waste

Within the waste management discourse, “waste” means different things to different people, and can thus be defined in complex and subjective ways. Depending on the type of material or geographical location, waste is perceived as rubbish, garbage, trash or junk (Oteng-Ababio, 2014). It is viewed by the general public as an inconvenient unwanted material and a health and environmental hazard (Sembiring & Nitivattananon, 2010; Oguntoyinbo, 2012). For Oteng-Ababio (2014), however, waste is anything that has been discarded or disposed by its owner.

While most residents and governments viewed waste as valueless, industries and reclaimers view waste as a resource (Sembiring & Nitivattananon, 2010). Moreover, reclaimers view it as a source of income and a resource that can provide socio-economic benefits and livelihood to the poor (Blaauw *et al*., 2015; Oteng-Ababio, 2014; Sembiring & Nitivattananon, 2010).

Interestingly, the different perceptions of waste by individuals and states aroused different kinds of solid waste management practices (Topic & Biedermann, 2015; Beall, 1997). Oteng-Ababio (2014) highlights that the complexities in waste and its

definition are embedded on the basic understanding of the subject by the person who is looking at it, be it ordinary citizens, politicians, technicians, businessman or activists. Blaauw *et al*. (2015) share the same sentiment with Nkosi (2003, cited in Sentime 2011) arguing that waste does not exist in nature, but is a human concept, and that everything is part of a continuous cycle as illustrated in figure 1. Cason and Clinton (2011) note that in developed and developing countries, waste is increasingly being recognised as a renewable source.

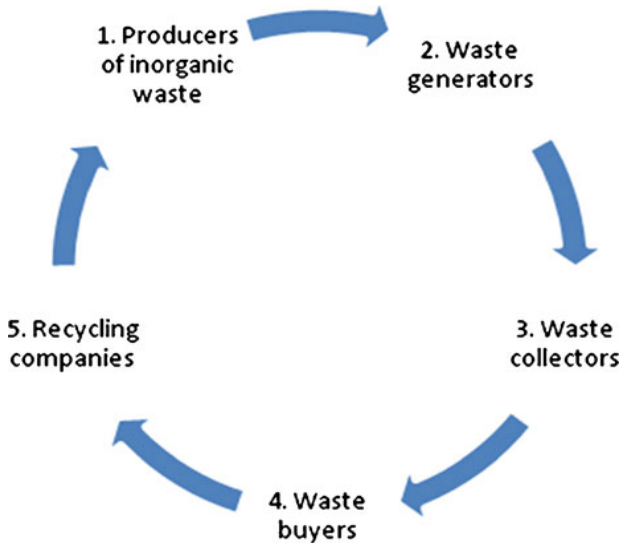


Figure 1: The Waste Cycle

Source: Schenck & Blaauw (2011: 415)

Bontoux and Leone (1997) argue that waste is a relative notion: something becomes "waste" when it loses its primary function to its user, and its status as waste is relative to the intended primary use by the owner. However, something that may be considered waste due to losing its primary function for the owner may be useful for a secondary purpose (Bontoux & Leone, 1997). Arguably, what someone may consider waste is raw material to a reclaimer for whom it provides a livelihood (Bontoux & Leone, 1997; Blaauw *et al*, 2011).

Arguably, waste presents social and economic value in developing the economy of a country (Blaauw *et al.*, 2015). The act of reducing, reusing and recovering waste grants opportunities to reduce reliance on natural resources and promotes socio-

economic development and job creation (Blaauw *et al.,* 2015). It can be argued that, in the informal waste sector, waste is viewed as a resource (Sembiring & Nitivattananon, 2010). Oteng-Ababio (2014) notes that waste, if properly managed, generates avenues for business ventures and a means of acquiring an income for poor and marginalised individuals. The notion of waste is therefore subjective and relative.

The differing definitions of waste arise out of the fact that there are different ways in which people construct meaning (Berger & Luckmann, 1966). Answering what is meant by waste does not imply that there is something that is incontestably waste (Bontoux & Leone, 1997). Scholars have argued that if individuals did not conceptualise "waste" it would not exist as waste. Beall (1997) argues that understandings of waste are shaped by economic inequality and social and economic status. Thus, the ways specific people define waste are not random, but are shaped by inequality and economic, social, and cultural factors (Beall, 1997).

2.3. Reclaimers: their work and perceptions

As already noted, reclaimers are individuals who depend on salvaging valuable materials from waste materials for a livelihood. Reclaiming is an informal occupation, which implies that the work of reclaimers is unregulated and unregistered, they have no contracts, no regular income, little recognition and high vulnerability, as well as simple equipment to work with (Gunsilius *et al*., 2011).

Literature illustrates that reclaimers are exposed to occupational health risks because of manual collecting, sorting and processing of mixed waste and lack of access to protective equipment (Wilson *et al.,* 2006; Ezeah *et al.,* 2013; Nas & Jaffe, 2004). This exposes them to air borne and infectious materials from waste (See also Rouse, 2006; Schenck *et al.,* 2012 & Kashyap & Visvanathan, 2014 Marello and Helwege, 2014). Landfill reclaimers face health issues due to the fact that landfill sites are breeding grounds for disease-carrying animals (Ezeah *et al.,* 2013). Trolley pushers operating on the kerbside face the danger of being run over by cars at intersections, or even of reclaimers causing accidents (Schenck *et al.,* 2012).

Depending on the geographical locations, reclaimers have other appellations. Some of the names that researchers have found reclaimers in different cities[1] using for themselves are bagariesi[2] (DEA, n.d; Samson, 2010a) and skarrelaars[3] (Schenck and Blaauw, 2011). In Johannesburg, the municipality and reclaimers use the term reclaimers. Reclaimers are seen around garbage trucks (Cason & Clinton, 2011), but mostly are found at landfill sites and kerbsides collecting, and sorting valuable materials disposed as waste (Marello & Helwege, 2014; Schenck *et al,* 2012). The recyclables primarily include paper, glass, plastic, metal and cardboard (DEA, n.d).

Although reclaimers have found a way to sustain their livelihood themselves by turning waste back into commodities through sorting and selling recyclables, the industry is still unfavourable. While they do earn a living, they earn low and uncertain levels of income due to the precarious nature of the occupation (Sentime, 2011; Cason & Clinton, 2011; Blaauw *et al*., 2015). It is important to note that most reclaimers do not belong to any cooperative and/or are unorganised. Thus, unorganised reclaimers are more vulnerable than organised groups (Dias & Ogando, 2015) and, as a result, have limited economic mobility (Marello & Helwege, 2014). Socially, they are stigmatised, isolated by citizens, and unauthorised, while their work often goes unnoticed (Samson, 2010b).

Studies from a range of contexts have argued that reclaimers are viewed as unclean, undignified, a nuisance and a hindrance to effective waste management processes and are often disrespected and marginalised (Samson, 2009; Cason & Clinton, 2011, Sentime, 2011; Gunsilius *et al.*, 2011). They are looked down on and are labelled as disease ridden, poverty stricken and criminals (Ezeah *et al*., 2013; Schenck & Blaauw, 2011). Gunsilius *et al.* (2011) in their study conducted in Germany argue that the treatment that reclaimers receive is rooted in a lack of knowledge regarding the contributions that reclaimers make towards resource recovery and recycling. Writing about South Africa and India, Schenck and Blaauw (2011), Gupta (n.d) and WIEGO (2013) concur with the studies above by noting that in addition to marginalisation, reclaimers are often considered to be in the lowest tiers of the hierarchy and at the

[1] Cape Town, Johannesburg and Tshwane
[2] A seTswana term meaning someone who is looking for valuable or good things that are useful
[3] An Afrikaans term meaning struggling to survive

bottom of the economic pyramid, while industries are at the top tier of the pyramid in waste management practices as illustrated in figure 2.

Ezeah *et al*. (2013) also note that many of the social issues that affect reclaimers are rooted in economic and social exclusion, due to which reclaimers are subject to abuse and bribery, and suffer violence from authorities, buyers and businessman. Social exclusion has basically stigmatised and isolated reclaimers both socially and economically to the extent that they have created their own values, beliefs, habits and social networks (Wilson *et al*., 2006; Ezeah *et al*., 2013). Sentime's study, conducted in 2011 in Braamfontein, Johannesburg, illustrates that reclaimers face harassment from metro police, they are threatened by gangsters, and they are challenged by urban residents due to the negative stereotypes forged against them (Sentime, 2011).

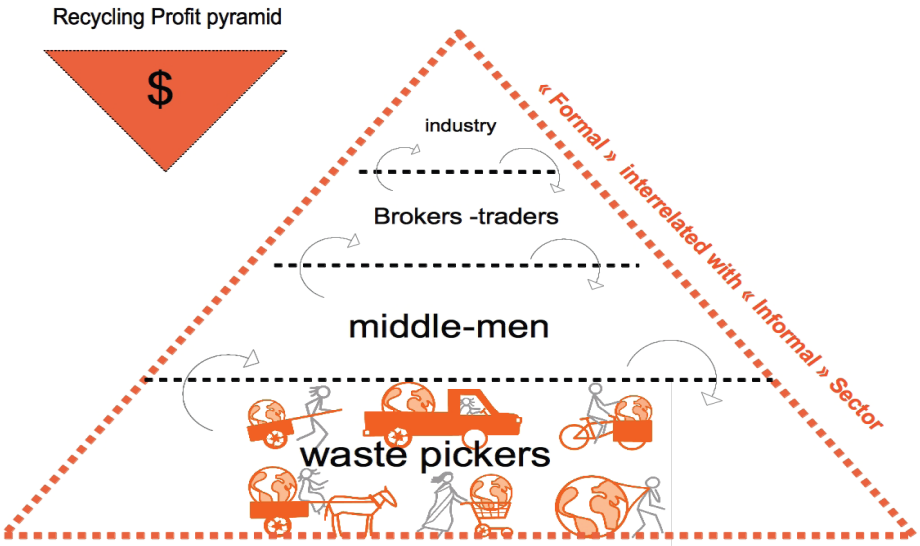


Figure 2: Reclaimers' position vs Economic profile

Source: WIEGO (2013)

Reclaimers contribute to the sector and their livelihoods. Studies conducted in Pune, India, by Chikarmane (2012: 3) highlight that informal waste pickers recovered 118 000 tons of waste in 2006. In the same, they consequently saved US$316,455 in municipal waste transport costs while monetary accruals by the municipality amount to US$3,615,900 (Chikarmane, 2012: 3). In South Africa particularly, "informal pickers are estimated to have saved municipalities between R309.2 – R748.8 million in landfill

airspace (in 2014), at little to no cost, by diverting recyclables away from landfill, at ±16 to 24 tonnes/picker/annum" (Godfrey *et al*.; 2016: 1). Yet, their work is unacknowledged (Velis *et al*., 2012).

Reclaimers work hard and long hours, but their income is not proportional to their work as they are considered insignificant (Sentime, 2011). Their income is the lowest and most irregular in the hierarchy of informal workers (Kashyap & Visvanathan, 2014). There are many implications of working in the informal economy which reclaimers face on a daily basis. Some of the implications include that they often work through intermediaries, whose presence affects their income because of exploitative pricing (Kashyap & Visvanathan, 2014).

2.4. Conceptualising integration

There is currently no universally accepted definition of integration. However, many scholars have attempted to conceptualise what the term means and the forms in which integration can occur. Integration in the context of waste management and reclaimers can be understood in vastly different ways. Fundamentally, approaches to integration differ according to objectives (Kashyap & Visvanathan, 2014). Kashyap and Visvanathan (2014) rightfully note that this takes into account the manner and extent to which the government desires to formalise the work of informal reclaimers. According to the debates of scholars and how different authors have conceptualised integration, there are two key understandings of integration. As further elaborated below, the first understanding is that integration is a form of social inclusion, which encompasses supporting reclaimers and empowering them within the waste sector. Further, integration is also a form of improving the efficiency of service delivery and maximising value of waste within the waste value chain.

2.4.1. Social Inclusion

Since integration has emerged as a way to formalise the work of reclaimers while sustaining their livelihoods, social perspective to integration presents forms of inclusion in the waste economy, which focuses on improving the working life of reclaimers. This includes empowerment, recognition, protection and job security as well as personal growth of reclaimers within the waste sector (Kashyap & Visvanathan,

2014) which may include supporting reclaimers to organise and formalise into SMMEs (Godfrey *et al.,* 2016).

According to Annepu *et al.* (n.d) assisting reclaimers to organise into SMMEs requires controlled, regulated and legalised frameworks to monitor reclaimers' contribution to sustainable resource recovery within a particular environment (Annepu *et al*., n.d). Blaauw *et al.* (2015) concurs with this point by stating that social inclusion of reclaimers can also be implemented by integrating reclaimers into waste management systems by managing landfills in a controlled manner with equal opportunities offered to all reclaimers in collecting waste.

Kashyap and Visvanathan (2014) suggest that integration can succeed through policy inclusion and formalisation to legitimise the informal sector. Formalisation refers to the process of making the work of reclaimers formal by supporting them to form into cooperatives (Godfrey *et al*. 2016) while policy inclusion implies that their work is legislated and institutionalised. That is, since reclaimers form a major part of the "forgotten and invisible" citizens in many developing countries, adopting and implementing policies that recognise the reclaimers and offer them support will legitimise their status in the waste sector (Kashyap & Visvanathan, 2014).

Many scholars (Dias, 2011d; Kashyap & Visvanathan, 2014; Godfrey *et al*. 2016) think of and view integration as a process which encompasses extensive inclusive programmes which progress positively towards integrating reclaimers into municipal waste management systems. Such Integrative waste management systems are therefore based on national, state or local level laws, and regulations to solidify the process of integration (Dias, 2011d). In Dias' (2011d) view, successful integration programmes use a people-centred approach which focuses on involving informal reclaimers in decision making regarding the collection of recyclable materials and putting them in the recycling chain.

This approach allows not only people who are in power to decide on what approaches and methods would work for the reclaimers. Instead, it acknowledges that reclaimers can make constructive choices if they are involved in decision making. The backing in legal frameworks for reclaimers may encompass social inclusion, job creation and

income generation as the main pillars of solid waste management (Dias, 2010d). Within the social inclusion approach, authors also view a participatory approach to planning and implementation where reclaimers are actively involved in planning and implementing approaches to solid waste management as an effective way to integrate reclaimers (Dias, 2011c). It is important to keep in mind that there is not an all-encompassing approach for every country to integration.

Integration can also take the form of institutionalisation which means that reclaiming would be made a common practice where integration of the informal sector occurs through organising reclaimers into cooperatives with assistance from NGOs or the public sector (Kashyap & Visvanathan, 2014; Godfrey *et al*., 2016). In this kind of integration, reclaimers would be autonomous agents and could receive recognition. Integration would therefore help reclaimers improve their livelihoods in totality – i.e. acquire reasonable incomes, job security and better working conditions. However, in South Africa, this approach has been unsustainable and the waste cooperatives face a 91.8% failure rate (Godfrey *et al.*, 2016).

Regardless, authors argue that in order to have successful integration within municipalities, reclaimers need to be organised, and organisations that reclaimers organise into need to have clarity on their goals and positions. In order to achieve desired results in an attempt to influence government practices and policies, initiatives and efforts have to go beyond internal liabilities; organisations involved need to seek external opportunities and seize them.

Another key model of integration is incorporating different technologies in waste management systems in order to make recycling practices efficient and effective for both the government and reclaimers. This can be done through introducing a payment system which enforces immediate cash payment to reclaimers when they sell their recyclables and subsequently issued with receipts, in order to remunerate them for providing municipal services (Chikarmane, 2012). Waste picker integration through the introduction of this payment method may adversely have a positive impact on reclaimers' welfare and their livelihoods. Although unmeasured, either qualitatively or quantitatively, Chikarmane (2012) notes that reclaimers make contribution by reducing

pollution and its waste streams as well as extending the lifespan of landfill sites by diverting waste away from the area.

Introducing different innovative technologies of integration such as a payment scheme will also ensure that reclaimers are remunerated for the services they render in the areas of collection, transportation and recycling. In an attempt to effect reclaimers' ability to qualify for a payment scheme, using reclaimer census (which encompass registration/database), reclaimer's identity card and bank account details – as done in Bogota – could prove to be feasible.

Other integration technologies include issuing of reclaimer identity cards from a municipal corporation in recognition of reclaimers' contribution towards waste management in urban areas (Chikarmane, 2012; Chikarmane & Narayan, 2009). In this manner, reclaimers are recognised within private and public spheres where they are able to interact with the poor and the rich on the same basis without being looked down upon. This approach to integration presents a new category of integration of reclaimers where the focus is placed on recognising reclaimers through their inclusion in public spaces and making their work valuable and recognisable to citizens as well as putting innovative technologies in effect (Chikarmane, 2012).

2.4.2. Service delivery efficiency

Conceptualising integration based on the second key understanding of integration focuses on the efficiency within waste management systems as well as service delivery. Authors (Ahmed & Ali, 2004; Paul *et al.* 2012) have defined integration as attempts to link the informal waste sector with the formal to improve the efficiency of the waste management sector and create new opportunities for employment. Similarly, integration is viewed by other scholars as the process of formalising the informal sector and providing capacity building for skills development (Godfrey *et al*., 2016).

Furthermore, integration is also a way to incorporate recycling in waste management practices regardless of whether it is through the informal reclaimers or private companies. This is depicted in what Ahmed and Ali (2004) refer to as public-private partnerships (PPPs) (Ahmed & Alib, 2004). This manner of integration encourages municipalities (the public sector) and reclaimers (the private sector) to enter into

partnerships to achieve efficient and effective integration. Kashyap and Visvanathan (2014) similarly note that public-private partnerships can be treated as a shared business where the public sector forges a partnership with the private sector and ensures a low cost of collection and sorting, while the public ensures minimum environmental pollution and recycling. Such partnerships help to improve reclaimers' working conditions and co-finance investments to improve recycling practices and service delivery efficiency (Kashyap & Visvanathan, 2014). Partnerships with existing informal reclaimers and providing incentives for reclaimers may be one way to initiate the processes of integration.

Another key strength of integration that literature focuses on is diversion of waste from landfill into the industrial value chain for reuse and recycling (Gunsilius *et al.,* 2011); that is, integrated waste management. It encompasses adopting different waste management mechanisms - recycling, adopting alternative disposal mechanisms, extended producer responsibility and waste-to-energy - in waste management systems to view waste systems as an integrated whole. While some scholars in the debate do not consider the role of reclaimers in that process (such as Gunsilius *et al.,* 2011; Wilson *et al*., 2006), Dias and Alves (2008) argue that reclaimers should be considered as key role players with the belief that integration of reclaimers in municipal waste management increases the efficiency of waste management services.

Arguably, integration of the informal sector into the formal sector can cover a broad spectrum and create a win-win situation for both sectors (Kashyap & Visvanathan, 2014). Based on that view, it can be argued that the emergence of recycling does not only present a practical strategy in response to rising cost of disposal and environmental risks associated with it, but is also as a symbolic antidote for over-consumptive and throw-away societies (Gunsilius et al., 2011). Still, it is important to note that that a single integration model cannot be suitable in all circumstances, given the different working conditions under which reclaimers operate, as well as the social and political dimensions of reclaiming.

The different understandings and approaches towards integration create lessons that can be learnt by the different parties currently attempting to implement integration programmes. One of the important observations across different approaches is that

all successful integration programmes comprise a bigger cooperative which understands entrepreneurship which manages and assists the smaller cooperatives to understand their in-capabilities in running businesses. Bigger cooperatives are not exploitative but rather advocate for the rights of all reclaimers.

Essentially, cooperatives work for the long term benefit of reclaimers and not for individual benefit. Having a cooperative run the operations of reclaimers play a significant role in the success of integration in that they deal with administrative processes and also provide reclaimers with facilities for sorting waste. Administration ensures that reclaimers are remunerated by services, the municipality and places where they sell their recyclables. Based on the reviewed literature, it is evident that models of integration differ depending on context. For instance, as discussed above, reclaimers can be integrated individually, a mixed approach can be used where reclaimers are integrated through a cooperative as well as individually since that is how they are paid, and integrate reclaimers through a payment scheme to cooperatives.

Many individuals depend on waste picking for their livelihoods, yet one of the major challenges in waste management sectors in developing countries is how the formal sector can work with informal reclaimers to improve their working conditions, livelihood, and efficiency in recycling (Wilson & Velis, 2006).

Integration is a process that cannot happen rapidly. For it to be successful, time and resources need to be invested in it. Scholars hold the view that integration processes have to begin with integrating (empowering and recognising) informal reclaimers into the seemingly formal sector (Cohen, 2014; Annepu *et al*., n.d.). In other countries such as Latin America where the integration process has been successfully articulated, the process began with the reclaimers themselves. Chikarmane (2012) argues that the first step to integration has to start with the unionisation of reclaimers to form cooperatives in an attempt to define their workspace within municipal waste management practices.

Above all, to implement a successful reclaimer integration programme, the process needs to begin with both the government and the reclaimers (Ahmed & Ali, 2004;

Ezeah *et al*., 2013). According to a study conducted by Cohen (2014) on an integration project, a formalisation plan devised in an attempt to integrate reclaimers would initially include improving the working conditions of reclaimers, including access to Personal Protective Equipment (PPE) and benefits.

Contrarily, Gupta (n.d) argues that the defining start for integration is by providing reclaimers with direct access to waste from source. Gupta's (n.d) approach characterises South Africa's approach towards zero waste where the government plans to promote separation at source and phase out salvaging at landfills (RSA, 1999; Polokwane Declaration, 2001; DEA, 2011). In that regard, Masood and Barlow (2013) suggest that to achieve this kind of integration, the government must enter into a formal contract with the informal reclaimers to ensure their access to waste.

Then again, Cason and Clinton (2011) argue that the integration process has to include the promotion of international best practices in order to learn from failures and successes to create an enabling environment for integration processes. But legal frameworks need to change to legalise and formalise the work that reclaimers do (Ezeah *et al*, 2013). This includes recognising the efforts that they make in waste management. Ahmed and Ali (2004) argue that policy inclusion may be one way to ensure successful integration as this will legally recognise reclaimers and the role they play in municipal waste management services. Thus, recognising reclaimers and their role will in turn improve their working conditions and provide them with benefits and decent salaries while improving their livelihood.

2.5. Theoretical Framework

This study adopts a social constructivism framework. This section provides the theoretical grounding for this study. It discusses and summarises the theory of social constructivism and the lenses through which the empirical data will be analysed. It presents work by Peter L. Berger and Thomas Luckmann (1966) and other authors on theory of social constructivism. It looks at how meaning and knowledge is constructed in different social settings. The section basically looks at how different experiences shape people's understanding of realties and consequently, in this instance, their understanding of integration.

Social constructivism was coined by Burger and Luckmann (1966) in an attempt to define how knowledge is constructed and how individuals know what is real and what is not. Social constructivism is a theory of knowledge which explores the manner in which knowledge and understanding of the world is jointly developed by individuals in their social milieus (Amineh & Asil, 2015). It presents the idea that the foundation of knowledge in everyday life is embedded in social interactions with people which result in the construction of reality (Berger & Luckmann, 1966). The theory of social constructivism highlights that social interactions shape the realities of individuals whom we interact with resulting in individuals sharing the same reality based on both parties' experiences. Hence, constructivism is the manner in which people construct meaning and make sense of their experiences through the process of learning (Amineh & Asil, 2015).

"Social constructivism represents knowledge as a human product that is socially and culturally constructed" (Amineh & Asil, 2015: 13). The theory emphasises that humans can construct knowledge based on how they interact with other people and their milieus. This understanding brings to our attention that integration as a concept can be understood as a social construct that is conceptualised based on social environments (Berger & Luckmann, 1966).

Berger and Luckmann (1966) identified two types of reality, the subjective reality and objective reality. The latter is influenced by institutionalisation and legitimation while the former is influenced by internalisation of reality and social structure and theories about identity (Berger & Luckmann, 1966). The understanding and conceptualisation of concepts is embedded in the way in which individuals interact with their surroundings and others before they internalise and use their knowledge (Amineh & Asil, 2015). Hence, meaning and knowledge are subjective to how people see their own realities.

Amineh & Asil (2015), highlight that new knowledge is constructed based on the knowledge that already exists within individuals' social spaces. Significantly, the theory has roots in two elements which are "… (a) the assumption that human beings rationalise their experience by creating a model of the social world and the way that it

functions, and (b) the belief in language as the most essential system through which humans construct reality" (Leeds-Hurwitz, 2009, cited in Amineh & Asil, 2005). Due to social milieus and experiences, new knowledge can be generated while meaning can be imposed on individuals under authority by those who possess power (Berger & Luckmann, 1966). According to Teague (2000), for knowledge to exist, two or more individuals are required to negotiate a meaning through actions and language in order to provide a space in which the "construction" of knowledge may occur. But this does not prevent individuals with authority from imposing meaning on those under their authority (Berger & Luckmann, 1966).

Meaning requires a manner in which reality can be explained and justified by highlighting that the power that is possessed by certain parties has an influence on reality and how others would develop meanings of different concepts. Berger and Luckmann (1966) highlight that the objective reality "… implies the problem of power - which of the conflicting definitions of reality will be 'made to stick' in the society" (1966: 126). Luckmann and Berger highlight that, where different conceptualisations of a term exist, the understanding that that will be considered correct will be of the one who poses more power.

Through the lenses of this theory, this study takes the stance of, and conceptualises integration based on social constructivism. The importance of adopting this theory lies in how it enables us to reveal different understandings of integration by different people who belong to different milieus, and to expose how they understand similar concepts. The theory also gives room for the production of new knowledge and new understanding of integration. It helps to understand that in the absence of a clear understanding of what integration means, integration cannot be defined and conceptualised as an absolute term that is not subjected to change. Therefore, based on different milieus, situations and challenges that may be faced in a particular country, integration might be conceptualised and constructed in different way.

2.6. Conclusion

This section highlighted different models of integration and how integration is defined and approached in different countries. The different conceptualisations of integration

take into account that concepts are defined differently in different contexts. An understanding that reclaimers need to be foremost and explicitly considered in integration processes, the implications the process would have on government as well as efficient service delivery, contributes to conceptualisations and understanding of integration based on social constructivism.

The studies conducted by DEA (n.d and 2012) are insightful, but they are unsuccessful in eliciting its contributions towards integration of reclaimers and how the legal framework will be adopted. The NWMS (DEA, 2011) which is facilitated by DEA is also insightful where the government's plans to integrate reclaimers are concerned. But the strategy does not offer adequate explanations about what integration entails. South Africa's route towards inclusive waste management through policy inclusion is seemingly not progressive, as illustrated by the reviewed literature.

Further, the studies that exist, conducted in Johannesburg, focus on reclaimers themselves and the work that they do, and do not focus on integration (see Sentime, 2011 as an example of this problem). This research provides insights into the City's integration programmes while illuminating the implications of integration on reclaimers. It also offers explanations on how integration is understood by reclaimers and government, by elucidating the successes and failures of the programmes and lessons learnt from the initiatives.

In brief, most studies focus on contextualising municipal solid waste management, the informal sector, reclaimers and integration as independent concepts, even those conducted in South Africa. It is seldom that authors incorporate and discuss all the phrases as interconnected. Literature on integration has not sufficiently explored how different parties have different understandings of integration, and the implications of this for the success of integration projects. Therefore, this research on the City of Johannesburg will update studies conducted by scholars within the City to address challenges faced regarding integrating reclaimers in municipal SWM. It explores different understandings of integration by different actors while mapping the implications thereof. This study applies the kind of integration that integrates reclaimers in the formal waste sector through institutionalisation and adds to it in terms of transforming the approach which the City may undertake to assist reclaimers.

CHAPTER 3:

3. Geographical context and methodology of the study

This chapter presents and describes the study sites and the reasons the study was conducted at both sites. It justifies choosing a comparative case study approach. It also looks at the methods that were adopted in data collection, and discusses the advantages and disadvantages of the methods used. Further, it discusses how data was analysed. Lastly, it discusses ethical considerations and the limitations of the study.

3.1. Study sites

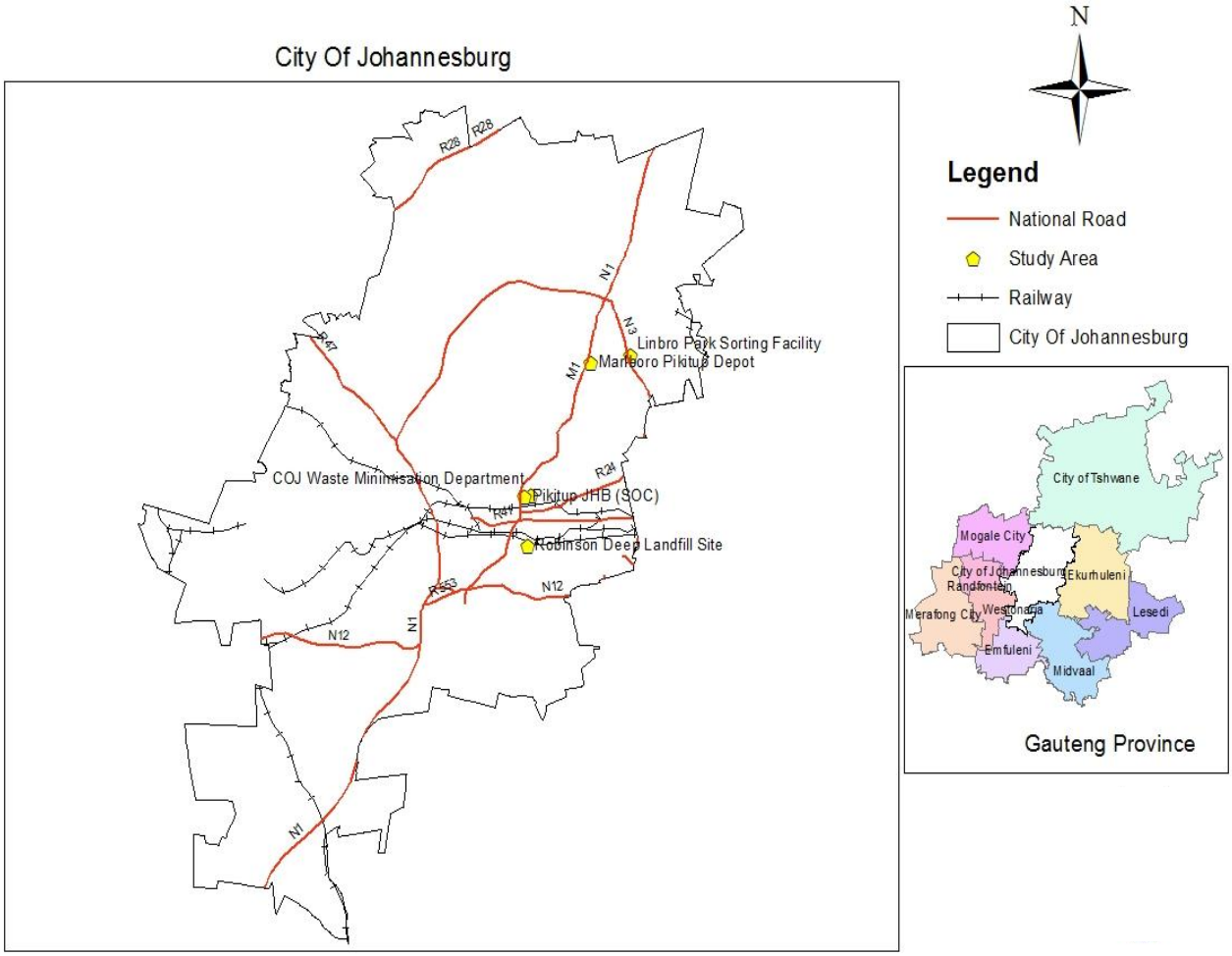


Figure 3: *Map of the Study Area*

Source: L Tseka, ArchGIS

The study was conducted at Robinson Deep Landfill Site and Linbro Park Sorting Facilities. The sites are linked to depots, which are sites where the provision of waste management services is micro-managed by ensuring that waste is collected in designated areas every day and also ensuring implementation of s@s and Jozi@Work programmes. Depots are part of Pikitup (Marlboro Depot), which reports to the City of Johannesburg Metropolitan Municipality EISD (Waste Minimisation Directorate), as illustrated on the map above. The case studies of Robinson Deep Landfill Site and Linbro Park kerbside were selected in conversation with Pikitup, and it was indicated that individuals working on both sites are involved in the integration programmes and the sites were suggested as good examples of programmes involving reclaimers.

3.1.1. Robinson Deep Landfill Site

Robinson Deep is a landfill site situated in Turffontein road, Booysens, Johannesburg. The landfill has been operating since 1905 and was permitted to be a landfill site in 1933. Robinson Deep has about 4 to 5 years left of landfill airspace and it is the busiest landfill amongst all the landfills across the City (Pikitup #1 Robinson Deep, 23/11/16). It consists of a maximum of 100 male reclaimers who are based at the site on a full time basis. The age of reclaimers at the landfill site is between 25 and 62 years. According to a Pikitup representative working at the landfill, reclaimers at Robinson Deep landfill site are a composite of South Africans – about 30% - and other African nationalities such as Nigerians, Zimbabweans and Cameroonians, who make up the remaining 70% of the workers on the site (Pikitup #1 Robinson Deep, 23/11/16). Generally, reclaimers work collectively, but South Africans tend to be controlling and dominate other reclaimers from outside South Africa. Most South Africans working at the landfill are highly skilled in reclaiming recyclable materials (Pikitup #1 Robinson Deep, 23/11/16).

3.1.2. Linbro Park sorting facility and Marlboro Depot

Marlboro Depot is a Pikitup branch which coordinates the collection of recyclable materials from separation at source programmes. This is done through daily allocation of collection routes to cooperatives. To effectively coordinate this initiative, operations managers work directly with cooperatives. Separation at source has been operational for five years at this depot, and involves collection in Lonehill, Hyde Park, Fourways,

Bryanston, Illovo, Greenstone, Alexandra, Sunninghill and Linbro Park (Pikitup Depot #1, 18/10/16).

Linbro Park was previously a landfill site. It was closed in 2000 and established as a sorting facility in October 2011. It is now mostly used to house cooperatives who are working under the Pikitup S@S programme. It consists of seven cooperatives (with 10 to 20 members) collecting, sorting and selling recyclable materials. The facility operates on weekdays between 07:30 and 15:30. However, occasionally cooperative members/workers are permitted to work on weekends between 08:00 and 14:00. This study focused on Talefane cooperative which consists of 12 members. The areas allocated to this cooperative for collection are Greenstone, Parkmore, Bryanston and Hyde Park (Pikitup Depot #1, 18/10/16).

3.1.3. Pikitup and Environment and Infrastructure Services Department

The City of Johannesburg is a metropolitan municipality in Gauteng, South Africa. The Municipality was established in 2000 by merging five previously independent municipalities (COJ, 2011). It consists of seven regions (Regions A – F) and has about 3.9 million inhabitants (COJ, 2011). Through the EISD, the City provides waste management services throughout the City of Johannesburg and integrates different aspects of waste minimisation through the Waste Minimisation Directorate. Hence, the EISD is the regulator of integrated waste management programmes. The EISD provides waste management services through Pikitup. Pikitup head office is situated in Braamfontein, Johannesburg and it is the City's wholly owned entity, established in 2001 (COJ, 2011). The entity's mandate is to implement waste minimisation programmes which are regulated by the City and to ensure quality provision of waste management services.

3.2. Methodology

The study employed different methods to ensure that data sources were triangulated (Olsen & Ormskirk, 2004) through varied techniques to acquire valid and credible data. This increased the validity and credibility of data by allowing different viewpoints to cast understanding on the topic being researched (Olsen & Ormskirk, 2004) and also

strengthened and deepened the conclusions drawn. Data was acquired using several techniques with reclaimers, middlemen, Pikitup, SALGA (South African Local Government Association) and CoJ officials. Methods used in this study include non-participant observation, semi-structured interviews and focus group discussions. These methods are discussed in detail below. The study is part of the CSIR-DST-DEA funded "Lessons from waste picker integration initiatives – development of evidence based guidelines to integrate reclaimers into South African municipal waste management system*,"* and was conducted under the auspices of the Memorandum of Understanding (MOU) between Pikitup and the University of the Witwatersrand in effect from 17 May 2016. The MOU was developed in order to facilitate the fieldwork aspect of the project and ensure access to any necessary documentation. It was also to reinforce Pikitup's participation in the project.

3.3. Comparative case study methodology

A comparative case study methodology was employed in this research. Goodrick (2014) defines the comparative case study methodology as an in-depth examination of two or more cases in order to produce generalised knowledge on how certain programmes work or fail (Yin, 2004). It facilitates the exploration of phenomena within its contexts using different data collection methods (Baxter & Jack, 2008). The comparative case study methodology helps to develop theory and provide reasons for causality (Baxter & Jack, 2008; Bernard, 2006) as it emphasises comparison within and across varied contexts (Goodrick, 2014). Hence, it focuses on comparing the similarities, differences and patterns of two cases or more that share a common goal (Bernard, 2009; Goodrick, 2014). The case study methodology in this study is pertinent as it addresses descriptive (*what)* and explanatory (*why, how)* questions (Yin, 2009).

There are different types of case study methodology which are categorised as exploratory, explanatory and descriptive. The latter case study methodology was used in this study to enable the researcher to describe an intervention and the real life context in which it occurred (Baxter & Jack, 2008; Yin, 2004). Yin (2004) asserts that the strength of a case study lies in its ability to examine, in depth, a case in a real-life context in order to explore the often simultaneously confirmatory and contrasting nature of a programme. Linbro Park and Robinson Deep were selected as cases since

these are two separate sites with different cultures and working conditions, to compare Pikitup's integration projects. In this way, it became possible to identify the successes and failures of Pikitup's integration initiatives and the contributing factors. The method also helped identify how and why programmes succeed or encounter challenges. It also helped to look at the implications of integration projects for all parties involved – reclaimers, middlemen, and Pikitup and CoJ officials.

3.4. Sampling

Non-probability sampling – choosing informants purposefully to acquire in-depth information about the topic being researched - was employed in this study (Bernard, 2006). The specific non-probability sampling approaches used were purposive and cluster sampling techniques. Purposive sampling entails the selection of informants by researcher on the basis of their presumed knowledge of the topic that is being researched (Bernard, 2006; Patton, 1990). Purposive sampling was chosen as a technique for this research since reclaimers are well versed in terms of reclaiming and integration programmes that they have been integrated in. Therefore, the researcher was aware that the sample will not represent the entire population. Cluster sampling is selecting participants due to their geographic location and similar activities that they engage in without having a convenient list of sample population (Bernard, 2006).

The advantage of using this sampling technique is that even if there is no list of people to interview, a sample can simply be located within an identified cluster. This sampling technique was helpful as reclaimers are predominantly found reclaiming waste in landfill sites and kerbside. Thus they are easy to sample directly. The research sample was 39 participants of which 28 respondents were cooperative members and informal reclaimers (12 at Linbro Park and 16 at Robinson Deep), five respondents were Pikitup officials, one was a SALGA official, three were middlemen and two were CoJ officials involved in waste management. For triangulation, two focus group discussions were conducted with 12 participants made up of individuals who did not take part in the interviews. Research sites were identified with the assistance of Pikitup's liaisons appointed under the MOU to ensure that respondents were part of their integration programmes.

3.5. Data collection methods

The study was qualitative in nature. In qualitative research, information is obtained from a relatively small group of informants and data analysis is non-statistical (Meurer *et al.,* 2007). Interview guidelines which were used to acquire information from participants in order to answer specific research questions, and the methods employed to gather this evidence are attached as addendum to this dissertation.

3.5.1. Observations

Non-participant observation was used as a data collection method in this research. This method is defined by Bernard as "watching and recording people's behaviour" (Bernard, 2006: 413). Data collection was conducted over a period of three months (September to December 2016). However, preliminary observations were carried out in August 2016 at both Robinson Deep and Linbro Park in order to build rapport with reclaimers while follow up interviews were conducted in March 2017. In September, the first two weeks comprised of observations. This encompassed the documentation of reclaimers' behaviour, values, and attitudes towards reclaiming within their social and natural setting in order to produce effective and objective knowledge (Bernard, 2006). Hence, observation of reclaimers was conducted in Robinson Deep landfill site (week 1) and Parkmore kerbside (week 2).

Preliminarily, the researcher visited Robinson Deep Landfill Site and Linbro Park. At Linbro Park, the researcher was introduced to cooperatives by the Pikitup depot manager. The intentions of the study were made known to all cooperative members or workers by the researcher. In this integration project, Pikitup provided cooperatives with a truck to collect recyclables. The materials were collected and delivered to Linbro Park Sorting Facilities where cooperative members or workers employed by the cooperatives received them and sorted them into different categories (plastic, paper, glass, cardboard and so on) and sold them to recycling companies such as Mpact.

Reclaimers and their work space were observed by the researcher. The normal working day at Linbro Park starts at 07:30 and ends at 15:30. Reclaimers work from Monday to Friday and occasionally on Saturdays. Basically, they consider the work that they do as a job as they have strict working hours that include a lunch hour. Their

work is organised and they work according to the roles allocated to each one of them. Their work is organised and follows a specific sequence as they carry on with their daily tasks. The area that they work in is also organised with specific sections where varied recyclables are placed. This enables them to work in an orderly fashion and track the quantity of recyclable materials they have reclaimed and what they need to discard as non-recyclables.

Visits to Robinson Deep Landfill Site revealed that the landfill is a place that continuously changes, as shown in figure 4. The landfill changed with every visit and even with every two hours spent on site. Basically, it seemed as though the place has shifted or become a different place. As the waste heaps, it changes everything around the landfill, including the way reclaimers work, their movement within the landfill and the way in which they sort the waste. It was noted that the landfill changes due to the amount of waste that is received from time to time. Some days there are extremely high levels of waste that limit mobility within the landfill. However, for waste pickers this is often a good thing as they have more materials to reclaim. Reclaimers determine their own working hours and work anytime between 4 am and 9 pm. There are some who occasionally work through the night.



Figure 4: *Changing landfill site. Both photos were taken from the same spot*

Photo: Maite Sekhwela (researcher)

The landfill is not a safe place to work in and the reclaimers acknowledge that. Observations singled out the fact that it is all about “survival of the fittest”. To elucidate this point, what matters to reclaimers is the amount of recyclables they can get from the waste trucks before it is buried. As a result, as soon as trucks arrive to dump waste, reclaimers rush to the trucks to get the most recyclables. This puts them in danger as they can be injured while they try to get the waste off the truck as opposed to waiting until the waste is offloaded. There is a lot of movement of trucks and there are wheel dozers that continuously move around to bury old waste and make space for new waste coming in. Several times when the researcher visited the landfill site she was advised not go to the landfill space where waste picking takes place, and the reasons given were that it is not safe. Hence the researcher continuously went back to the landfill and waited for the green light to be able to go to the dumpsite to observe reclaimers.

3.5.2. Semi-structured interviews

Semi-structured interviews, defined as one-on-one in-depth interview method for qualitative data collection (Meurer *et al.,* 2007), were conducted with reclaimers, middlemen, and officials from SALGA, CoJ, and Pikitup over a period of four months, from September to December 2016. Follow-up interviews were conducted in March 2017. This is because conducting interviews was dependent on the availability of participants. Reclaimers are generally busy individuals who value every minute that passes. Participating in an interview for them was somewhat of a waste of 30 minutes' worth of income. Therefore most of them were not keen to participate and needed convincing.

Semi-structured interviews were guided by a set of questions that allowed participants to provide elaborated answers and allowed for follow up questions to arise (Bernard, 2006). They were based on an interview guide which comprised of questions and topics that needed to be covered in the interviews. However, the interviews still allowed respondents to express themselves on their own terms and at their own pace (Bernard, 2006). The advantage of using semi-structured interviews lies in the fact that the method gave room for the researcher to ask probing questions to enable the respondent to produce more information (Bernard, 2006). As getting reclaimers to participate in the research was challenging due to the nature of their work, some interviews were conducted while the reclaimers were working. As part of data collection, notes were taken during interviews. In cases where participants permitted, the interviews were recorded with a voice recorder.

3.5.3. Focus group discussion

For data triangulation, focus group discussions were conducted with different groups of reclaimers over a period of two weeks. Participants in the focus group discussions were different from the reclaimers who were interviewed individually. This was done in order to avoid receiving the same responses from the previously interviewed reclaimers. Two focus group discussions were conducted, one at Linbro Park and the other at Robinson Deep. At Robinson Deep, the focus group discussion was unorganised and was conducted while reclaimers were selling their recyclables to middlemen, as they usually move in groups. The reason for conducting a focus group discussion in that manner was that reclaimers are continually extremely busy.

Therefore, participating in a focus group discussion would be an hour's loss of their income which they could not permit. Although that was also the case at Linbro Park, reclaimers there were more willing to participate and spare some minutes to participate in the focus group discussion. Regardless, the focus group discussions enabled the researcher to record attitudes of people and to also see how they interact with one another (Bernard, 2006). Also, focus group discussions helped informants to assist each other in answering questions and ensured that they provided useful and relevant information.

In spite of the many advantages that using focus group discussions present, there are a few disadvantages. These include respondents tending to not be completely free to express their thoughts and therefore to end up agreeing with each other. Additionally, the researcher is prone to have less control over interviews where respondents deviate from the questions being asked to discussing irrelevant issues (Marshall, 2006).

3.6. Data analysis

Data analysis was done using thematic content analysis, which is defined by Alhojailan (2012) as qualitative data analysis that groups patterns and themes that emerge from data collected in order to analyse classifications and to present themes. In order to interpret and draw conclusions from the data collected, data was grouped according to different themes in which they appear. This was done to determine and compare the relationship that exists between concepts (Alhojailan, 2012). Thematic content analysis is a widely used qualitative data analytic tool even though there is no clear mandate on how it should be done (Annepu *et al*., n.d).

In writing the report, links were made between various concepts and opinions that were raised by respondents. Pertinent to the research was the understanding of integration by all stakeholders and how this has influenced integration projects. Thematic content analysis in this case helped in terms of categorising and coding data according to themes, to classify data according to differences and similarities (Alhojailan, 2012). Thematic content analysis comprises of a staged process which includes the researcher familiarising themselves with data, transcription of verbal responses, generating codes, searching for and naming themes, data analysis, and

producing the actual report (Annepu *et al*., n.d; Alhojailan, 2012). Themes that emerged in this study included understanding of integration, effects of integration on reclaimers' livelihood, challenges that reclaimers and the government face in integration projects, and the working conditions of reclaimers. Other themes that emerged include the legislative and the institutional; human capital; and physical and socio-economic challenges which relate to experiences of integrating reclaimers in the City. The advantage of using this analytic tool is that it is flexible, while the disadvantage is that discussions around the data can be too broad due to the extended range of options in terms of analysis (Braun & Clarke, 2006).

3.7. Ethical considerations

This study was conducted in accordance with University of the Witwatersrand's ethical requirements. Ethical clearance was obtained before conducting fieldwork. In conducting the fieldwork, participants were provided with an information sheet detailing the research title, aims and objectives, and the expected results thereof (The British Psychological Society, 2010). The researcher sought to obtain informed consent from participants. Participants were made aware that they can withdraw from participation at any given time without reason. They were also disinclined to answer all questions in the interview and could choose not to answer certain questions during the interview with no explanation to the researcher (The British Psychological Society, 2010).

The study sought to "maximise benefit and minimise harm… from inception through to dissemination" by ensuring that participants incurred no harm or discomfort in their well-being, personal values and dignity (The British Psychological Society, 2010: 11). Moreover, confidentiality and anonymity was assured to participants by noting that identifiable information about participants would not be disclosed without permission, and their identity would not be revealed (Wiles *et al.,* 2006). The researcher respected the privacy of participants and thus the information they provided was treated as confidential unless agreed otherwise in advance (The British Psychological Society, 2010). As such, without their given permission, no names are revealed; information provided was treated as anonymous. Verbal consent was acquired in cases where reclaimers were illiterate.

Although all reclaimers know each other, in ensuring confidentiality and anonymity in focus group discussions, a name substitution system was introduced before the session began (Mack *et al*., 2005) and pseudonyms were used for those who wished to be anonymous. Also, participants were requested to respect each other's anonymity and privacy and not reveal any identity of any participants (Mack *et al.,* 2005). This was done before and after the session. Participants were also made aware that they would not be given any incentives for participating in the research. Hence, participation was completely voluntary. The respondents were aged between 25 and 62 years, where reclaimers were all males and cooperative members or workers were a mixture of males and females. None of the participants were disabled in any way. Thus, there were no cases where participants' ability to give consent was impaired.

3.8. Limitations of the study

The language barrier was a challenge in the study. Although different participants could be interviewed in the language of their choice, there were difficulties in translating certain words since vernacular languages do not have words such as integration. The meaning was therefore diluted when translated.

Since this study was focusing on reclaimers who were integrated in Pikitup's integration programmes, the main target participants were reclaimers. A major limitation to the study in both study sites was the presence of non-reclaimers in integration programmes. Officials did not know where reclaimers went when they quit cooperatives. Resultantly, the researcher was unable to trace such reclaimers to interview them and seek clarity regarding why they left the programmes, what happened during their participation, and their understanding of the programme prior to their participation.

3.9. Conclusion

This chapter has illustrated the methodology and methods used in this study and explained why this study has employed such methods. It introduced the study areas and also shed light on how they were selected and on how data was analysed. For an empirical case study, it is important to use different data collection methods in order

to enable triangulation of data to occur. As in most situations, this study also encountered limitations which could have compromised the findings of this study if they were not dealt with properly.

The next chapter looks at national and local legislation on integration in South Africa.

CHAPTER 4

4. Legislation on Integration in South Africa

4.1. Introduction

This section discusses the legislative route that South Africa has undertaken to address challenges faced in SWM and integration of reclaimers at a national and local level. It contextualises waste management approaches by looking at the cradle-to-grave to cradle-to-cradle and waste hierarchy approach that South Africa is undertaking towards waste management practices. Nationally, it looks at the Polokwane Declaration of 2001, the National Environmental Management Waste Bill (2007 & 2007a), the South African National Environmental Management Waste Act (Act No. 59 of 2008) and the National Waste Management Strategy (DEA 2011). Locally, the section discusses the City of Johannesburg's Integrated Waste Management Policy (IWM Policy) (CoJ, 2011) and the Integrated Waste Management Plan (IWM Plan) (CoJ, 2011). Also, it discusses Pikitup's revised Separation at Source (S@S) strategy along with the entity's 2015/16 Business Plan.

4.1.1. Context

In the quest to improve waste management services in the City of Johannesburg (CoJ) and to integrate reclaimers, the approach of transitioning from cradle-to-grave to cradle-to-cradle through the implementation of the waste hierarchy has been adopted. While cradle-to-grave is an approach to waste management that regards waste disposal as the end of life for materials (Braungart & McDonough, 2003), cradle-to-cradle promotes sustainable and conservative management of waste materials (Bjørn & Strandesen, n.d; Braungart & McDonough, 2003). However, the transition towards cradle-to-cradle can be achieved through the implementation of the waste hierarchy. This refers to a waste management model which promotes waste avoidance ahead of recycling and disposal.

4.1.2. Cradle-to-grave to cradle-to-cradle approach

Cradle-to-grave is a waste management model that considers disposal of products as the end of the life cycle of the materials disposed (Braungart & McDonough, 2003). It entails producer responsibility for the lifecycle of the product until its final disposal

(Pikitup, 2015). The cradle-to-grave approach to waste management guarantees that a product will reach the end of its use when it gets disposed of and subsequently it will become waste which must be dealt with at some cost to the end user (Braungart & McDonough, 2003). The cradle-to-grave approach basically considers waste management as collection, transportation and disposal of waste materials produced by human activities (Theron & Visser, 2011; Braungart & McDonough, 2003). Mainly, it is an approach that promotes a take-make-waste economy (Geng & Herstatt, 2014).

The cradle-to-cradle model was designed to instead ensure responsible consumption, conservation of natural resources and sustainable development practice (Geng & Herstatt, 2014). Cradle-to-cradle is a relatively new concept that promotes sustainability within the context of production and system design (Bjørn & Strandesen, n.d; Braungart & McDonough, 2003). It comprises the principles that are encapsulated in the fact that waste equals food, solar can be used as a form of energy and that solutions are context particular and cannot be generalised across all problems (MBDC, 2002; Bjørn & Strandesen, n.d). Cradle-to-cradle thus pursues the eco-effectiveness approach which focuses mainly on growing industries that do not damage ecological and social systems (MBDC, 2002). Pikitup (2015) highlights that the cradle-to-cradle approach ensures that when a product reaches the end of its life cycle, its components are recycled, reused or recovered. This approach therefore enables conservation of resources through waste minimisation, diversion and avoidance.

4.1.3. The waste hierarchy

The transition from cradle-to-grave to cradle-to-cradle can be achieved through the implementation of a waste hierarchy (Figure 5 below). According to the DEA (2012), the waste hierarchy is a technical approach to waste management. Until recently, the waste hierarchy has influenced South Africa's legislation on waste management and it is linked to national policy on waste management plans (DEA, 2015). CoJ (2011) defines the waste hierarchy as a concept that promotes waste avoidance ahead of recycling and disposal. The waste hierarchy offers a new and holistic approach to management of waste materials, according to the DEA (2012). With waste treatment and disposal being at the bottom of the hierarchy and waste minimisation (or avoidance) being in the top tier, the waste hierarchy promotes waste avoidance,

reduction, re-use, recycling, recovery, treatment, and safe disposal as a last resort (DEA, 2012; CoJ, 2011).

The waste hierarchy emphasises four key elements, namely reduction, reuse, recycling and recovery. Pikitup (2015) notes that implementation of the waste hierarchy requires a paradigm shift in the way products are designed in order to promote the recycling and reuse of the products which give effect to the cradle-to-cradle approach to waste management. According to DST (2014), moving up the waste hierarchy presents a variety of benefits to the South African economy in terms of the value that could potentially be recovered from waste streams.

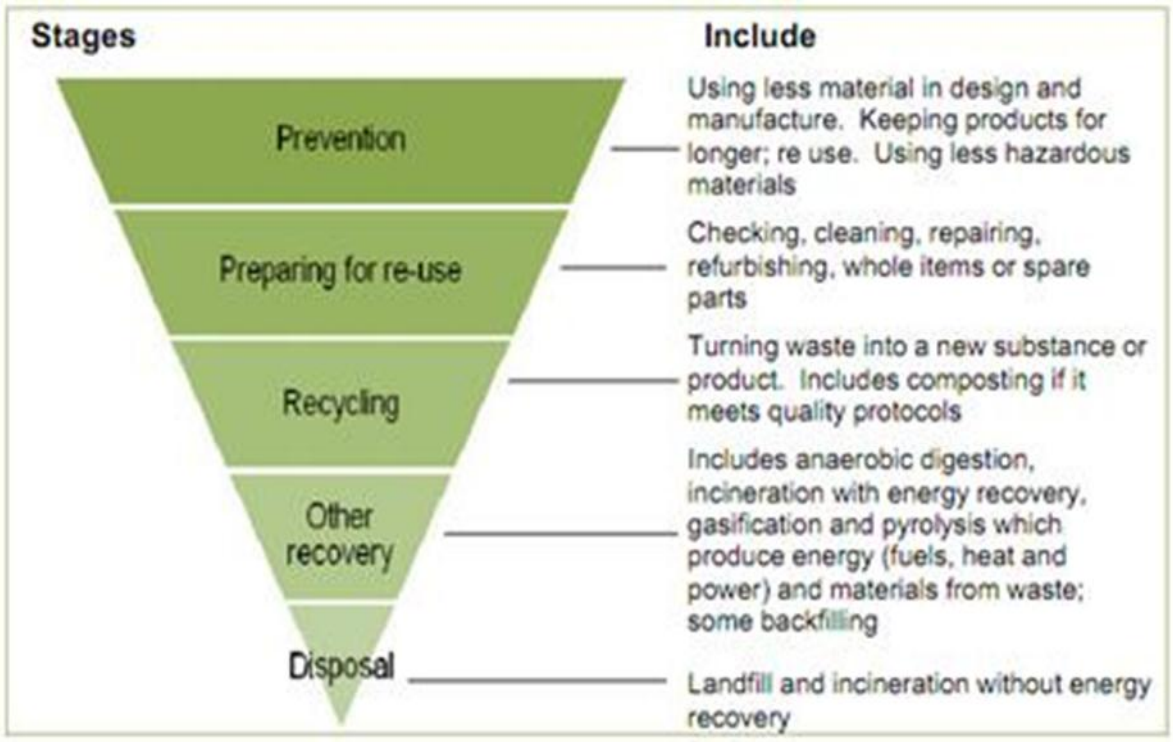


Figure 5: The Waste Hierarchy

Source: 360 Environmental (11 December 2016)

Due to the decline in landfill airspace and increase in the number of reclaimers salving materials from landfills (Godfrey *et al*., 2016; CoJ, 2011; Theron & Visser, 2011), the government has been compelled to revise its waste management strategies and integrate reclaimers in waste management systems (Theron & Visser, 2011). South Africa is only beginning the processes of formally integrating reclaimers in municipal waste management. However, Blaauw *et al.* (2015) notes that, the South African

government does not appear to be ready to integrate reclaimers in municipal waste management. This has then made the activities and income of reclaimers vulnerable to negative effects of waste management policies and strategies (Blaauw *et al*., 2015). Even though policies to move up the waste hierarchy have been proposed, landfilling remains dominant in South Africa's waste management systems (DST, 2014).

4.2. National policy on waste management

Legislation on waste management in South Africa is guided by the Constitution of the Republic of South Africa (No. 108 of 1996) which stipulates that everyone has a constitutional right to an environment that is conducive to their health in order to achieve sustainable development (RSA, 2008). Hence, waste management legislation takes into account individuals' constitutional right to a conducive environment. In an attempt to cultivate a conducive environment for reclaimers regarding salvaging of recyclables in landfills, the first National Waste Management Strategy (DEAT, 1999) stated that:

> *Salvaging on landfills will be formalised and controlled by 2003 and will be phased out completely in the longer-term,* (DEAT, 1999: 18)

And:

> *Uncontrolled salvaging on general landfill sites will be phased out as soon as possible and formal recycling centres following separation at source will be promoted.* (DEAT, 1999: 108).

However, due to the lack of regulation from the government to ensure that they deliver on the mandate provided, the number of reclaimers collecting waste from landfill sites and kerbside has increased tremendously (Godfrey *et al*., 2016).

South Africa's plans to transition towards efficient waste management can be traced back to the establishment of the White Paper on Integrated Pollution and Waste Management (IP&WM), which was developed in order to address the pandemic of pollution and mismanagement of solid waste, particularly in South Africa. The idea of

waste prevention and minimisation was introduced in order to curb the negative impacts that the cradle-to-grave approach has on landfills and the environment at large.

In 2001, the First National Waste Management Summit was held in Polokwane where the Polokwane Declaration on Waste Management was signed by national, provincial and local government representatives, community businesses and civil society (Polokwane Declaration, 2001). The Polokwane Declaration was aimed at improving waste management practices by enforcing the cradle-to-cradle approach towards zero waste by 2022 while stabilising waste generation and reducing waste disposal by 50% by 2012 (Polokwane Declaration, 2001). It stated South Africa's plans to reduce, reuse and recycle waste to conserve the environment. Thus, this declaration encouraged the development of a waste minimisation strategy that minimises waste generation from the source.

Although there was legislation on waste management, it did not effectively and directly address the matter of integration and reclaimers working at landfill sites. It is important to realise that abolition and/or ineffective implementation of waste management practices compromises the livelihood of reclaimers irrespective of the idea of them being provided with better working conditions. Samson (2010b) rightly states in her study that:

> *Government is correct in identifying that salvaging at landfill sites has problematic health and safety implications. However, advocating its elimination without a clear process to ensure that reclaimers are involved in future recycling initiatives threatens to undermine the livelihood strategies of people who are already struggling to support themselves and their families.*
>
> *Samson (2010b: 2)*

In 2007, the National Environmental Management Waste Bill was introduced. The Bill acknowledged that waste is a resource and it offers economic opportunities; however, waste management practices in South Africa are ineffective and the effects of mismanagement of waste are borne by the poor (RSA, 2007). Ironically, the first publication of the Waste Bill did not recognise informal reclaimers who sustain their livelihoods through waste picking and did not include any plans to improve their status

within waste management (Samson, 2010b). Based on that, groundWork and allies intervened and lobbied government to amend the Bill (Samson, 2010b). Following the amendment, the Act now stipulates in Clause 51: (1) “A waste management licence must specify - (i) if applicable, the conditions in terms of which salvaging of waste maybe undertaken” (RSA, 2007a). Although the Bill does not stipulate how salvaging should be done or when it should be permitted (Samson, 2010b), this amendment marked the first time that informal reclaimers were recognised in South Africa’s legislation (Samson, 2010b).

The implementation of waste management practices, the National Environmental Management Waste Act (NEMWA) (Act 59 of 2008) in particular, also considers conducive environment as fundamental. The NEMWA also states that sustainable development is to be achieved through waste minimisation, recycling, reuse and recovery. Under clause 51 (i) the NEMWA states “if applicable, the conditions in terms of which salvaging of waste may be undertaken”. The NEMWA made fundamental policy shifts where, although under conditions, salvaging was permitted.

Although the Act speaks of waste as a resource that offers economic opportunities, it nonetheless gives no significant recognition to reclaimers nor to the contribution that they make towards waste management and the waste sector as a whole. As such, the work of reclaimers is unaccounted for by government while they are still invisible. To say the least, the Waste Act did not do much for reclaimers as they were still not recognised for the contribution that they make towards SWM even after the Act was instituted (Blaauw *et al*., 2015).

In 2011, the National Waste Management Strategy (NWMS) was established following the Waste Act of 2008. The NWMS was introduced as a legislative mandate of the Waste Act, purposed to fulfil the objectives of the Waste Act (DEA, 2011). The NWMS (DEA, 2011) aimed to implement initiatives to minimise, reduce, reuse and recycle waste by diverting recyclable materials from landfill sites. In the quest to recognise reclaimers and integrate them into municipal waste management, the section on the waste sector’s contribution to the green economy included as one of its objectives “…to improve the working conditions … [and] creat[e] decent work through formalising the role of waste pickers” (DEA, 2011: 27).

Little, however, has been done thus far by national government to recognise and integrate reclaimers in the waste sector. Although the strategy stipulates the implementation of separation at source programmes in metropolitan municipalities by 2016, it is evident that South Africa is yet to implement a separation at source programme that will be rolled out nationwide (Godfrey *et al*., 2016).

4.3. Local plans and frameworks for waste management

The CoJ's IWM Policy was introduced in 2011 in order to respond to issues of waste management and the decline in landfill airspace in the City (CoJ, 2011a). The objective of the IWM Policy was to ensure that the City develops sustainable integrated municipal waste management strategies and that that there is effective service delivery by integrating separation at source and recycling in waste management systems. IWM Policy states that:

> *Collection systems for source separated waste will be introduced in areas where it is practical and economically feasible. Such collection systems could involve the establishment of public private partnerships, cooperatives and even creation of … poverty alleviation opportunities* (CoJ, 2011a: 10)

With regards to moving up the waste hierarchy, the City has committed to facilitate recycling by providing opportunities for separation of waste at source, establishing buy-back and drop-off centres while creating job opportunities. According to the CoJ (2011), this approach may assist in developing public private partnerships (PPPs) in order to establish collection systems for waste separated at source. Moreover, PPPs will assist the CoJ in terms of service provision where contractors would provide services on behalf of the CoJ (CoJ, 2011a). The City's by-laws as mandated by the NWMS have not been developed, but City officials have noted that the City by-laws will be developed in order to promote diverting waste to energy, waste minimisation, recycling and recovery.

In the same year, the City developed its Integrated Waste Management Plan which aimed to facilitate the implementation of the IWM Policy and outline the exact plans

undertaken by the municipality in terms of integrated waste management planning (CoJ, 2011b). Hence it was developed to further facilitate the implementation of cost effective, integrated waste management services while improving the lives of citizens (CoJ, 2011b). The IWM Plan recognises waste minimisation as crucial within the city in an attempt to address the challenges faced in terms of declining landfill airspace.

Some of the objectives as stipulated in the Plan are to:

> *…contribute towards the upliftment of the quality of life of the people within the CoJ ….by identifying, promoting and supporting potential job opportunities within the sector*

And

> *Evaluate and implement appropriate mechanisms to formalize informal salvaging at the working face of the landfill site.*

One of the key minimisation programmes implemented in the City is to separation at source and form reclaimers' committees to establish a line of communication between reclaimers and the City are (CoJ, 2011b: iiv). The IWM Plan makes mention of reclaimers and clearly stipulates and/or conceptualises integration of reclaimers in waste management systems. It acknowledges that there is a need to formalise reclaimers. However, the plans of integrating reclaimers reflect that integration will be implemented in order to curb the increasing number of reclaimers within the City as well regulate and control their actions through the implementation of integrated waste management (CoJ, 2011b: 99) as stated in the first NWMS. This opposes the view of "integration" as empowerment to reclaimers. The action plans in that regard included a City-wide rollout of separation at source by 2012 (CoJ, 2011b: 35).

For the implementation of these programmes targeted at reclaimer integration through IWM, the City uses Extended Public Works Programme (EPWP) funding in order to integrate reclaimers. In a nutshell, the EPWP is part of the national Department of Economic Development (DED), and is a key national initiative that focuses on providing temporary jobs for unemployed individuals in South Africa (Department of

Public Works, 2013). In addition, EISD officials stated that EPWP funding is provided to the Department for empowerment in terms of job creation. EPWP funding was used to register reclaimers, provide them with PPE, a stipend (as noted already), a truck and collection routes, as well as for logistics such as catering during the course of the training.

In the main, the City had to devise means to ensure that the lifespan of landfill sites is extended while developing the recycling economy by making opportunities available for reclaimers in the waste value chain and recycling as a whole (Pikitup, 2015: 1). One of the respondents alluded to this:

> *[Gradually], we want to introduce [a] culture of taking care of our waste. And remember now in Joburg, the population is a lot and it's growing very, very, very fast, so waste also becomes a challenge. We were given targets… According to the GDS (Growth and Development Strategy), we must at least be diverting 97% of waste by 2040… only 3% should go to the landfill site. So eventually, whatever that is not recyclable is the one that is supposed to go to the landfill site…*
>
> *(Pikitup Head Office #2, 28/11/16)*

In pursuit of the waste economy, the City's wholly owned waste management utility, Pikitup, initiated the separation at source programme as a strategic plan for the implementation of the IWM Plan. The Pikitup Strategic Roadmap, developed by PD Naidoo & Associates (2007), clearly states plans on integration of reclaimers and how they will gradually be assisted to move from working on landfill sites to kerbsides. As such, integration of reclaimers is conceptualised as improving the working conditions of reclaimers working at landfill sites. The Roadmap indicates plans to formalise reclaimers working at landfills in order to achieve the adjusted Polokwane Declaration targets through phased implementation of interventions (P D Naidoo & Associates, 2007). Phase one (2007 to 2009) included improving the working conditions of landfill reclaimers; phase two (2010 to 2012) included building a material sorting facility; and phase three (2012 to 2022) aimed to have reduced disposal of waste materials at landfill sites by 70% (P D Naidoo & Associates, 2007). This approach implies that, working conditions of reclaimers will be improved through implementation of integrated

waste management practices while salvaging of materials from landfills will eventually be phased out.

In pursuit of developing IWM systems, Pikitup's S@S (Separation at Source) programme was developed as a tool to assist in the transformation of the City's waste management practices (Pikitup, 2015). S@S focuses on collection of recyclable materials from high income areas; participants are provided with a truck, a coordinator and collection routes. However, they do not receive any remuneration from Pikitup. The implementation of the programme in the City began in 2009 as a pilot in Watervaal depot. The programme was developed in an attempt to divert recyclable materials from landfill sites to the recycling economy. In the revised S@S strategy, Pikitup stated that the programme is "…aimed at saving the precarious and depleting landfill airspace, create a recycling economy by making opportunities available for recycling and small scale players in the value chain" (Pikitup, 2015: 4).

Although there are plans in the model developed to offer opportunities to "small scale players" in the waste economy (which implicitly refers to reclaimers) through integration, there has not been a comprehensible definition of what integration means and what such integration entails. But Pikitup's revised S@S strategy (2015) defines integration as follows:

> *Reclaimer integration refers to the incorporation of reclaimers into the value chain of S@S.*

It also states that:

> *The programme has as one of its objectives incorporation of reclaimers into the operations and solutions that come through the programme.*
>
> *(Pikitup, 2015: 10)*

As noted already, the City's IWM Policy and Plan only intents to integrate reclaimers by curbing the number of reclaimers working at landfills as well as controlling their actions within that space while taking into cognisance service delivery. As opposed to

both the IWM Policy and Plan, Pikitup's strategies and plans appear to have a clearer objective with regards to supporting "small scale" players within the waste value chain.

However, due to different perceptions of integration, some officials highlighted that this approach to integration is contradictory to the Entity's mandate of service delivery. According to these officials, service delivery and implementation of IWM systems should be prioritised as opposed to focusing on supporting reclaimers. The respondent highlighted that:

> *…integration for me is a wrong word because first my question is, why integrate someone who does not want to be integrated? But also can the City afford to integrate everybody? …the interest for us is to say how much are we diverting and how is it assisting us with waste minimisation.*
>
> *(Pikitup Head Office #1, 21/11/16)*

To ensure the implementation of this business model, Pikitup introduced other programmes alongside S@S, namely Jozi@Work and Food for Waste. Food for Waste is a flagship programme initiated by Pikitup to encourage poor communities of the City to consider recycling as a means of generating an income. In this programme, individuals are expected to keep designated areas clean in exchange for food packages (Pikitup, 2011).

Similarly, Jozi@Work was developed in order to provide community members with job opportunities (Pikitup, 2015). The programme was developed in 2014 and was launched in 2015 in Ennerdale where cooperatives started work in Zondi Depot. In this programme, the City formed partnerships with community members in an attempt to provide them with job opportunities through the waste economy. But J@W did not only focus on the waste economy; it included other utilities.

Jozi@Work is aligned with the business model of separation at source which explicitly commits to integrate reclaimers (Pikitup, 2015: 13). The programme was implemented by instituting cooperatives and entrepreneurial development initiatives which ensure job creation and establishment of businesses (Pikitup, 2016). A cooperative is defined in the Cooperatives Act of 2005 as "an autonomous association of persons united

voluntarily to meet their common economic and social needs and aspirations through a jointly owned and democratically controlled enterprise organised and operated on co-operative principles" (RSA, 2005 :5). In accordance with the Cooperatives Act, primary cooperatives are established by a minimum of five members in order to meet the employment needs of its workers (DTI, 2004: 8). According to Pikitup, these programmes have not been rolled out throughout the City because of the financial implications (Pikitup, 2015).

Although there are similarities in the S@S and Jozi@Work programmes, there are also differences that distinguish each. The Jozi@Work programme primarily focuses on collection of waste materials, cleaning informal settlements, and clearing illegal dumping spots (Pikitup, 2015/16). Cooperatives involved in Jozi@Work are allocated to informal settlements or low income areas where they are supposed to collect recyclables while ensuring that they clean the areas. In that, the support that they receive is different from the S@S cooperatives. Jozi@Work cooperatives are provided with work packages which incorporate the fulfilment of the aforementioned duties in exchange for a monthly salary (Pikitup, 2015). Unlike the S@S cooperatives, Jozi@Work cooperatives do not receive a truck for collection from Pikitup but are required to purchase a truck of their own from the money they earn by selling recyclables (Pikitup Head Office #2, 28/11/16).

Below is a comparative presentation of S@S and J@W programmes implemented by Pikitup.

	Separation at Source (S@S)	**Jozi @ Work (J@W)**
Role	Collect recyclables,	clear illegal dumping spots, Collect recyclables; Clean informal settlements
Area of collection	High income areas	Low income areas
Support	Truck, coordinator, routes, fuel	Work packages

Remuneration	None	Monthly salary
Funding	DTI, DBSA, IDC and Pikitup's operational budget	EPWP
Requirements	South African citizen, unemployed	South African citizen, live next to the programme, poor

Sources: Pikitup Head Office #1 and #2 and EISD Waste #1 and #2

Moreover, Pikitup in its Business Plan for the 2015/16 financial year stated that the entity seeks to divert waste streams sent to landfills while promoting moving up the waste hierarchy (Pikitup, 2016). Pikitup has set as an objective using waste as a resource for poverty alleviation and job creation (Pikitup, 2016); this is to be achieved by recognition of value throughout the waste value chain. In the 2015/16 financial year, Pikitup developed a new business model that ensures that value is extracted from the waste value chain which is inclusive of all the aforementioned programmes. Commitments were made through the guiding principles of the separation at source draft strategy, where one of the principles was to formalise the role of reclaimers (Pikitup, 2015: 5).

4.4. Conclusion

This section depicts a shift in policy regarding the work of reclaimers. As noted, until recently, the work of reclaimers went unrecognised and unacknowledged where their presence was utterly ignored to an extent that policies did not make mention of them at all and salvaging was uncontrolled. However, progress is shown in policies where the reclaimers were included in legislation. This was followed by formalisation which conditionally permitted salvaging. Local plans and policies also depict clear plans in terms of integration and what it means in the City and Pikitup. What is more evident and dominant is how integration is conceptualised in different spheres of government. Although there is disjunction, different officials of government understand integration from efficient service delivery perspective while other officials have a clear focus on social inclusion and improving the lives of reclaimers. This disjuncture highlights that integration is only a policy concept but has not been clearly defined.

CHAPTER 5

5. Case study one: Linbro Park Sorting Facilities

This chapter analyses the integration programme at Linbro Park. It provides the historical context of Linbro Park sorting facilities and the Talefane Cooperative based there. The chapter focuses on providing an overview of the programme in order to explain the specific integration programme at Linbro Park. It further presents an analysis of the integration programme and how different understandings shaped it.

5.1. Historical Context



Figure 6: Map of Linbro Park Sorting Facilities

Source: Google Maps

Linbro Park is a sorting facility situated in 3rd Road in Region E of the City of Johannesburg (figure 6). It was previously an operational landfill site, but was closed in the year 2000 as the landfill airspace reached its maximum capacity. There were reclaimers who were salvaging materials from the landfill while it was still operational.

After it was closed, all reclaimers were compelled to cease working at the landfill. Following that, they apparently went on to work on kerbside before they were mobilised to join a cooperative. Noteworthy is that although some reclaimers became part of cooperatives, the majority of reclaimers were not included in the programme.

Since its closure, Pikitup has embarked on a project to rehabilitate the site and turn it into an integrated waste management site (Pikitup #2 Linbro Park, 02/12/16). In 2011, Linbro Park was officially transformed into a garden site which incorporated sorting facilities in October in the same year. Garden sites are sites where residents are provided with a space within a 5km radius where they can drop-off their garden waste – that is, tree felling, flowers, hedge clippings and so on. In November 2016, during the time of data collection, Linbro Park's infrastructure (figure 7) was being developed to include sorting facilities that will enhance the cooperatives' activities of sorting recyclables. The facilities are shelters where the cooperatives will be able to sort and store their recyclables.



Figure 7: Infrastructure for sorting recyclables

Photograph: Maite Sekhwela (researcher)

Linbro Park has stringent operating hours. Cooperative members only work between 7:30 and 15:30, Mondays to Fridays, and occasionally on Saturdays. Linbro Park is used as a sorting facility where cooperatives sort their materials and sell them to BBCs.

Although this is referred to as “sorting facilities”, cooperatives did not have facilities as such but were only provided with an open space where they sorted their recyclables in October 2016. Cooperatives stored their materials at the open space provided by Pikitup (figure 8).

At the time of data collection, there were seven cooperatives in total operating at Linbro Park sorting facilities: Twanani, Parkmore/Talefane, Shomang, Lesedi, Mvelezho, and Keep it Clean (Pikitup, 2015: 9) as well as a Jozi@Work cooperative named Remarkable. This research focused on one of the seven cooperatives named Parkmore/Talefane Cooperative, herein referred to as Talefane. Cooperatives are groups of organised individuals who receive support from Pikitup to collect recyclables in different assigned locations and are not supposed to turn themselves into employers. As discussed above, legislation defines a cooperative as “an autonomous association of persons united voluntarily to meet their common economic and social needs and aspirations through a jointly owned and democratically controlled enterprise organised and operated on co-operative principles” (RSA, 2005: 5). It is important to note that Jozi@Work and S@S cooperatives have different working terms and receive different support from Pikitup, as discussed in Chapter Four.

Primarily, cooperatives at Linbro Park carry out the mandate of S@S by collecting recyclables in different households (as discussed above) and managing the operation of collecting recyclable materials at kerbside. As part of the official S@S programme, cooperatives collect recyclables from households in a truck provided by Pikitup to each cooperative, with a driver and fuel provided by Pikitup at designated collection areas on a daily basis (Pikitup Head Office #1, 17/11/16). After collection, the cooperatives transport the materials to Linbro Park where they sort the recyclables and sell to BBCs on site. The BBCs are in partnership with Pikitup: they go to the site twice a week to buy recyclable materials from cooperatives (Pikitup Depot #1, 18/10/16).



Figure 8: Storage Space for Talefane Cooperative

Photograph: Maite Sekhwela (researcher)

5.2. Programme overview

S@S is one of the programmes which contained commitments to integrate reclaimers in the waste management value chain. According to one of the interviewees from Pikitup, initially, although not prioritised, the programme aimed to incorporate reclaimers to a greater extent. In that, Pikitup officials sought informal collectors within the City in order to allow them to be participants in the programme (Pikitup Head Office #1, 17/11/16). However, according to officials, many reclaimers were not keen to participate because they felt that their autonomy would be compromised. Yet, as discussed in Chapter Four, Pikitup had targets to achieve in accordance with the Polokwane declaration (Pikitup Head Office #2, 28/11/16). Hence, regardless of the lack of interest from reclaimers, Pikitup was determined to reduce the tonnages of waste going into landfill. Although not prioritised, reclaimers who were not interested were left out of the programme while community members who were willing to participate were incorporated (Pikitup Head Office #1, 17/11/16).

5.2.1. History of Talefane cooperative

Talefane Cooperative was established in 2013. Initially, the cooperative was referred to as Parkmore, whose original members were mostly reclaimers and a few unemployed residents in the community led by an individual who decided to withdraw

his participation from the cooperative in 2012 (Talefane Cooperative Member #1, 14/09/16). But the founder was not a reclaimer. Parkmore Cooperative comprised members who went into partnership with residents and got them to agree that they could collect recyclables from them (Pikitup Head Office #1, 29/06/2016). After receiving funding from Pikitup, Parkmore cooperative was moved to Linbro Park. However, the partnership ceased when Pikitup provided funding to the cooperative since Parkmore is one of the areas of collection for Pikitup S@S programme.

Reclaimers who were part of Parkmore cooperative also withdrew their participation when s@s was introduced, after participating for a year. The name of the cooperative was changed in 2013 by the members who remained in the cooperative after the leader left. According to Pikitup officials, the leader withdrew his participation a year after the cooperative started receiving support from Pikitup in 2011. At the time when the cooperative was still called Parkmore, cooperative members collected recyclables from Sandton, and sorted and sold the materials to BBCs without any support from Pikitup (Pikitup Depot #1, 22/03/17). Pikitup only established a relationship with Parkmore after it was integrated into the S@S programme. Basically, the cooperative's mandate did not change after it was moved to Pikitup. The routes where they were collecting also remained the same since they were already collecting at Pikitup's planned routes for S@S. Hence Pikitup took it upon itself to provide daily routes to the cooperative.

During the time of fieldwork, Talefane cooperative was made up of 12 participants where two individuals were members and the other ten were workers who had recently joined the cooperative. Talefane Cooperative workers are managed by the two members of the cooperative who decided to continue with the cooperative after the leader withdrew. The workers are paid R60 a day for collecting and sorting recyclables. Cooperative members stated that they earn their wages through profit that the cooperative makes after selling recyclables and that they often earn even less than the workers (Talefane Cooperative Member #1, 14/09/2017). Workers are employed on a walk-in basis: when people come looking for a job, Talefane Cooperative members hire them if there is a need.

5.2.2. Engagement: formation of cooperatives

Information provided during conversations with Pikitup officials when choosing the study site was that the initial idea regarding S@S was to formalise the work of reclaimers by organising them into cooperatives as a requirement of the S@S strategy (Pikitup Head office #1, 17/11/16). This programme is funded by a number of stakeholders such as the Department of Trade and Industry (DTI), the Development Bank of Southern Africa (DBSA) and the Industrial Development Corporation (IDC) (Pikitup, 2015: 19).

The depot's duty is to coordinate the operations of all the cooperatives housed at the sorting facility. As part of the official programme, Talefane Cooperative members and workers are supposed to provide environmental education to residents when they issue them with starter packs, which include pamphlets and recycling bags.

The approach to the programme at Linbro Park focused on identifying informal collectors in different depots in order to support them in carrying out their recycling activities (Pikitup Head Office #1, 17/11/16). Pikitup officials noted that before the commencement of this programme, the Pikitup team went out in the streets to look for and invite interested reclaimers to workshops (Pikitup Head Office #2, 28/11/16). Through these workshops, reclaimers were formed into cooperatives which also included non-reclaimers (Pikitup Head Office #2, 28/11/16). This was done in November 2011 as part of the process of establishing cooperatives and the S@S programme in Linbro Park (Pikitup Depot #1, 22/03/17). Training workshops also catered for reclaimers from different regions across the City. Pikitup officials stated that the training workshops focused on capacitating attendees on the basics of entrepreneurship, where they were provided with a workshop on the basics of handling a cooperative. The training workshops are ongoing; they are organised to take place for the duration of a day and have a clear focus of establishing cooperatives (Pikitup Depot #1, 22/03/17). Accordingly, Pikitup head office officials facilitate the process of forming cooperatives.

The reclaimer and community integration programme through S@S programme was carried out by Pikitup, which ensured that cooperatives receive the support they require to carry out the S@S mandate. It is important to bear in mind that the S@S

programme at Linbro Park was not only focused on reclaimers but was also aimed at creating job opportunities for community members. Although it is important to quantify the number of reclaimers who were initially involved in the programme and who are still part of it, Pikitup officials do not have the statistics. Notwithstanding, the programme had limited consideration for reclaimers to participate due to different conceptions of integration. In Linbro Park and surrounding depots, integration was viewed and approached as provision of efficient services and diverting waste from landfill sites. This point was echoed by one of Pikitup's officials who stated that:

> *This was not about reclaimers only. This was about the City reducing waste that was going to the landfill. And in us doing that, we are looking for collectors and that included reclaimers. So we don't have a programme in the City that is called reclaimer integration…*
>
> *(Pikitup Head office #1, 17/11/2016)*

5.2.3. Conditions of support

For the first three years, cooperatives received the following support from Pikitup: sorting space, a truck (Figure 9), daily collection routes, fuel and a driver (Pikitup Head Office #2, 28/11/16).



Figure 9: Pikitup truck provided to cooperatives as part of S@S programme

Photo: Maite Sekhwela (researcher)

Pikitup officials reported that cooperatives were also provided with a team leader to ensure that all the recyclables are collected in the allocated areas and to report areas of no participation. They were also given recycling hessians to issue residents as they collected the full ones (Pikitup Depot #1, 18/10/16). Cooperatives were allocated a sorting space where companies come on a weekly basis to buy their recyclables.

> *We gave them areas that you will collect from this area to that area and then we assisted them with trucks. The truck comes with a Pikitup driver and a supervisor. We assisted them with bags, we also assisted them with pamphlets for education and awareness to go to the community. So from their side, what they do they provide their staff to go into the trucks to collect from the residents and also to give out the bags.*
>
> *(Pikitup Head Office #2, 28/11/16)*

On that note, cooperatives were mandated to provide Pikitup with a monthly report which stipulates the tonnages collected and sold for the month for each type of material, the kilometres travelled, bags issued and collected and the number of loads collected (Pikitup #1 Linbro Park 18/10/16). Pikitup officials reported that at the end of the three years the cooperatives were meant to operate on their own without receiving any assistance from the government (Pikitup Depot #2, 01/12/16; Pikitup Head Office #2, 28/11/2016). However, the cooperatives are still unable to support themselves and so Pikitup still plays that role. One of Pikitup official stated that:

"when we started we told them (cooperatives) that the project is for one year, Pikitup will help you up to a certain point. From there you have to sustain yourself, but they cannot sustain themselves. If we pull out today, they will all be dead… they depend too much on Pikitup, if Pikitup doesn't assist… they fold their hands but at the same time expect money to come in

(Pikitup Head Office #2, 28/11/2016)

This presents some of the challenges that Pikitup is facing in the implementation of the S@S programme and how the programme was supposed to operate.

5.3. Cooperatives: formation and challenges

This section presents and analyses the data collected. It focuses on understanding why reclaimer integration programmes did not achieve their objectives. It looks at the S@S programme at Linbro Park, making reference to the commitments made by Pikitup and the City to integrate reclaimers into a separation at source programme. Pikitup claimed to include reclaimers in projects that are not specifically targeted at them; as such, community members ended up participating in supposedly "reclaimer integration programmes". Thus this section pays special attention to the inclusion of community members in the programme. It looks at the reasons why cooperatives encounter challenges, why experienced reclaimers decided to withdraw their participation and the perceptions of Talefane cooperative members and workers regarding integration.

According to the data gathered, there were no "integration" programmes, but there were S@S programmes that had initially prioritised integrating reclaimers as per the programme's principles and mandate. However, the reclaimers were never prioritised. In November 2016, there were no former reclaimers who were involved in S@S from Talefane Cooperative. Officials also stated that there were no former reclaimers in the other six cooperatives within Linbro Park. Findings illustrate that individuals who were participating in S@S programmes at the time of data collection were not originally reclaimers. According to the findings from Talefane Cooperative at Linbro Park, it is clear that the essence of integrating reclaimers was distorted when community members were allowed to be part of the programme. However, Pikitup officials justify this occurrence by noting that Pikitup has no fully flagged programme that focuses only on integrating reclaimers. But the current S@S programme focuses on providing community members and interested reclaimers with job opportunities within the waste value chain (Pikitup Head Office #1, 17/11/2016).

This however, contradicts Pikitup's S@S strategy which states that "the programme has as one of its objectives incorporation of reclaimers into the operations and solutions that come through the programme" (Pikitup, 2015: 10), and meetings held with the official where background was provided in terms of the programme and the

targeted people. One of the comments provided by a senior representative in S@S during group meetings was that:

> *As one of the separation at source programme principles, we will involve reclaimers/waste pickers in solutions*.
>
> *(Pikitup Head office #1, 17/11/2016)*

Since reclaimers who were mobilised to join cooperatives withdrew their participation from the programme, the majority of Pikitup officials interviewed stated that reclaimers were not interested in being part of the S@S programme. According to a senior manager of the S@S programme, many cooperative members and residents stopped working with cooperatives because the arrangement resulted in a loss rather than an increase in income (Pikitup Head Office #1, 29/06/16). At the time of data collection, Talefane Cooperative had not even a single member or worker who worked previously as a reclaimer. All Talefane Cooperative members and workers who were interviewed indicated that they have never handled waste as a means of acquiring an income before joining Talefane.

5.4. Why participants left cooperatives

As mentioned before, the cooperative workers during the fieldwork period who were involved in the S@S programmes had no background in reclaiming. Ten out of ten Talefane cooperative workers mentioned during interviews that they have never worked with waste before. The reason they agreed to be contracted to Talefane Cooperative is due to their social and economic vulnerabilities in the sense that they are unable to find employment. When asked why they could not secure employment anywhere else, respondents mentioned that it is difficult for them to acquire employment elsewhere due to their limited educational background. For those reclaimers who left, apparently they were collecting recyclables on the kerbside, working as reclaimers before they were involved in the programme. When the programme turned out not be feasible for them, they apparently went back to working on the same streets they used to work on. Below are the reasons why participants left cooperatives.

5.4.1. Livelihood viability

According to Pikitup officials, cooperative members of Talefane as well as members of other cooperatives at Linbro Park, including reclaimers and some recruited in communities, quit cooperatives due to earnings being insufficient (Talefane Cooperative member #1, 14/09/2016). Apparently, experienced reclaimers left cooperatives because the money they were receiving while participating in the programme could not sustain their livelihood. Knowing the potential of the amount they could earn, they decided to leave the cooperatives and continue working on their own. Respondents also noted that Talefane Cooperative workers do not consider the work as a permanent job - they work on a temporary basis wherein as soon as they acquire employment elsewhere, they quit. This is based on the fact that all new reclaimers are also unable to sustain their livelihood with the current amount of money that they earn.

Pikitup officials stated that reclaimers who were involved in the integration programme left the cooperatives as the S@S programme incurred loss rather than gain for them. However, they are not certain where the reclaimers went after they left. Importantly, one of the officials noted that the implementation of S@S was not prioritising reclaimers. When asked about the programme during interviews, the respondent inconsistently highlighted that S@S was not prioritising reclaimers, noting that reclaimers were incorporated to participate in the programme since they were collecting informally already (Pikitup Head Office #1, 29/06/16).

5.4.2. Feelings of injustice

As discussed in section one, the City and Pikitup have introduced a number of projects that focus on waste minimisation. These include S@S, Jozi@Work and Food for Waste (Pikitup, 2015). These programmes created competition amongst reclaimers. Hence some participants expressed their concerns regarding the implementation of the Jozi@Work programme at Linbro Park. Cooperative members and workers are aware of the conditions attached to J@W cooperatives, however, they are not willing to accept the differences and rather deem them as illegitimate; basically, they think it is unfair for others to receive benefits and others to not receive anything while they are seemingly doing the same job. For that reason, the programmes introduced by Pikitup created a clear problem of competition between J@W and S@S cooperatives as well

as informal reclaimers which is a concern for most people participating in the programme.

Talefane Cooperative members stated that since the Jozi@Work programme is also targeted at waste diversion, it has created tension among cooperatives. Even though Talefane Cooperative members and Jozi@Work employees are allocated different routes, they felt that the programme was putting their livelihood in jeopardy by virtue of Jozi@Work employees collecting recyclables from kerbside. Although there might be other contributing factors, Talefane Cooperative workers highlighted that kerbside reclaimers reduce the amount of recyclables that they are supposed to collect from kerbside and households.

The majority of Talefane Cooperative workers raised the concern that Jozi@Work employees are paid a salary while, according to them, performing the same duties as the S@S cooperative members (refer to Chapter Four). But this is not entirely the case, because Jozi@Work cooperatives clean streets and clear illegal dumping spots. This was a concern for Talefane Cooperative workers since they are sometimes not paid or get paid half of their wages. Cooperative members were reluctant and felt that they were treated unfairly by the programme comparing themselves with J@W cooperatives. Their distress and reluctance may be embedded in the evident mishaps in coordination of the recycling programmes by Pikitup. This is why the cooperatives stressed that Pikitup should pay their wages.

According to a Talefane Cooperative member, since participants in the S@S programme were community members who came to participate in S@S through walk-ins, they did not have prior knowledge of Pikitup's reclaimer integration and S@S project. Also, community members were not provided with an explanation of what S@S is and what the programme aimed to achieve (Talefane Cooperative Member #2 Linbro Park, 13/09/16). Hence, cooperative members had expectations and felt that it was unfair to not receive the same treatment and have unequal work conditions. Many non-reclaimer cooperative members and workers also felt that they were not being integrated into Pikitup's Integrated Waste Management plans and the waste value chain.

Yet, reclaimers were not included in the programmes and not given the work that they were currently doing which resulted in them being excluded from the programme. But, this resulted from the fact that they were not initially prioritised in the conceptualisation of the programme due to management's failure to recognise that reclaimers were already doing the job in that particular area. In the quest to improve service delivery and create employment opportunities, officials highlighted the difference between JW@ and S@S, which depicts S@S as being an employment opportunity which offers hard training and encourages independence. This is illustrated in the comment made by the official:

> *… the coops that are doing Jozi at work are being paid whereas those that are doing separation at source, they don't get paid. But the separation at source people get paid from selling the material. So they have to work hard, they have to do education, they have to do get more material from the residents so that they can get more materials to sort and sell in order to get their money.*
>
> *(*Pikitup Head Office #2, 28/11/16)

Individuals involved in Talefane Cooperative believe that the S@S programme run by cooperatives is the government's initiative to provide job opportunities to those who are unemployed. However, many of the cooperative members felt that the fact that they are not being paid by Pikitup while J@W workers are being paid is unfair. Respondents voiced their concerns by commenting that:

> *It's not fair what is currently happening because we are doing the same thing as those that are working for Jozi@Work. So why should we get paid less and not have a standard salary? … as Pikitup and government, they must look at the fact that we are doing the same job with the Jozi@Work and we also want to earn better.*
>
> *(Talefane Cooperative worker #9 Linbro Park, 16/09/16)*

As discussed in Chapter Four, the working conditions attached to J@W programme are entirely different from those of S@S (Pikitup Head Office #2, 28/11/16). Although the programmes and their conditions were supposed to distinguish the programmes so that differences are clearly know, they have however provided reasons for new

reclaimers to feel entitled to certain benefits of the programmes. This contributed to unstainable nature of the programme.

Pikitup officials claimed that cooperative members who are involved in separation at source programmes are not able to stand on their own and require constant support from Pikitup (Pikitup Head Office #2, 28/11/16). This is reflected by officials' comments by stating that:

> *…Coops like to be spoon-fed, they can't be on their own…*
>
> *Pikitup Head Office #2, 28/11/16).*

That is, members are too dependent on Pikitup. Officials stated that if it happened that Pikitup pulled out of the programmes and demanded that they stood on their own as per their initial plan, all cooperatives participating in S@S would collapse. According to Pikitup officials, cooperatives do not understand their mandate and do not have any tangible plan on their operations regardless of the one-day workshop they are provided with. While cooperatives are assigned a leader, the individual is only responsible for recording the tonnages collected. Therefore there is no mentoring or development role played by anyone in increasing cooperative members' or workers' capacity. According to Pikitup officials at the depot and head office, this is why most cooperatives have proved to encounter countless challenges such that cooperative members decide to quit when they get better opportunities. Important to note, however, is that many of the challenges arise due to the way Pikitup designed the programmes.

5.4.3. Sustainability of cooperatives: income generation

Talefane Cooperative workers raised another concern regarding the wages they receive after collecting, sorting and selling recyclables, while members of the cooperative complained that the profit that they have to share among themselves was insufficient. Most of them elaborated that the money they receive does not enable them to sufficiently provide for their families and sustain their livelihood. Sharing wages among cooperative members and workers in accordance with the materials sold was a cause for a number of concerns raised among Talefane Cooperative workers. Their concerns included that the money was not enough to be shared amongst themselves,

and they thought that Pikitup should supplement it. Some of the members commented by stating that:

> *Pikitup should make it their responsibility to ensure that we are paid a full salary at the end of each month. They should also increase the money. In cases where our money is not in full, Pikitup should act as a company that takes care of us and pay us the money that is short.*
>
> *(Talefane Cooperative Member #2, Linbro Park, 13/09/16)*

> *Pikitup should help us with money. The money that we currently receive is not enough. Workers climb on trucks, if they get injured there is no cover to protect them.*
>
> *(Talefane Cooperative Member #1, Linbro Park, 14/09/16)*

> *Pikitup needs to make sure that the payment we receive is enough*
>
> *(Talefane Cooperative worker #5, Linbro Park, 14/09/16)*

The bottom line is that, Pikitup did not share information on how the projects are funded. Hence, these comments illustrate clearly that cooperatives members and workers did not seem to be aware that the programmes are not paid for by Pikitup but are funded by external stakeholders. Apparently, Talefane cooperative members and workers do not receive their full wages because they do not collect and sell sufficient recyclables. It was stated that workers are supposed to be paid R60 p/d. However, the material they sell does not enable them to receive their full wages of R1200 per month (Talefane Cooperative Member, Linbro Park, 14/09/16). Still more, their livelihood or income is sometimes negatively affected by market prices which constantly fluctuate. Consequently, they get paid different amounts of money every month. In such cases, cooperative members are unable to earn their own income while they prioritise paying the workers.

Some of the respondents participating in S@S through Talefane Cooperative noted:

This demotivates me to come to work on a daily basis because I know I might not get paid. I have not been paid for the past two months. I still have to be paid for that. The supervisor (one of the members of the cooperative) is even unable to pay us at least R1000 per month each even though it is R60 per day. I just feel like Pikitup could stop their project and bring someone who will be able to bring change because we are badly treated in terms of payments.

(Talefane Cooperative Member #2 Linbro Park, 14/09/16)

The problem is that sometimes we get paid and then the money is short. It never comes in full. Pikitup knows that we are working here but then they do not care. The money we get here is too little, R60 per day cannot even afford our livelihood.

(Talefane Cooperative worker #7 Linbro Park, 16/09/16)

...they must know that we cannot get paid by the materials that we recycle because we do not even manage our lives well. They (Pikitup) must develop a system that will help us earn more money; we cannot work for R60 p/d as Pikitup and government, they must look at the fact that we are doing the same job with the Jozi@Work and we also want to earn better. And sometimes we get paid half salary and get told we didn't collect enough materials while having worked a full month.

(Talefane Cooperative worker #9 Linbro Park, 16/09/16)

Talefane workers' and members' understanding clearly depict that as a cooperative, they have a lot of expectations from Pikitup since they expect payment from the entity. But, the problem is that Pikitup pays little attention to them and their work. Also, other issues that emanate include inequality and exploitation inter alia within that group. Although members are careful to observe that workers are paid before they can receive their cut, they exploit members in terms of the money they pay on a daily basis, considering that there are profits from sales.

Findings show that when working collectively, there is a lack of respect among cooperative members in that some individuals put in more effort than others (Talefane

Cooperative member #1 Linbro Park, 14/09/16). Talefane Cooperative members indicated that in other instances, some cooperative workers would decide not to go to work without providing any reason, yet they would still demand to be paid the same amount as the other workers. As a result, the reclaimed recyclable materials are then insufficient to get them capital that will satisfy all parties. This disconnection among other members contradicts the notion of "cooperative" itself as it opposes what it stands for.

5.4.4. Measuring the success of S@S

In 2015 Pikitup reported that the programme had been successful since it was piloted in 2009 and the impact was evident in community participation rates that are continuously growing (Pikitup, 2015: 8). Still, Pikitup officials have different views of the success of the S@S programme, where some believe it is benefiting the City in that there are tangible results in terms of targets achieved in diverting waste from landfill and creating jobs, officials stated that:

> *It depends on how you want to see it… But if you look at the fact that so far the programme has created more than 1 000 jobs, for me it is a success. If you look at the fact that you are diverting more than 20 tons of waste per annum, for me it is a success.*
>
> *(Pikitup Head Office #1, 17/11/2016)*

> *We do get a lot of tonnages that come from landfills. Even for reclaimers, it is at least a job, every month they have something to use to buy what they need. We created job opportunities and communities they start to appreciate and learn about recycling.*
>
> *(Pikitup Head Office #2, 28/11/2016)*

While others argue that the programme is still far from achieving set targets:

> *I still believe that most of the waste that is going to the landfill site is recyclable waste and it lands on the landfill site… The programme and the roll out thereof has been too slow, the process is too slow…*
>
> *(Pikitup #1, 23/12/2016)*

"The success is when you see somebody getting a steady income for six months, and seeing somebody from just being a reclaimer to be part of a coop and owning a BBC… or they grow in recycling economy and operate like an SMME. Because that is what we want to do and we are not there yet"

(EISD Waste #1, 25/11/16)

It can be argued that different views in measuring success and failure are rooted in the absence of a monitoring and evaluation criteria and therefore no clear indication of how successes and failures are defined. Also, due to different conceptions of integration and since integration remains a policy concept and clearly defined within these institutions, officials view the process of integration differently where some consider it based on service delivery perspective while others apply an understanding of empowerment. There is also no clear indication of whether the programme focuses only on community participation in S@S, or if success should also include reclaimers who are participating.

5.5. Why cooperatives fail

Even though waste cooperatives in South Africa have a mortality rate of 91.8% (Godfrey, 2015), organising experienced and new reclaimers into waste cooperative is seemingly the preferred approach in the City of Johannesburg. The findings of this study have illustrated the reasons why cooperatives often do not benefit its members and/or workers. Some of the reasons that emanated from this study is that cooperatives do not succeed due to mismatched articulation of participation in programmes, insufficient income, competition from various groups of reclaimers, participation from household and internal exploitation, inter alia.

Based on the findings, as new reclaimers, it was clear that Talefane Cooperative members' understanding of integration is a disjuncture from that of Pikitup's, although Talefane Cooperative members and workers participate actively in Pikitup's S@S programme. Yet, they have an understanding based on their practical experiences and the expectations they have based on what they perceive fair and unfair. It is apparent that the attempt of integrating experienced reclaimers in the programme did

not succeed, as all reclaimers left. Even with the remaining new reclaimers, there were concerns regarding their relationship with Pikitup since participants in the programme were relatively new reclaimers who were left in the programme when experienced reclaimers left.

Talefane Cooperative members stated that, unfortunately, community members only participate on a temporary basis and leave the cooperatives when they have acquired better employment. This is mainly because there are many challenges that are faced by cooperatives regarding payments and modes of operation. Also, the retention of cooperative workers who previously worked as reclaimers was very poor. Talefane Cooperative members stated that even retaining the community members to work for the cooperative is challenging.

The comment below by Pikitup official indicates some of the challenges of integrating reclaimers and retaining reclaimers' participation in the programme:

> *When we started we wanted to involve reclaimers…it is a challenge for them to be involved in the project… At the moment they are still getting something from the bin because our community has not reached a stage where they recycle and sort everything.... When they come in the morning - because they come very early - they open them [bins] and check the material that they need inside the bags and they take what they need. So when the cooperatives come they pick up the bag that has the materials. But most of the material that is in there is not of good value as compared to what they [the reclaimers] got*
>
> *(Pikitup Head Office #2 28/11/16)*

This also depicts the issues of competition among different groups of reclaimers.

5.5.1. Perceptions of integration from the ground

As discussed in Chapter Three, the Linbro Park site was selected as a research site because the programme was targeted at reclaimers working at the site. However, experienced reclaimers were not interested in the programme as it was not viable for them and upon realisation that the programme does not work in their favour and/or benefit them. Since the experienced reclaimers had better options, they left the

programme and could not be forced to participate in the programme. It became clear that community members' willingness to participate in the programme is embedded in urban poverty and their inability to acquire formal employment. This is influenced by what Nzeadibe and Anyadike (2012) refer to as "… the prism of urban poverty, social exclusion and social integration" within which the informal sector has been analysed. Members and workers of Talefane Cooperative view their work as a job since they are able to get wages and are able to sustain their livelihood to some extent. Yet they were not made aware that they are participating in Pikitup's integration programmes. One Talefane member mentioned that:

> *When I joined Talefane I had no idea that I was joining a Pikitup project.*
>
> *(Talefane Cooperative Member #2 Linbro Park, 13/09/16)*

Another shared the same sentiment, highlighting that:

> *Initially I was never told that we are working for Pikitup project, all I knew was that I am working for someone with Pikitup's trucks.*
>
> *(Talefane Cooperative worker #9 Linbro Park, 16/09/16).*

5.5.2. Job provision

When asked what integration means, participants' comments illustrated that there is no common or consistent understanding among Talefane workers and Pikitup officials. Still more, even among cooperative members and workers, understandings of integration are diverse and inconsistent. The different conceptions emanate from the construction of knowledge based on practice and social interactions. That is, they understand integration as job provision. The statements below are some of the responses provided by cooperative members and workers:

> *… to me it meant that I would be working under Pikitup doing S@S, while they help pay workers who collect materials, those who package starter packs at the depot, as well as those who work on site.*
>
> *(Talefane Cooperative Member #1 Linbro Park, 14/09/16)*

For me it is having a job and being able to get an income at the end of the month.

(Talefane Cooperative worker #3 Linbro Park, 14/09/16)

… Receiving support from Pikitup… It would mean assistance in terms of providing uniform and money.

(Talefane Cooperative worker #8 Linbro Park, 16/09/16)

5.5.3. Expectations

Clearly, cooperative members and workers constructed their own understanding and knowledge of what integration means. This brings forth another dynamic of the understanding of integration which is expectations. Yet, due to mismatch of and a deep practical understanding of Pikitup providing support to cooperatives for a short period of time versus cooperatives being autonomous, there is a clear confusion. This is why cooperative members and workers expect Pikitup to continuously provide support since according to their knowledge, they are working for Pikitup although they are not working for Pikitup directly.

This illustrates that respondents were not aware of the kind of relationship they have with Pikitup. As discussed above, even new reclaimers who were included in S@S did not think that the inclusion of community members was sufficient to cater for their expectation, since for them being integrated meant being paid by and working for Pikitup.

Based on that, the most striking finding was the following view, also expressed by the majority of the respondents:

It is really sad that Pikitup only wants to see areas that they allocate to us for collection clean…they want to see it [recyclables] sorted while they do not care about whether we get paid or not.

(Talefane Cooperative worker #9, Linbro Park 16/09/16)

Although inconsistent, it appears that cooperative members at Linbro Park collecting from kerbside have similar understanding of what integration is. A common view

among Talefane Cooperative members and workers was that integration is being incorporated in Pikitup's waste management programmes by receiving a salary from Pikitup. Since these are new reclaimers who have never worked independently as reclaimers, their understanding of what integration should be highlights their desires, aspirations, ambitions and expectation. As one interviewee stated:

> *Integration is Pikitup being involved in our work in the sense that we work and then we receive our payments from them or they assist if the cooperative did not make enough money to pay all its workers in a particular month. Integration according to me does not pay individuals by the materials they sell, workers have a stable income.*
>
> *(Talefane Cooperative worker #4 Linbro Park 14/09/16)*

More so, the perceptions of integration presented also depict that, contrary to Pikitup's intention of encouraging independence and autonomy by helping cooperatives become businesses in the waste sector and grooming entrepreneurs, new reclaimers want to be recognised as municipal workers rather than entrepreneurs.

Previous studies evaluating the impacts of excluding reclaimers from formal labour markets illustrate that some individuals have become the ultimate symbols of poverty (Beall, 1997). This is also the case in the informal sector in South Africa. Beall's (1997) view was explicitly reproduced in the views expressed by Talefane Cooperative members who stated that their willingness to participate in the integration programmes was embedded in a lack of economic and employment opportunities. Hence they often quit when they acquire formal employment. Cooperative members expressed the view that they always work in anxiety and fear as they are not certain whether they will receive their full salary or not. Regardless, they also hold the view that even when they receive their full salary it is not enough to sustain their livelihood.

The integration programme has diverted from the initial objective of empowering reclaimers working at landfill sites and kerbside while creating jobs. The programme appears to have only brought job opportunities to unemployed individuals of different communities. Moreover, the programmes basically created more competition between different groups of reclaimers. A minority of participants indicated that the S@S

programme has been very beneficial in their lives in that they are given a truck which has fuel and a driver for free. According to their views, getting these resources would not be easy for an independent cooperative.

5.5.4. Improved working conditions

Talefane Cooperative members and workers further expressed that their working conditions are not conducive to their health and livelihood as a whole. This is due to the lack of shelter, pavements, ablution facilities and so forth. In all cases, Talefane Cooperative members and workers reported that they need to work in a safe environment with sufficient resources. This shows that if experienced and new reclaimers were involved in the conceptualisation of integration, the programme would have worked better for them.

From this statement, it is evident that since community members of Talefane Cooperative treat the programmes as a job, they expect Pikitup to take responsibility for operational activities. This means that Pikitup must always ensure that they are paid and have sufficiency in all that they require. This includes provision of PPE. Respondents raised the concern that they are susceptible to diseases since they are never certain of what they could find in the plastics that they open. Currently, for them to receive a uniform or PPE, it must come out of their payment which is insufficient. This is why cooperative members or workers choose to work without PPE.

On a positive note, a minority of the respondents described that they love what they are doing and are happy that they are part of the programme even though they still lack understanding of what the programme entails. Yet it can be argued that they are only grateful because they have no better options, as they expressed that if it was not for the programme, they would not have anything else to do.

5.6. Conclusion

While Pikitup has claimed that the S@S programme at Linbro Park sorting facility is a good example of an initiative to incorporate and integrate experienced reclaimers in the waste value chain, this chapter has revealed that the people whom the programme targeted found it unfeasible and left. Essentially, Pikitup did not include in its

conceptualisation of the programme reclaimers' working conditions. As a result, unregulated competition between different groups of reclaimers, the kind of support reclaimers expected, operations and insufficient income led most reclaimers to withdraw their participation. Due to these challenges that cooperatives face, new reclaimers (cooperative members and workers) felt that the work that Pikitup is doing to incorporate them in waste management practices and the waste value chain is inadequate as they are not seeing any changes in their livelihood or reaping any benefits from participating. Furthermore, the absence of experienced reclaimers in the programme is another sign of failure of the programme. This emanates from the challenges that new reclaimers in Talefane cooperative (and other cooperatives) are facing which impact on their levels of income. At the core of these challenges or the failure, it is the manner in which the programme was framed which evidently led to income loss for experienced reclaimers. This gave rise to unregulated competition among different groups, tension among cooperative members and workers, loss of income/ insufficient income as well as operational times and hours. Subsequently, it was perceived as not being viable since it did not address their needs.

CHAPTER 6:

6. Case study two: Robinson Deep landfill site

6.1. Introduction



Figure 10: Map of Robinson Deep landfill site

Source: Google Maps

This chapter focuses on reclaimer integration programmes implemented at Robinson Deep landfill site. It traces the history of Robinson Deep and provides a brief background of the landfill and the reclaimers working at the site. It also provides an overview of the Robinson Deep landfill site integration programme. This gives special attention to the project at Robinson Deep and includes details on the inception of the actual programme. Based on integration programme implemented at Pikitup, this Chapter aims to respond to questions such as why reclaimers withdrew their participation from the programme, why Pikitup failed to integrate kerbside reclaimers, why integration programmes were not a success, why integrating reclaimers by organising them into cooperatives failed, why reclaimers felt they were treated with injustice and how Pikitup addressed the issue of non-participation by experienced reclaimers in the programme.

6.2. History, overview and spatial analysis

Robinson Deep is one of the City's four functioning landfill sites – Ennerdale, Goudkoppies, Marie Louise and Robinson Deep. It is situated in the City of Johannesburg's Region F, in Turffontein Road, Booysens (See figure 10 above). It is one of the oldest landfill sites in Johannesburg and has been in existence for more than 100 years (CoJ, 2011). Robinson Deep has been operational since 1905 and was permitted to be a landfill site in 1933. However, reclaimers were only allowed to work at the landfill from 1994 (Pikitup #1 Robinson Deep, 23/11/2016).

As noted above, the City's landfill sites are facing the challenge of declining landfill airspace and Robinson Deep is not an exception. In 2016, Pikitup reported that Robinson Deep has a lifespan of only 5.6 years left (Pikitup 2016/17). This is one reason that prompted the municipality to initiate integrated waste management programmes in order to improve efficiency of waste management services and empower reclaimers currently working at the site by including them in S@S programme. Pikitup and the City prioritised diverting waste from landfill sites in order to curb the declining landfill airspace by implementing integrated waste management strategies (Pikitup, 2015). In that case, reclaimers were to be incorporated in the City's planned strategies.

At the time of data collection in November 2016, there were 100 male reclaimers who worked at the site. One of Pikitup officials who was working at the site mentioned that the majority of reclaimers at the landfill are not South African. According to the official, about 30% of the reclaimers are South Africans and 70% are Nigerians, Zimbabweans and Cameroonians (Pikitup #1 Robinson Deep, 23/11/16).

In 2008, Robinson Deep had a functional, clean Material Recovery Facility (MRF) (shown in figure 11). It is located at the bottom of the landfill in front of the space where buyers are situated. A clean MRF is defined by Pikitup as a centralised place where recyclables recovered through separation at source are taken for further separation, either mechanically or by hand (Pikitup, 2015: 48). The MRF was built to house reclaimers in pursuit of the City's Integrated Waste Management (IWM) programme. The clean MRF was contracted to a private company to focus on sorting pre-separated

recyclables from household collection done by reclaimers participating in S@S. Reclaimers were not given control over the MRF. Unfortunately, reclaimers were unable to make enough money in this business arrangement while the contractors could not fulfil their contractual agreements.

One of the Pikitup officials stated that the MRF was operated through a contractual joint venture between Vuma Waste and Enviro Waste. The two parties entered into a contract in 2004 which was renewed every five years. The MRF operated as a BBC and reclaimers were required to sell their recyclables to the contractors. Reclaimers were encouraged to sort collected recyclables at the MRF through the IWM programme by the EISD which was introduced in 2008 (Pikitup #1 Robinson Deep, 02/03/17). Reclaimers were provided with a space to sort their recyclables in the MRF. However, the Pikitup official highlighted that the condition for reclaimers to utilise the space at the MRF was that reclaimers are not permitted to leave the premises with the sorted recyclables. Hence, reclaimers could only use the space provided they sold the recyclables to the contractors.

During interviews, Pikitup officials stated that in 2008, reclaimers who were integrated into the City's IWM programme worked at the MRF for two to three months after which they were requested to vacate the premises so that the MRF could be refurbished. The contract was supposed to be extended for another five years. But, the contract was not renewed. Instead, while reclaimers vacated the premises, the MRF was closed in 2014 due to disagreement between the two contractors and because of operational challenges (Pikitup #1 Robinson Deep, 01/12/2016). According to reclaimers and Pikitup officials, reclaimers were not allowed to sort their recyclables at the MRF after they were asked to vacate. Due to the absence of a sorting facility or the non-functionality of the MRF, reclaimers participating in S@S did not have a place where they could safely place and sort the recyclables that they collected since the MRF was closed.



Figure 11: Material recovery facility at Robinson Deep

Photo: Maite Sekhwela (researcher)

During the time of data collection in November 2016, there was a sorting area behind the landfill offices where buyers and cooperatives were situated (as illustrated in figure 10 above). Buyers and cooperatives found in the area were placed there on a temporary basis; however, due to the Material Recovery Facility (MRF) not being functional, the individuals extended their stay (Pikitup #1 Robinson Deep, 01/12/16). It is worth noting that Pikitup has not formally permitted buyers to operate at the site (Pikitup #1 Robinson Deep, 01/12/16). Reclaimers sorted waste materials at the landfill or dumpsite and brought their recyclable material to where the cooperatives and buyers are situated in order to sell.

Normally, the Environment and Infrastructure Services Department (EISD) formulates projects concepts to be implemented by Pikitup. In that regard, the EISD's role is to monitor and oversee the implementation of different programmes. However, reclaimer integration through the S@S programme at Robinson Deep was designed and implemented by the EISD and Pikitup as a pilot project (Pikitup #1 Robinson Deep, 02/03/17), although mostly, Pikitup designs and implements waste management projects. According to Pikitup and EISD officials, Pikitup's role was almost dormant while the EISD was extensively involved in the design and implementation of the pilot project. The City recognises reclaimers as key players in waste recovery and thus devised means to ensure that they make a notable contribution to waste recovery programmes (EISD Waste #1, 25/11/16). As stated by an official from EISD:

We as the City, we are recognising reclaimers as an important player in assisting us in recovering… we suspect that reclaimers are contributing to 6% of the waste that we are recovering… Because waste reclaimers are the ones who are assisting us to do that

(*EISD Waste #1, 25/11/16)*

As noted already, the EISD took the lead in the implementation of the project, where reclaimers were trained and formed into cooperatives over a period of three days in 2008 and 2013 (EISD Waste #1, 25/11/16). Reclaimers were given a stipend for their attendance. Although there was not any kind of assessment concerning reclaimers' skills prior to the workshops, training workshops were deemed essential by City officials in that reclaimers were presumed to not have business skills required to operate cooperatives (EISD Waste #2, 12/12/16). Since the integration programme was designed so that reclaimers were to be the drivers of the projects and manage the finances of the whole group, all reclaimers needed to be capacitated in that regard (EISD Waste #2, 12/12/16).

City officials mentioned that the training workshops were done in an attempt to empower and capacitate reclaimers as well as fortify their knowledge in waste picking and how to work as a cooperative within the waste sector. In the workshops, reclaimers were provided with Personal Protective Equipment (PPE) and were advised to form themselves into cooperatives under S@S in order to enhance their eligibility to receive financial assistance:

…Training involves the waste management legislation, what is waste… and also business skills. On business skills, it will go into details on how to form cooperatives… the funding that we use is EPWP so it has its own rules and regulations. We can only use that money to empower South Africans, so from the observations I've been doing with my colleagues we can see that 70 if not 75 percent of the reclaimers are not South African.

(EISD Waste #2, 12/12/16)

The City's training programmes are dependent on funding from EPWP, which is provided for the sole purpose to empower and support cooperatives, not individuals, through training workshops. Hence EISD sought funding from EPWP and identified reclaimer integration as a local project to empower reclaimers (EISD Waste #2, 22/03/17). During interviews, City officials stated that the EISD uses EPWP funding as there is currently no other department where they can seek or access funding for extensive programmes such as reclaimer integration.

Although reclaimers do not receive EPWP funding but benefit from it through training workshops, the funding has stringent requirements for reclaimers to qualify for participation in the training workshops. An identity document is a mandatory requirement (EISD Waste #2, 12/12/16). This means that only South Africans can be empowered with this funding. This requirement had an effect on reclaimers' participation at Robinson Deep landfill site, where only a few individuals were able to participate in the integration programme (Pikitup #1 Robinson Deep, 02/03/17).

The pilot project at Robinson Deep focused on collection of recyclables conducted through the Waterval depot, where reclaimers collected recyclables from the surrounding areas and took the recyclables to manufacturers for weighing and selling (Pikitup #1 Robinson Deep, 02/03/17). The manner in which cooperatives work is that, as part of the agreement between reclaimers, Pikitup and the EISD, reclaimers were expected to collect recyclables from house to house while they provided environmental education to residents. Moreover, cooperative members had to share equally the money generated from selling recyclables fortnightly or on a monthly basis, just as the Linbro Park cooperatives did (Reclaimer #12 Robinson Deep, 21/11/16).

During interviews, reclaimers as well as EISD and Pikitup officials mentioned that, through the reclaimer integration programme, each cooperative was supposed to do kerbside collection from about 400 000 households in and around Turffontein every week. Reclaimers were provided with PPE, a truck for collection, and a leader who knew the routes.

In a nutshell, the programme at Robinson Deep landfill site started in 2008. Reclaimers mentioned that there were about five cooperatives that were established at the time of the training. Cooperatives were comprised of reclaimers only and had different compositions: where some cooperatives had about five to 15 members, others had between 25 and 30 members. Reclaimers were provided with a sorting space at the MRF where they were obligated to sell their recyclables to the contractors who were operating the MRF. There were, however, issues of exploitation by the contractors since reclaimers were obligated to sell their materials to them and when they use the facility. More so, reclaimers felt that they were being exploited by the BBCs situated in the MRF. This is embedded in that the prices were too low as compared to prices in other BBCs outside the landfill site.

Pikitup and EISD provide the reclaimers with a truck, routes and a driver to collect recyclables from households. Reclaimers' responsibility in this integration was to collect separated materials from households, sort them and sell them to BBCs. At the time of data collection, all reclaimers had already quit participating in the programme and had gone back to work at the landfill site. Most reclaimers stated that their reasons for leaving were that they felt it was better to work at landfill site since there is more income compared to when they collect and sell their recyclables as a collective.

Reclaimers went back to the landfill in order to be able to reach their own targets as these could not be achieved when working as a cooperative. Also, the idea of having to share profits among cooperative members and workers was not well received by reclaimers who felt that it is exploitation and they are robbed of their monies by buyers. This then led reclaimers back to their refuge. This reflects the idea depicted by Millar (2014) that reclaimers often pursue relational autonomy in order to enable them to work at any time they would like without any restrictions. But reclaimers did not only quit, some of them became employers where they hired community members to work in the programme while they work at the landfill. This also provided another stream for generation of their own income. At the time of data collection, there were two cooperatives at Robinson Deep which were owned by reclaimers sorting and selling recyclables. The employees still collect recyclables in the surrounding areas and bring the recyclables for sorting at Robinson Deep sorting sections where buyers are situated (as shown on figure 10 above).

6.3. Challenges of being organised

… I joined a coop, doing separation at source, but it didn't work out because … we didn't share the same dreams amongst the members of the cooperatives... it was difficult to put an effort when somebody doesn't put enough effort as you, so that's when we started to split..

(Reclaimer #12 Robinson Deep, 21/11/2016)

This is a comment made by one of the reclaimers explaining his views on integration by organising reclaimers into cooperatives.

According to the officials, due to limited resources, integrating reclaimers individually and not as a group is perceived costly as opposed to integrating cooperatives due to the perception that empowering individuals is considered empowering private businesses with public money (Pikitup Head Office #2, 22/03/17), even though they do support SMMEs as part of Jozi@Work.. On the other hand, EISD and Pikitup support cooperatives to ensure that a number of people are empowered at the same time rather than focusing on one person (Pikitup Head Office #2, 22/03/17). Nonetheless, one of the major drawbacks of the integration programme was requiring reclaimers to organise into cooperatives while disregarding that reclaimers are autonomous agents. Consequently, working collaboratively proved to be a challenge among them. This was one major reason why the majority of reclaimers went back to the landfill site in 2008 (shown in figure 12).



Figure 12: Robinson Deep landfill site

Photograph: Maite Sekhwela (researcher)

6.3.1. Working as cooperatives

There were common views among reclaimers who were part of the programme about their interest in participating in the integration programme subject to changes in approach and provision of resources. In spite of the fact that reclaimers were willing to participate in the IWM programme, they raised concerns regarding the amount of recyclables they collect and the storage. As noted already, there was an MRF built at the site to ensure that reclaimers had sufficient space to sort their recyclables. In reference to the comments made by the majority of respondents, the MRF was a major contributor to reclaimers making an insufficient income since they had to sell their recyclables to the contractors at a lower price. As the MRF could not make enough money, it was abandoned by the company in 2014. As a result, reclaimers ended up not having space to sort their recyclables. This statement was echoed by one of the reclaimers who mentioned that:

> *You can understand that we need a place like where we can sort and store our stuff.*
>
> *(Reclaimer #6 Robinson Deep, 28/10/16)*

The reclaimers' views on this issue depicted a deficit from EISD and Pikitup's side as space was not provided for most cooperatives to sort their recyclables after the MRF was closed. This made it difficult for reclaimers to work as they had no place to store and sort their collected recyclables. Some reclaimers decided to withdraw from participating since they were unable to see progress in what they were doing and due to limited sorting facilities.

6.3.2. Household participation

Another element that led to Pikitup and EISD to not achieve the objectives of the S@S programme was the lack of environmental education among participant households. Since households are provided with different bags for sorting recyclables, every household participating is expected, although not obligated, to separate waste according to categories indicated in the "starter pack" they are provided with and put them on kerbside for reclaimers to collect. Any household can participate in the programme, based on willingness. Yet, nine out of 16 reclaimers interviewed who left the project complained that there is not enough material to collect on the kerbside. At the core of this issue is that most households do not separate their waste, some do not put their dustbins outside for collection while others prefer to sell their materials to BBCs. This was noted as a cause for concern for all reclaimers as it was stated that it negatively affects the tonnages of waste they collect, which then trickles down to the amount of money they receive.

Also, the presence of kerbside reclaimers and households' resistance to give away their recyclables proved to be a challenge for reclaimers in meeting daily targets when collecting on the kerbside. Reclaimers noted that:

> *When you go into the houses to collect, it was very difficult because you find that people are not doing recycling in that area and it would be rude of you to come and take over their waste*
>
> *(Reclaimer #12 Robinson Deep, 21/11/16)*

This point was also echoed by Pikitup officials. One stated that:

> *Participation is also a problem because currently we are sitting at 18% participation rate because most residents are not participating. This is mostly an issue in informal settlements, because in formal settlements they are keener to participate… The challenge is really to change the mind-set of people… what is needed is ongoing education.*
>
> *(Pikitup Depot #1, 18/10/16)*

This elucidated Pikitup's impotence in educating households about this programme and what is required of them. Reclaimers who left cooperatives constantly had to explain themselves to household members when they went to collect from the kerbside. Many of those reclaimers voiced that this consumed much of their time in which they could have been very productive if they were at the landfill. What made this a challenge to reclaimers is that occupants of many households refuse to hand over their recyclables to reclaimers. This is because they hold the view that, if reclaimers are getting money out of that, they can also take it to Buy Back Centres (BBCs) and make money for themselves.

Participation from households is a major challenge to integration as some people are just not interested. There is a critical need to educate and to maximise awareness in households regarding separating waste. Low participation negatively affects the success of integration programmes. Pikitup officials raised a concern that currently, formal settlements are willing to participate while informal settlements have the mentality that they can sell the recyclables themselves rather than give them to someone who will receive money for it while they gave them away for free. Hence there is some form of resistance from the informal settlements regarding participation in the programme (Pikitup Depot #1, 18/10/16). But, the issue is that eventually, they do not recycle and recyclable and waste materials end up in public spaces. This is why J@W was initiated, to clean informal settlements. It was highlighted that:

> *Informal settlements such as Alex find it difficult to participate because they look at the fact that the people who collect get money from their waste while they get nothing. Their mentality is in a way that they say why should they participate*

and give people their waste for recycling for them to get money when they can do it themselves

(Pikitup Depot #1, 18/10/16)

6.3.3. Competition, issues of documentation and fear

Unregulated competition from different groups of reclaimers was also evident at Robinson Deep. However, reclaimers at the landfill stated that, in the absence of a formal regulation of competition, street reclaimers have informal regulations regarding who collects recyclables from which streets and on which days. This created a problem for reclaimers who were supposed to carry out formal kerbside collection. The competition raises a crucial issue of formal regulation and whether Pikitup's integration initiative provide reclaimers with a mandate to collect on the streets but unable to implement the system.

Yet, on Pikitup's side, it also remains an issue as it raises a question of how to regulate competition mostly between informal and formal reclaimers who are basically operate in the same areas, performing the same duties. .Pikitup officials have stated that locating informal reclaimers is often a challenge as they are always moving. As a result, regulating the competition is not feasible. Moreover, the lack of education among households regarding this programme has had a domino effect on recyclables collected, truck loads, and tonnages sold and as well as the reclaimers' income. As pointed out by one of the respondents:

The guys tried it out... they were marketing it quite well and they were quite good in their marketing strategies. They'd go house to house and explain the whole process of integrated waste minimisation and recycling. However, they got obstacles which were basically that … before they [cooperatives] could come with the truck to collect, the street reclaimers would come [at 4am] and take most of the recyclable stuff. So they were losing.

(Pikitup #1 Robinson Deep, 01/12/2016)

A reclaimer reported that:

At times when you go there to collect you find that there is already a lady already holding your plastics, then what can you do? You end up leaving the plastic,

you go to the next street you find the trolley guy and their plastic is already full, so it was very difficult"

(Reclaimer #12 Robinson Deep, 21/11/16)

What's more, according to Pikitup and City officials, the integration of reclaimers has encountered challenges from its inception and throughout its execution. The City is facing the challenge of integrating reclaimers despite the resistance from reclaimers. The South African economy has always relied on migrant labour from neighbouring countries, and many of the City's reclaimers are undocumented migrants without permits to work in South Africa (EISD Waste #1, 25/11/16). According to Pikitup and EISD officials, one reason waste pickers are resisting participating is that the relatively large number of undocumented migrants from neighbouring countries are trying to avoid the state. This, according to officials, is because they are undocumented and want nothing to do with the government due to the fear that they could be deported. For them, it seems as though integration is the government's way to locate and deport them (EISD Waste #2, 12/12/16). As a result, they are reluctant to provide their contact details to government officials. However, Pikitup officials noted that at the landfill, reclaimers are more interactive and were willing to interact and hear out the municipality.

…when we started we … went under the bridges and talked to reclaimers… But the experience hasn't been a good one because… once you say you are from the municipality they don't want to interact with you

(Pikitup Head office #1, 17/11/2016)

Other officials also raised the same concern:

…they think maybe we want to chase them away...

*(*Pikitup Head Office #2, 28/11/16*)*

Resistance [from non-South Africans is a challenge], and the mistrust between the reclaimers and government officials.

(EISD Waste #2, 25/11/16)

Based on interviews with government officials, resistance to participate in integration programmes by reclaimers both from landfill sites and kerbside is mostly based on the mistrust between the reclaimers and the state (*EISD Waste #2, 25/11/16)*. For most government officials, reclaimers resist participating in such programmes as they always think that the government is up to something, and that any form of engagement with them will jeopardise their livelihood. This is owing to the broken communication between government officials and reclaimers as well as weak legislation on reclaiming.

6.3.4. Working as cooperatives

Many respondents provided reasons and highlighted that the shortcomings and mishaps of the programme are due to the non-feasibility and non-viability of the programme. Most reclaimers stated that cooperatives failed because participation resulted in loss of income rather than gain. Reclaimers raised a concern that the training for empowerment organised prior to implementation and the programme itself were poorly designed leading to implementation which did not yield any notable profits (Reclaimer #12, Robinson Deep, 22/03/17). This confirms the conceptualisation of integration by Paul *et al.* (2012) and Godfrey *et al.* (2016), who deem capacity building among reclaimers essential.

Also, the programmes collapsed due to reclaimers' inability to adapt to the new working conditions as well as Pikitup's failure to consider reclaimers' work and experience. As autonomous agents, reclaimers felt confounded that they had to work according to certain working hours and be restricted to collect at the areas. This for them was a restriction which limited them to achieve their targets. Experienced reclaimers felt that they were being exploited by the programme since their income generation reduced. These are among many other reasons discussed in this study. Clearly, the programmes are seemingly not working for reclaimers and also Pikitup is not achieving its objectives. Yet, Pikitup and the City still insist on this approach. If the programme is not working, why should reclaimers continue to work as cooperatives while other models can be explored to establish what works better for both parties.

Moreover, one of the most important findings in this study is that the approach to integration of forming cooperatives can be considered as starting a business. Some reclaimers were more experienced and skilled than others in terms of reclaiming and

sorting what is valuable. According to informants working with reclaimers, some reclaimers' lack of education might have affected their ability to manage and operate the cooperatives (Buyer #3 25/10/16). In that, another problem among reclaimers was that there was no clear understanding of what a cooperative is and how it was supposed to work (Buyer #3 25/10/16).

A middleman who was also a reclaimer previously, and was involved in the S@S programme, noted that:

> *… it failed because look, what these guys (Pikitup) did is that they forced us to form these groups that we call cooperatives…I ended up pulling out… because it was not profitable… imagine having 25 CEOs in one small company, everyone wants a fat cheque…*
>
> *(Buyer #3 25/10/16)*

A SALGA waste specialist shared the same sentiment on that point:

> *… everyone wants to be the boss and sometimes wrong people are in the cooperatives…*
>
> *(SALGA Waste Specialist #1 27/11/16)*

The same sentiment was echoed by one of the reclaimers:

> *…the money we got was not enough… in cooperatives we don't get along, that's the problem. Because someone would think of transport money for tomorrow, they go back the landfill, another thinks of something else and they leave. So I don't think we can be able to work together. That is the failure we face.*
>
> *(Reclaimer #9 Robinson Deep, 25/10/16)*

As discussed in section two of this chapter, it is important to note that EISD and Pikitup had been training reclaimers in entrepreneurial skills. Thus reclaimers were forced to become bosses when they couldn't earn enough. Due to the lack of entrepreneurial skills and their individualistic mentality, reclaimers do not consider cooperatives to be

initiatives that are developed in order to assist them in waste picking (Reclaimer #6 Robinson Deep, 28/10/16). They also disregard the fact that in cooperatives they are all equal and must put in the same effort. Failure was therefore due to the fact that some treat the cooperatives as their own businesses and only expect others to work. Although on different spectrums, one of the Pikitup officials concurred with the above sentiments by noting that:

> *… these people think that coop is a business where you will hire people to work, whereas [it is a different kind of business] everyone must work. So because they feel like they are directors in the business they do not put a lot of effort… (Pikitup Head Office #2,* 28/11/2016*)*

The shortcomings of integration projects are rooted in the inability of many participating reclaimers to work in a team and their lack of a sense of team work. Since reclaimers are autonomous agents as described by Millar (2014), they are used to working alone and independently while they dictate their own working terms. Hence, some were putting more effort than others. As already stated, some reclaimers then decided to quit the cooperatives and work on their own in order to have more control over their ability to reach their own daily targets.

6.3.5. Payment of reclaimers

Another pitfall of the integration programme was how reclaimers were paid when they were part of cooperatives. Having being accustomed to receiving money on a daily basis, reclaimers could not withstand getting paid weekly, fortnightly or even worse, not getting paid in full. Clearly, working as cooperatives did not give them the ability to acquire the same income they used to get when they worked independently. Reclaimers elucidated that the money they were getting paid when they were part of cooperatives was not enough to cover their debts. Most reclaimers stated that they were jeopardising their livelihood by participating.

A number of points were raised by reclaimers to substantiate further the shortcomings of integration programmes:

… the money I made did not benefit me that much because I had my debts that were above that money. So I decided I must go back to where I started because it's better there.

(Reclaimer #9 Robinson Deep, 21/11/16)

Believe me it was bad, I used my money from my own pocket [to pay others], I did that for six months, I even created debts that were not even necessary… with cooperatives it was very difficult because we had to hire people to help us sort the stuff while we get very little amount of recyclables. We have to pay those people; at the end of the day we owe them money which is not even enough.

(Reclaimer #6 Robinson Deep, 25/10/16)

… it affected my money because I could not meet my daily targets; the amount of money that I was paid always changed, today I would get more and the next day I get close to nothing, so I decided to come back and work alone.

(Reclaimer #15 Robinson Deep, 24/11/16)

In terms of income, integration programmes had extremely negative effects on reclaimers (and cooperative members and workers) and their livelihood. To elaborate, working as a cooperative implied that all the money received from recyclables sold must be shared among all 15-plus members of a cooperative including the owner, which most reclaimers found problematic (Reclaimer #12 Robinson Deep, 21/11/16). This concern emanates from feelings of exploitation where most of the reclaimers felt that they were not receiving as much money as they should. However, this was due to the overall money that the cooperatives made. According to reclaimers, if a cooperative makes R20 000 in two weeks, it has to be shared equally among reclaimers. Reclaimers working at Robinson Deep landfill site raised the concern that this amounts to nothing since they are able to make, in two days or three, the money they would work for fortnightly if they were part of cooperatives (Reclaimer #9 Robinson Deep, 23/11/16; Buyer #2, 25/10/11).

6.3.6. Operations

Most of the interviewees were of the view that cooperatives faced challenges due to the fact that they were expected to do a lot with limited time. For them, providing environmental education to residents while doing marketing had an impact on the tonnages of recyclables collected. The reclaimers expressed this sentiment by stating that:

> *… every day we were given a truck that we had to use for six to eight hours per day, the challenge was that the hours for the truck they were very, very small, in those eight hours you find that there is lunch, you have to do collections, you have to do marketing, you have to do the selling, all this in those small hours. It was very, very difficult…"*
>
> *(Reclaimer #12 Robinson Deep, 21/11/16)*

Hence, it was a challenge to meet the demands of the project while ensuring that adequate income was acquired.

6.3.7. Exploitation by private contractors

Reclaimers raised the problems that arose in the cooperatives through Pikitup involving a private company to manage cooperatives (Reclaimer #6 Robinson Deep, 28/10/16). Reclaimers who were part of cooperatives were collecting from households and bringing the recyclables to the MRF for sorting and selling. Reclaimers reported that they faced exploitation from the company where their materials were bought at a very low price due to lower volumes of the recyclables they collected (Reclaimer #6 Robinson Deep, 28/10/16). A Pikitup official also alluded to this point by stating that the contractors at the MRF had obligations to maintain it. So, they made the prices low so that some of the money they saved could go into maintaining the MRF (Pikitup #1 Robinson Deep, 02/03/2017). Hence it appears as though the integration programme was not empowering the reclaimers but the company through this approach.

Nonetheless, the minority of the reclaimers revealed that the promise of money (incentives) from Pikitup stimulated reclaimers' participation in the programme (Pikitup #1 Robinson Deep, 02/03/2017; Reclaimers #9 Robinson Deep, 21/11/16). However, since some reclaimers were only after money, they were working ineffectively while

they waited for the money. Consequently, when the money was received, they quit and went back to the landfill while some started their own businesses (Pikitup #1 Robinson Deep, 02/03/2017).

6.3.8. Problems with being a pilot

It is worth noting that reclaimers realised over time that they were participating in a pilot project while they were not benefiting much from the project (Reclaimer #12, Robinson Deep, 21/11/16). Due to a conglomeration of factors noted in the discussion in previous sections, the majority of reclaimers decided to quit cooperatives in 2009. Surprisingly, reclaimers did not just quit working as cooperatives; from 2009 when reclaimers decided to quit cooperatives, they hired community members to work on the project while they reclaimed independently at the landfill site. A former reclaimer and participant in the S@S programme mentioned that:

> *We do have cooperatives here. But now, the owners of the cooperatives are still working up there (landfill site). But when they are up there, they are working independently. Each man for himself and at the end of the day whatever they reclaim they still come and sell…*
>
> *(Buyer #3 Robinson Deep, 25/10/16)*

> *I tried, I was part of a cooperative … it became difficult for me to work with guys who were inexperienced and some of the guys couldn't participate, they didn't understand what it is; whether it is a business or what... So I ended up pulling out because we started at a wrong foot… we had to hire people to sort the material at the MRF. They didn't even have money to pay the guys. Many others pulled out after me.*
>
> *(Buyer #3 Robinson Deep, 25/10/16)*

Another interviewee participating in the separation at source programme commented:

> *There are different companies here and I work for Dieryan… and our bosses are at the landfill, the workers (including me) are about seven, with three bosses. The bosses are basically the owners of the cooperatives, they are the ones that work at the landfill and I am left here in charge*

(Cooperative worker #4 Robinson Deep, 27/10/2016)

Apparently, reclaimers communicated their challenges to Pikitup. As stated by one of the reclaimers:

> *We talked to Pikitup and told them our challenges but they couldn't meet our demands … they told us "the actual programme now has not started, now we just wanted to see what is going on"… I then realised it is a case study, so why didn't they tell us it's a case study so that we don't stop whatever we were doing… we can have one foot on the one side and another on the other side… so that is when I decided that no [I can't participate in a case study] cause my time, I won't get this time again.*
>
> *(Reclaimer #12 Robinson Deep, 21/11/16)*

This statement was confirmed by other reclaimers who mentioned that:

> *…we went to Pikitup Head office and told them what was happening…*
>
> *(Reclaimer #5 Robinson Deep, 27/10/2016)*

The comments made by reclaimers demonstrate that the programme reclaimers were simply not interested in the pilot project rolled out by Pikitup. Hence, the reclaimers pulled out of the programmes because they were told the integration programmes were still a pilot (Reclaimer #12 Robinson Deep, 21/11/16). This presented even more reason for reclaimers to stop participating in the programmes as they were not willing to jeopardise their livelihood for something they were not sure would succeed.

It is worth noting that stakeholder engagement in the initial stages of the programme was not done in a manner that encouraged the participation of reclaimers by engaging them in designing the programme (Reclaimer #12 Robinson Deep, 21/11/16). Rather, reclaimers raised the concern that the programme was somewhat imposed on them without them being given a choice to make any contributions to the programme (Reclaimer #6 Robinson Deep, 28/10/16). One of the respondents stated that:

…we were told what to do actually, it wasn't our choice. It was not someone who woke up in the morning and thought, look, let me start something on my own. So it's like forcing someone into something he doesn't understand. So for me it never worked and for the other guys it never worked.

(Buyer #3 Robinson Deep, 25/10/16)

Although reclaimers' own understanding of integration was/is not entirely aligned with that of Pikitup, they were drawn into participation by the idea that the programme would transform their work and life as a whole (Reclaimer #8 Robinson Deep, 28/10/16). But, since the terms of participation were imposed on them – that is, organise into cooperatives and collect from house to house - reclaimers felt that they were compelled into something they did not fully understand and forced to join cooperatives (Reclaimer #12 Robinson Deep, 21/11/16). This is why reclaimers and the programme itself faced many challenges in participation. In this model that was imposed on them, they experienced shortcomings.

Reclaimers have mentioned that the programme was not beneficial for them as they experienced more loss than gain. Due to the confluence of factors discussed in the previous section, they felt that it was not beneficial. Although S@S ended up not benefiting reclaimers, the common understanding among reclaimers and Pikitup officials is that reclaimers were supposed to be the drivers of the programme. The City does not pass legislation but operates using by-laws, agreements, and regulations which guide them on how to manage solid waste, yet these are inadequate in addressing the issue of reclaimers (EISD Waste #2, 12/12/16). This is why integrating reclaimers in the City has been a challenge.

6.4. Reclaimers' understanding and perceptions of integration

Based on the findings, there is no clear, predefined understanding of "integration". When asked what integration means, different individuals answered according to their own understanding. The following are some of the responses received:

Integration for me was an opportunity to become better.

(Reclaimer #9 Robinson Deep, 21/11/16)

… integration is working together with one goal in mind

(Reclaimer #14, Robinson Deep 24/11/16)

6.4.1. Integration as capacity building

Based on the above understandings and other responses provided by reclaimers, they perceived integration as receiving help from the government. According to reclaimers, assistance is provided in an attempt to improve the working conditions of reclaimers working at landfill sites since they work under awfully bad conditions (shown in figure 13). This, for them, meant that the City would embark on a journey of regularly training them and ensuring that they create sustainable livelihoods by means of collecting and recycling materials other than working at a landfill site.

This echoes one of the models of integration identified by Godfrey *et al.* (2016) and Paul *et al.* (2012) which depicts formalisation of reclaimers through capacity building. Moreover, they conceptualise integration as assistance received from different spheres of government to help them achieve their full potential within the sector while ensuring that their livelihoods are sustainable. This kind of integration as viewed by reclaimers links with Kashyap & Visvanathan's (2014) model of integration through institutionalisation, where reclaiming is made a common practice and reclaimers are capacitated, recognised and work in better conditions.



Figure 13: The [Informal] Workplace

Photo: Maite Sekhwela (researcher)

However some of the reclaimers elucidated that integration as a process is confusing, as the programme that has been implemented is different from what they had initially expected.

6.4.2. Integration as becoming a boss

In spite of their autonomous nature, the majority of reclaimers viewed integration as a process of assisting reclaimers to work in unity in collecting recyclables. One important finding regarding integration is that some reclaimers are still collecting recyclables at the landfill site while they 'own' cooperatives (Buyer #3 Robinson Deep, 25/10/16). Reclaimers received the trucks from Pikitup and all the support required from EISD and Pikitup. However, reclaimers claimed that they were being exploited by BBCs in that the money they received when selling their recyclables was not matching the tonnages sold, such that the money was insufficient to meet their own daily needs (Reclaimer #6 Robinson Deep, 28/10/16). Also, due to a disconnected understanding of integration and what it aimed to achieve, reclaimers hired community members to participate in S@S, thereby becoming bosses (Pikitup #1 Robinson Deep, 23/11/16). Employees in one of the cooperatives raised the same concern of being paid inadequately. It is therefore evident that reclaimers also became exploiters while they

themselves worked at the landfill. This presented a challenge to S@S because they are threatening the success of the programme.

6.4.3. Integration as recognition

For the contribution that reclaimers make towards waste management and increasing landfill airspace, reclaimers felt that they are not being given enough credit since they are individuals who started the waste recycling industry (Reclaimer #9 Robinson Deep, 25/10/16). Thus they felt that they deserve to have recognition from the government for the work they do. While the City is focusing on the monetary value they stand to gain, reclaimers across the country are saving the municipality landfill airspace and in turn saved between R309.2 million and R748.8 million in 2014 alone through the work that they do (Godfrey *et al.*, 2016). Reclaimers, being the pioneers of the recycling economy, stated that integration should begin with the government recognising them. When asked what recognition means to them, reclaimers stated that they want to be registered, provided with a form of identification (identification cards), offered PPE on a monthly basis, better working conditions and access to an operational MRF (Reclaimer #3 Robinson Deep, 25/10/16).

The responses from reclaimers illustrate that reclaimers viewed integration as the City recognising them as the experts of the waste industry and treating them as such. This meant that they would be moved out of the landfill to provide them with better working conditions (by collecting on kerbside), PPE, and an income (Reclaimer #6 Robinson Deep, 28/10/16). But the model of organising reclaimers into cooperatives was not how they perceived integration would be.

6.5. Foreign migrants at Robinson Deep

Among reclaimers at the landfill site, there are some reclaimers who are immigrants who came to South Africa to look for employment. Due to the lack of employment opportunities, they ended up working at the landfill in order to ensure that there is sufficient provision for their families (Reclaimer #3 Robinson Deep, 25/10/16). Undocumented reclaimers interviewed are not aware of integration programmes and have no idea what integration is. Even though the foreign reclaimers reported that South African reclaimers work well with them, the general response from migrants was

that they feel that their experience in the landfill is related to some form of exclusion by the government. However, they expressed their interest in being integrated.

Foreign reclaimers interviewed felt that the integration programme at Robinson Deep is exclusionary, as foreigners were not included. That is, foreign reclaimers felt that they were not being told about anything; all the projects that have ever happened at Robinson Deep disregarded their existence. When asked about how they interpreted “exclusion” and “disregard”, they expressed that they are not being taken care of and are dependent on information provided by fellow reclaimers at the landfill who are South Africans to update them on what it is happening (Reclaimer #16 Robinson Deep, 24/11/16).

Although unaware of what integration programmes entail, reclaimers who are foreigners developed their own understanding of integration that they would be willing to participate in (Reclaimer #11 Robinson Deep, 23/11/16). Yet, interviewees indicated that providing the right documentation for integration is a challenge for some of them (Reclaimer #2 Robinson Deep, 24/10/16).

6.6. Conclusion

In light of the idea that integration can take many forms, as discussed in Chapter Two, it is important to bear in mind that in the absence of a formally communicated definition of what integration is and what it entails, “understanding” of the term carries great potential to jeopardise the success of integration programmes. As discussed, the imposed conditions of integration programmes at Robison Deep led to the shortcomings of the programmes described in section 6.3. It has illustrated that the approach undertaken by Pikitup to include reclaimers in kerbside collection of recyclables does not work for cooperatives as it leads to participants not making any profit. It is important to also realise that the competition between different groups of reclaimers was due to the fact that landfill reclaimers were integrated in the programme and were required to collect on kerbside. Yet, kerbside reclaimers were not integrated in the programme. Thus, the programmes did not benefit reclaimers and eventually they went back to work at the landfill. Despite the fact that reclaimers have been negatively affected by integration programmes, they perceive integration as a

good initiative that they would like to be involved in, provided there is proper planning with clear outcomes. However, reclaimers feel that there is no buy-in from the City or themselves to fully commit and participate in integration initiatives. Many reclaimers stated that there is lack of commitment from Pikitup towards ensuring that they are integrated.

Despite their willingness to participate, reclaimers had a sense that they could not fully participate if they did not have any assurance that the programme would be a success. Hence, they felt that if there could first be buy-in from both parties, there would be commitment shown. According to reclaimers, Pikitup has not properly communicated the concept of integration to them. This has brought about confusion and conflicting interpretations of the programme, what it entails, what they are expected to do and how it is supposed to benefit them.

CHAPTER 7:

7. Comparative Analysis

7.1. Introduction

This chapter conducts a comparative analysis of the two case studies. It looks at similarities and differences between the integration projects at Robinson Deep landfill site and Linbro Park sorting facilities. It looks at participants' perceptions in conceptualising integration by drawing responses from different groups of participants, including reclaimers, cooperative members and workers, and Pikitup, SALGA and EISD officials. It focuses specifically on how integration has been conceptualised and the implications of such understandings on integration programmes. This section also analyses the findings presented in Chapter Five and Chapter Six using Berger and Luckmann's (1966) theory of social constructivism, outlined in Chapter Two.

7.2. Section 1: framing and design of integration programme

There are a number of similarities between integration programmes at Robinson Deep landfill site and Linbro Park sorting facilities. As discussed in Chapter Five and Six, reclaimer integration programmes were designed and implemented such that there are similarities (and to some extent, differences). However, it is clear that the integration programme at Robinson Deep was developed in order to incorporate reclaimers in formal waste management practices in that reclaimers were seemingly prioritised in the initiatives. While this was the case at Robinson Deep, reclaimers at Linbro Park had a different experience in that they were not prioritised in the programme since waste diversion from landfill sites seemed to be the main priority from Pikitup's side. Thus, for Linbro Park, objective one was prevailing objective two.

Although the integration programme at Robinson Deep was headed by EISD while the programme at Linbro Park was headed by Pikitup, they took the same form since they were part of the same programme conceptualised by EISD. That is, the approach in both initiatives was similar such that reclaimers and community members were organised into cooperatives and provided with a truck and a driver. The difference between these programmes was that the integration programme at Robinson Deep landfill site focused exclusively on integrating reclaimers in the formal waste sector, although reclaimers ended up hiring community members to work in the programme

as it was not profitable for them. The findings in both cases have illustrated that in these the programmes were not profitable since reclaimers were exposed to competition with kerbside reclaimers who often discreetly collected valuables before integrated reclaimers would do so. Unlike cooperative members or workers working at Linbro Park, reclaimers at Robinson Deep were viewed by the City as important players in the process of diverting waste from landfill sites. In both these programmes, neither reclaimers nor cooperatives members were paid by Pikitup. Rather, as part of the contractual agreement, reclaimers and all participants received their wages from the money they generated from selling recyclables. This is why reclaimers and community members who took part in the programmes decided to quit working as a cooperative and went back to working on their own.

The essence of the findings in both cases is that cooperative model of integration as well as the programme itself was not viable and economically benefiting for experienced reclaimers. This constitutes some of the reasons why reclaimers eventually decided to withdraw their participation from the programme while they hired community members to participate in their stead. Furthermore, the programmes were not economically viable due unregulated competition among different groups of reclaimers resulting from inability to organise reclaimers to be part of the programme.

7.3. Section 2: changing composition

The majority of respondents from both sites indicated that the composition of the cooperatives is constantly evolving. Initially, the integration programme at Robinson Deep was exclusively comprised of landfill reclaimers. But, as discussed in Chapter Five, owing to the challenges that the cooperatives encountered throughout their participation in the integration programmes, reclaimers quit. This resulted in constant change in the structure of the cooperatives formed at Robinson Deep landfill site.

Still, there were some reclaimers who remained members of the cooperatives. Therefore, the cooperatives then comprised of reclaimers who were members of the cooperatives and community members who were workers, managed by reclaimers. Over time, other reclaimers stopped working in the integration programme because it was not enticing for them but remained members of the cooperatives and hired

community members to work. Some of the community members were appointed by reclaimers collectively to oversee the operation of the cooperative while they work at the dumpsite. Hence, the community members participating in the integration programme were managed by a worker in the cooperative. Reclaimers who won the cooperative macro managed the cooperative workers by ensuring that materials collected are sold and workers are paid their wages while they also pay themselves with the profits made.

Conversely, cooperatives that were established at Linbro Park were a composition of community members and reclaimers. However, similar to the case of Robinson Deep, this structure constantly changed. Therefore, by the time of data collection, participants were all new reclaimers. This showed that the programme at Linbro Park was focused objective two (efficiency in service delivery) over objective one (social inclusion). The major difference in the composition of these cooperatives is that reclaimers at Robinson Deep landfill site is that reclaimers left the programme and hired community members whereas the cooperatives at Linbro Park ended up being solely owned and managed by new reclaimers.

7.4. Section 3: implications of integration

Due to the lack of common understanding of integration among reclaimers and Pikitup, there were variations in how both parties conceptualised and constructed the meaning of integration within their social environments (Berger & Luckmann, 1966). The programmes that Pikitup developed as “integration” were not seen as such by reclaimers. As a result, the so-called integration projects had a variety of implications for reclaimers and the implemented programme itself. As it is, integration remains policy concept whose understanding and meaning is not yet predefined.

Pikitup’s integration programmes were was developed and defined without including reclaimers’ experiences, needs and knowledge. This is the main reason why the programmes did not work for reclaimers. Arguably, officials are not aware of the dynamics of reclaiming and being a reclaimer and are not adapted to the needs of reclaimers. Hence, they would not be able to sufficiently articulate integration and the issues it should address without consulting reclaimers. If Pikitup had adopted a

bottom-up approach to find common ground in defining integration and designing integration programmes, all the pitfalls of integration could have been avoided. The top-down approach undertaken by Pikitup in which the programmes were conceptualised and implemented limited their ability to fix the ill-adapted programmes in response to reclaimers' needs.

As noted in Chapter Five and Six, the majority of reclaimers at the two research sites are foreign nationals. This is a concerning issue as they are not permitted to participate in the programme. To emphasise, the integration programme did not address how foreign nationals who are working as reclaimers can be assisted to enable their participation in the integration programmes. Notwithstanding, their inability to consider foreign nationals was unintentional but embedded in the fact that the national funding has conditions which makes it difficult for local government to include foreign nationals. For foreign reclaimers, they felt that this was a form of exclusion where they were excluded from participation in the programmes due to their areas of origin.

One of the biggest concerns brought up as a cause for dissatisfaction is that the programmes lacked practical and experiential knowledge and as such they were not informed before implementation. As a result, Pikitup and the City targeted to move landfill reclaimers to work on kerbside instead of first integrating existing reclaimers on kerbside. This fostered competition among reclaimers and those that are part of the programmes, as discussed in Chapter Five and Six. It also compromised their livelihood and working life. In addition, the system deprived reclaimers of materials from industries and retail places.

Another cause for dissatisfaction among reclaimers and cooperative members and workers (as discussed in Chapter Five and Six) is the impact that integration programmes had on their livelihoods and working lives. Reclaimers expressed great dissatisfaction that while they were cooperative members, they sometimes had to take money out of their own pockets to pay some of the workers since they could not make enough money from selling recyclables. On the other hand, cooperative members at Linbro Park sometimes do not get their wages due to insufficient money. Members mentioned that before they could share the profit money amongst themselves, they had to ensure that the workers are all paid. Since members of cooperatives had to

occasionally take money from their own pockets to ensure that everyone is paid, reclaimers mentioned that integration programmes created more money problems than they had had before.

Although cooperative members at Linbro Park have never collected recyclables informally and are not familiar with how the informal waste sector operates, they shared the sentiments of Robinson Deep reclaimers regarding the payment. According to them, the money that they received was insufficient to cater for their entire livelihoods. According to participants, Pikitup and the City were selfish when designing these projects in not considering them and the sustainability of the cooperatives. This is evident in the comments made by experienced reclaimers, discussed in Chapter Six, and new reclaimers, discussed in Chapter Five, when they highlighted that their challenges were communicated to Pikitup but there is limited ability to address the issues in response to reclaimers' challenge. Again, this depicts that reclaiming on kerbside is not economically sustainable due to competition that exists and Pikitup's inability to regulate it.

This has affected participation levels of reclaimers at Robinson Deep landfill site. Owing to reclaimers' desire to pursue what Millar (2014) refers to as 'relational autonomy', reclaimers felt that they could not participate in the programme because their participation was attached to "unfair" conditions from the City. This was so since reclaimers felt that integration was imposed on them. In the reclaimers' view, this jeopardised their working life and the sustainability of their work and working relationships (see Chapter Six). As a result, they left the cooperatives to work at landfills in order to continue having a degree of control over their work. Obversely, cooperative members and workers at Linbro Park sorting facility faced the same issues, but they persevered regardless. This is based on the fact that they have never worked as reclaimers before. Therefore, they are unsure or have no clue of the dynamics of working informally as a reclaimer and the returns it usually yields.

The challenge also lies with the fact that there was no engagement on the conceptualisation and implementation of the programmes and its challenges before the actual roll-out. Most reclaimers felt that they were worse off when they participated in the integration programmes compared to when they were working independently at

the landfill or kerbside. As presented in Chapter Five and Six, this is one of the reasons reclaimers decided to go back and work at the landfill. This is a main reason that integration programmes initiated at landfills faced many setbacks and eventually collapsed. Due to different understandings of integration and the form it is supposed to take, the programmes appeared to have done more bad than good to reclaimers. To elaborate, due to the top-down approach employed in the design of integration, the programmes that were introduced as part of integration were not suitable for reclaimers.

Most importantly, integration programmes did not have any rules for, or platforms of engagement with, the reclaimers. Thus the design and implementation of the programmes had many gaps and unforeseen pitfalls in the reclaimers' contexts. This highlights the importance of engagement and consultation with relevant stakeholders in the design and implementation of projects. It also highlights the importance of rigorously and extensively including reclaimers in the process of designing integration. Approaching integration in this manner will enable reclaimers to participate in decision making and establish what integration means within their context.

Above all, the implications that emanated from integration programmes are embedded in the design of the programmes. Before the implementation, there was no identification of the key players and their roles within the industry and integration process. Therefore it was not clear who was supposed to be participating in the programmes and who had the right to collect recyclables from households. This was a cause for mistrust between government and business, business and reclaimers, and government and reclaimers. Reclaimers feel that the government is unable to relate to their personal experiences and motivations for working at the landfill. This constructivism and the experiences of reclaimers have resulted in resistance from the reclaimers as they feel that they cannot participate in the programmes if the precariousness of their labour is not taken into consideration.

7.5. Section 4: the theory of integration versus practice and understanding

Although municipalities in South Africa are attempting to integrate reclaimers, there has not been a comprehensible definition of what integration means and what such integration entails, as discussed in Chapter Four, Five and Six. Based on the fact that reclaimer integration was not adequately conceptualised by EISD and Pikitup before the implementation of the programmes, the theory of the programme as outlined in policies and strategies differs from what has occurred on the ground (in Robinson Deep and Linbro Park) and in practise, as discussed in Chapter Five and Six. The different conceptualisation of integration by these different groups can be explained by drawing on social constructivism.

Drawing on Berger and Luckmann's (1966) work, which explains the construction of social reality based on social interactions and human agreements, it is clear that the meaning of integration varies among different groups of individuals based on their social settings. Most importantly, its meaning is based on the end results of integration that different parties want to see and the power and influence that certain parties have to enforce their understanding. Currently, there is no common position amongst reclaimers, the City and Pikitup on what integration means.

Based on social realities and knowledge of their social environment (Kim, 2001; Berger & Luckmann, 1966), reclaimers at Robinson Deep landfill site expressed a different understanding of what integration might mean. Noteworthy is that cultural, political, economic and social contexts influenced the way in which integration is understood by reclaimers. The understanding of integration as capacity building, becoming a boss and being recognised links with the different models discussed in Chapter Two. Although variously defined, reclaimers perceived integration as empowerment and recognition. This form of integration concurs with the models of integration identified by Godfrey *et al.* (2016) which helps to build capacity amongst reclaimers.

It is worth noting that Pikitup and City officials did not properly communicate Pikitup's meaning of integration to reclaimers. Based on socially constructed knowledge and meaning (Amineh & Asil, 2015; Berger & Luckmann, 1966), integration according to

reclaimers is perceived as an opportunity to better themselves in the recycling business through assistance and support from Pikitup. This illustrates conceptualisation of integration such as outlined by Kashyap and Visvanathan (2014) as institutionalisation, where different sphere of government and NGOs commit to assist reclaimers and ensure that they have financial support and any other support they might require. Yet the shortcomings presented in Chapter Five and Six elucidate that Pikitup's integration programmes face challenges due to misconceptions as well as different understandings of integration.

Reclaimers at Robinson Deep and cooperative members and workers at Linbro Park conceptualised the process of integration by concluding that Pikitup only cares about the tonnages they divert from landfill sites. Considering that statement, it can be concluded that the perceptions of reclaimers and members and workers of Talefane cooperative and their resistance to integration is founded on the attitude and level of commitment from Pikitup, which are contradictory to the aspirations of reclaimers. Reclaimers expressed that they do wish to be integrated; but the ways in which they want to be integrated do not feature in Pikitup's conceptualisation of reclaimer integration. Hence to officials it appears as though reclaimers do not want to be integrated while to reclaimers it appears as though the City does not want to integrate them.

Some of the respondents believed that, in terms of the South African Constitution, no reclaimer is allowed to operate on the landfill site (EISD Waste #1, 25/11/16). Yet, as reflected in Godfrey *et al.*'s (2016) study, the City has been unable to manage this such that there are more reclaimers in landfill sites than at the kerbside. Attempts to formalise the work of reclaimers working at landfill sites and at the kerbside were initiated through waste minimisation programmes, such as separation at source, which are enforced to divert waste from landfill site. Reclaimers stated that integration programmes, S@S in particular, could improve their lives. But this seems like it is going to be a long process since there is still no current definition of what integration is and no clearly defined integration programme to incorporate reclaimers. Generally, the flaws of the programme have overridden the successes.

The challenge of integration was that the definition of integration is a policy concept which has not been clearly defined. Thus, no person has an understanding of integration. However, conceptualisations of integrations among different parties – reclaimers, Pikitup and the City are central around objective one (service delivery efficiency) and objective 2 (social inclusion and empowerment). Still, the definitions were not rooted in an understanding of what a successful integration would look like. As highlighted by Berger and Luckmann (1966), individuals who have the decision-making powers use their power and influence to impose meaning on people who are under their authority. The theory of social constructivism also illustrates that the conceptualisation of integration and reclaimers' and officials' expectations from the programmes were altogether socially constructed. Further, the funding provided by EPWP also aided in the City's conception of integration by attaching conditions to the fund, which was imposed on officials

It can be argued that social interactions shape the realities of individuals whom we interact with, resulting in individuals sharing the same reality based on both parties' expressions. But the meaning of integration was imposed on reclaimers, since officials do not form part of the social milieu of reclaimers. From the perspective of most reclaimers, integration can never be a success if it is to be approached in a way that dictates what they should do because engaging in decision making is a central part of integration for them. For those who have experienced integration, many have distanced themselves and never want to be part of it due to the hiccups. Despite the challenges and failures faced by integration programmes, some reclaimers feel that they can still participate if there are clear plans. Since individuals cannot change reality by simply changing their mind-set (Samson 2015), there are a host of material conditions that need to be addressed for integration to work.

Paul *et al.'s* (2012) and Godfrey *et al.'s* (2016) studies highlight understandings of integration which identify recognition of reclaimers as an important aspect of integration, where reclaimers are offered capacity building and skills development. Due to this conception and differences in reality (Berger & Luckmann, 1966), the feasibility, or lack thereof, of the programmes was realised by reclaimers and they eventually quit. In this case, considering that reclaimers are autonomous agents, it is indeed essential to consider the social environment and setting of reclaimers and all

other stakeholders to construct meaning based on human agreement (Amineh & Asil, 2015; Berger & Luckmann, 1966). Integration programmes based on this understanding could acquire buy-in from both reclaimers and government to fully participate in the programme.

The work of reclaimers is undoubtedly precarious. For starters, reclaimers and members and workers of Talefane cooperative have no job security, no sense of social status, they face prejudice, most people misunderstand the work that they do, they are treated unfairly and they have no stable income. As a result, they are mostly secretive regarding the work that they do. This draws attention to the element of precariousness of labour conditions (Millar, 2014). Relational autonomy ascertains that reclaimers have been working on their own and at their own pace. Reclaimers have issues with the idea of being indebted to one person or a company. As noted already, the landfill is their comfort zone and their place of refuge. Hence, they are doubtful and have fear that should they be integrated and work for the City or any other company, they will be robbed of their wages. As reflected by one of the Pikitup respondents noting that:

> *… most of them are highly skilled, if you give them a job, they will not survive. They will not cope with the job because they are used to the freedom of time and working at their own time and the salaries they are making.*
>
> *(Pikitup #1 Robinson Deep, 01/12/2016)*

The perception shared by kerbside members and workers of Talefane cooperative regarding the impacts of Pikitup's integration programmes differs from that of reclaimers at landfill site. These differences were brought about by different working spaces and conditions. With respect to Talefane cooperative members and workers, their participation was encouraged by their unemployment prior to participation. As such, they did not have a job to return to. Moreover, since they never worked as reclaimers and had no experience in that regard, they did not have the skills and knowledge to start working independently.

Even though Talefane members and workers have no informal or formal experience in the waste sector, they expressed dissatisfaction regarding the money they receive. They stated that it only allows them to buy food for their households and then it is

finished. This is why they conceptualised integration as employment where they expect Pikitup to ensure that they receive reasonable full wages at the end of the each month. This kind of conceptualisation does not link with any models of integration that have been developed by scholars. In spite of how the programme has benefited community members, as it has created job opportunities, there are challenges that members and workers of Talefane cooperative encounter in sustaining their livelihood.

Berger and Luckmann (1966) emphasise that knowledge is not transmitted but rather constructed. To illustrate that knowledge is constructed, different people in different contexts participating in the same programme have experienced the programme differently. To elaborate, while reclaimers at the landfill hold the view that being involved in integration programmes changed their livelihood for worse, Talefane cooperative members and workers expressed that it has impacted positively on their livelihoods. Hence the former went back to collect recyclables at the landfill site. However, they acknowledge that the programme is still new and cannot be dismissed as a failure yet. Most reclaimers are breadwinners at home in that they strive to make ends meet to enable them to support their families. In spite of the bad working conditions experienced, reclaimers view the landfill as the only place where they can get sufficient recyclable materials.

The majority of reclaimers mentioned that although they work in a non-conducive environment, they cannot quit their job because it will take them many years to get employment considering the current unemployment rate in South Africa (Reclaimer #12 Robinson Deep, 25/10/16). Sadly, circumstances do not allow them to quit because they still have to fend for their families and sustain their livelihood. For this reason, reclaimers distance themselves from anything that threatens their livelihood since they are used to receiving money on a daily basis.

Contrary to expectation, reclaimers mentioned that the pitfalls and shortcomings of integration programmes cannot only be attributed to Pikitup or the City. Reclaimers acknowledge their part in the challenges the government encountered in the implementation of the programmes. They nonetheless stated that their lack of commitment to collaborative work contributed significantly towards the shortcomings

of the programmes. It appears that between Pikitup and reclaimers, there was no agreement on any sort of strategy that guided how the cooperatives should operate.

Although reclaimers acknowledge that the programmes are designed to benefit them, they did not bother to go an extra mile to devise their own strategies which could guide them in their operations. Nevertheless, reclaimers mentioned that if they had any better opportunities, they would stop working at the landfill. It seems that reclaimers seek job security above all else. The majority of the reclaimers said they would definitely participate in integration should there be a specific and solid strategy on how the programmes would work and how they would benefit from them. This is because they are also aware that the working conditions at landfill site are hazardous compared to working on the kerbside.

7.6. Conclusion

The informal waste economy has existed within the practices of waste management for many years. This is what has led to the current state and growth of the informal waste sector. Arguably, integrating reclaimers cannot be imposed on them by having City officials impose their understanding on reclaimers. The work that reclaimers are currently doing is informal and can perhaps easily be criminalised. However, this should not happen by any means as it will destroy many jobs and further push the marginalised and vulnerable individuals into poverty. Based on commitments made in different policies and plans (see Chapter Four), integration of reclaimers needs to happen in order to secure individuals' jobs.

Above all, the shortcomings of integration programmes are embedded in the fact that plans to integrate reclaimers were not communicated to them. Rather, since the City has the power to enforce its understanding on reclaimers, finalised decisions were imposed on the reclaimers and they were told what to do. Given the fact that reclaimers are autonomous agents, it appears as though they were forced into doing something that they do not understand. Reclaimers alluded to the fact that integration is a good idea from the government, but the process needs to focus more on consultation and developing a clear definition and meaning of what integration is and the expected outcome.

Based on the different understandings of integration, this study takes the stance of, and adds to the model of, integrating reclaimers through institutionalisation. This kind of approach features recognition of reclaimers within the formal waste sector, involving reclaimers in the practices of waste management while acknowledging the significant contribution they make towards the sector. This includes not only applying a bottom up approach towards integration, but also involving reclaimers in decision making throughout the process.

CHAPTER 8:

8. Conclusion

In the absence of a clear understanding of what integration means and a coherent approach from the City, the study aimed to explore integration initiatives implemented by Johannesburg's Environment and Infrastructure Services Department (EISD) and Pikitup. The study explored the implications of integration when there is no clear understanding. Further, it focused on investigating who is prioritised in the process and the objectives the programmes aim to achieve.

This study problematised understanding of integration and the implications that integration has for different actors when there is no shared understanding of what the term means and what form it is supposed to take. The study demonstrated that, because Pikitup designed integration initiatives based on its own understanding without including reclaimers' knowledge and experience, the programmes posed negative effects for reclaimers, were not economically sustainable and created new forms of competition, which could have been avoided if Pikitup had adopted a bottom up approach to both defining integration and designing integration projects.

Chapter Two of this study identified and presented different models and understandings of integration and mapped the positon of reclaimers in the waste value chain. It also showed that reclaimers make notable contribution towards waste management through the informal sector. Unfortunately, they are not recognised. It also provided the theoretical grounding for this study and the lenses through which data was analysed. Other significant findings are illustrated in Chapter Four which shows that there's no clear direction or mandate in South Africa's legislative route towards integration. Its legislation, policies, plans and by-laws depict that South Africa's legislative status in terms of recognising reclaimers in the informal waste sector is void and does not substantially incorporate reclaimers.

Most importantly, Chapter Five and Six discussed integration programmes and illustrated that they have greatly affected the work of reclaimers and their livelihood. The chapters have illustrated that since there was no clear understanding of integration, the programmes took different forms. Consequently, the theory of the

programmes was different from the actual practice. This illustrated that integration is a socially constructed and contested concept. Moreover, the different forms the programmes took illustrate how social environments, power and influence can significantly impact negatively on the manner in which integration programmes are shaped. Above all, this study, through Chapter Seven, highlighted that reclaimers' participation in integration programmes implicated their livelihood and working lives: seemingly, the programmes caused more harm than good.

This study documented different and often inconsistent understandings of integration among different groups of people. Clearly, the study has demonstrated that there are different visions of integration which shaped the actual integration projects implemented by the City and Pikitup. The understanding of integration and the overall vision for the City regarding integration as discussed in this study illuminates a blurred focus on both objective one and objective two – which is to empower reclaimers and to ensure that there is service delivery efficiency within waste management. Although the understanding and conception of integration is inconsistent, the implemented programmes demonstrate that vision and focus of integration within the City is more focused on recognition and empowerment of reclaimers while growing the waste sector in order to enable diversion of waste from landfill sites.

Similarly, reclaimers' understanding and vision of integration is reflected in objective one, focusing on being empowered and recognised as important role players within the waste value chain. Both experienced and new reclaimers have different understanding of integration. Regardless of the differences, their overall vision is to have programmes that work and benefit them, programmes that are focused on improving their working conditions, livelihood and increase their income. Thus, they envision integration in light of economic sustainability and viability so that they are able to increase profits.

One of the most important findings to emerge in this study is that meaningful and progressive integration of reclaimers must be developed in a manner which depicts fairness. As per the Brazilian experience and Dias' (2011d) understanding of integration, the inclusion of reclaimers in decision making is central to successful and meaningful reclaimer integration. Reclaimers should be provided with a platform to

express themselves in whatsoever way they wish. Hence this study and other studies by different scholars (Godfrey *et al*., 2016; Blaauw & Schenck, 2011; Blaauw *et al.,* 2016; DEA, 2012; Samson, 2010b) illustrate that there is a dire need for the City to organise and facilitate stakeholder engagement workshops in order to understand reclaimers' immediate needs.

Most importantly, even though the City is beginning to recognise the importance of recycling and moving waste up the waste value chain, reclaimers are the individuals who have been operating in the industry for many years. In fact, they established the recycling industry. The current data in this study illustrated that waste minimisation programmes implemented by Pikitup (that is, S@S and Jozi@Work) did not address the challenges that are currently encountered in the informal waste sector by virtue of not prioritising reclaimers. Therefore this study highlights that waste minimisation programmes need to focus on improving reclaimers' working conditions and assist in maintaining the existing jobs that reclaimers have created themselves. The results of this study show that programmes should not focus on creating new employment to community members, as reflected in the findings, but should focus on strengthening and improving the existing jobs of reclaimers.

The empirical findings of this study contribute to existing knowledge of integration. Moreover, the exploration of integration in this study has extended knowledge on how social environments influence perceptions of reality and the manner in which power and influence affect integration programmes. This finding provides insights on how integration has been understood within the City by all different parties. Owing to power relations and influences, the City's conceptualisation and understanding of integration was implemented without consultation with reclaimers. As a result, integration had detrimental effects on reclaimers' livelihoods and working life as well as on the success of reclaimer integration and S@S programmes.

For integration to succeed, Pikitup also needs to acknowledge that individually, they will not be able to reach the needs of reclaimers without any consultation or stakeholder participation. Integration projects cannot meet and satisfy the needs of reclaimers if the programmes are not informed by people on the ground. The study emphasises that organisations developing integration programmes (whether

government or NGOs or the private sector) should not be narrow minded but must acknowledge and recognise that reclaimers can also be agents. Moreover, reclaimers are knowledgeable of the complexities related to sorting recyclable materials (Godfrey *et al*., 2016). If all the stakeholders work in unity, many opportunities can be drawn out from the waste value chain to benefit reclaimers and the City at large.

Based on the outcome of integration programmes and the processes undertaken to implement the projects, this study strengthens the idea that integration processes must adopt a bottom up approach (Dias, 2011c) to ensure that reclaimers are integrated in a manner that both parties – reclaimers and the City – will benefit from. A bottom up approach will focus on how reclaimers want to be integrated and what their role will be in waste management throughout the integration process. The current data provided by this study highlights the importance of integration and that it does not only require reclaimers to be involved in designing programmes, but also in deciding what integration will mean in that context. Not only will this benefit reclaimers, but involving informal reclaimers in decision making regarding the collection of recyclable materials and putting them in the recycling value chain will be beneficial for the success of integration.

This study conceptualises integration and adds to the different models that were discussed in literature in order to develop the meaning of integration. It has revealed that integration aims to achieve certain objectives and that the government need to understand that reclaimers are invariably working on kerbsides and at landfill sites. Commitments made in policies and plans must be taken into account in order to fast track the integration process and ensure that reclaimers are integrated in municipal waste systems. Significantly, plans to integrate reclaimers must take into account the fact that reclaimers are autonomous agents, while prioritising sustenance of reclaimers' livelihood. One way to do this is to prioritise and focus on issues that are prioritised by reclaimers and to have a clear long term vision regarding reclaimer integration.

The relevance of the literature reviewed in terms of integration is supported by the current study which illustrates that reclaimers feel the need to be recognised, above all else (Abizaid, 2015; Chikarmane, 2012; Dias, 2011d; Samson, 2010c). This is

based on the fact that reclaimers felt that, although the government is attempting to integrate them, there is significant lack of commitment towards that course. It is important to note that integration can take any form, but it has to start with institutionalisation – the government recognising the contribution that reclaimers makes towards waste management. So, until the City commits to and develops a fully-fledged integration programme that focuses on and prioritises reclaimers, the City will continue to have to deal with issues of waste management and reclaimers working at landfill sites and kerbsides.

This study concurs with those of Godfrey *et al.* (2016) and Blaauw *et al.* (2015) and highlights that until the government realises and acknowledges that reclaimers are the experts in the waste recovery industry that they are better equipped in the waste sector, and also that officials can learn from them, the foundation of the initiatives will continuously be shaky. The study has also depicted that willingness is an important aspect in the process of integration. This needs to be realised by all actors involved in the process. If there is only one party that is willing to actively engage in the initiative while the other does not take into consideration the challenges and issues that are raised, the success of the programme will indefinitely be compromised.

This study argued that the meaning of reclaimer integration as presented by participants differs due to widely varied milieus and experiences. The empirical findings of this study illuminate the need for further studies on integration to be attentive to the social construction of “integration”. This study also illuminates the need to focus on how municipalities impose their own understanding of integration on reclaimers and how these negatively affected reclaimers and in turn hindered the achievement of the City’s goals. This also highlights the need to conduct a study similar to this one at a national level.

Since the understanding of integration is not shared among reclaimers who are being integrated and the drivers of the initiatives, to assist the process of integration, further academic research could explore and quantify the contribution reclaimers make towards waste management. An extensive focus on the potential of organising reclaimers into cooperatives is essential in integration programmes. But allowing reclaimers to develop their business models and influence decision making in how

they would like to be integrated could be helpful. A more fruitful area for further academic pursuit would be to supplementarily explore models of integration that can be used to integrate reclaimers in the City of Johannesburg. If different models are explored, integration holds great potential for reclaimer recognition and acknowledgment. Above all, it will provide a platform to make their voices heard.

Furthermore, it would be interesting to carry out further studies to explore whether integrating reclaimers by organising them into cooperatives is the only model which projects successful integration. Also, whether there is no model that can work better than cooperatives. Moreover, it would be beneficial to document how reclaimers framed and presented their concerns to Pikitup and the nature of reclaimers' demands.

Arguably, in order to develop a common understanding of integration, there needs to be buy-in from different actors, being reclaimers and City officials. Since reclaimers are currently unable to fully commit to integration programmes while the City has not explicitly committed to prioritise reclaimers in integration programmes, areas worthy of academic research may significantly explore how the City can acquire buy-in from reclaimers. Further research can also be undertaken to explore what kind of communication line can be established between reclaimers and the government in the process of integration to ensure that there is buy-in from both parties. This will also contribute positively towards establishing the best model for social inclusion and integration.

This study contributes to previous studies of integration by looking at how different parties understand integration. Also by highlighting that with varying understandings of what integration means for different parties, it is not surprising that integration projects have been shaped differently by different people. Given that integration was not sufficiently conceptualised in order to develop a clear understanding of that it means among all parties, different people developed their own understanding of what integration is.

Power and influence were identified as significant factors in integration programmes. Further studies could focus more on power relations and influence to determine how they impact on integration programmes. This study highlights that the outcome of

integration programmes would be different if all parties who are part of the process shared the same power, as it is evident how, within each different group (that is, reclaimers and officials), the understanding of integration was interlinked. Yet officials, by virtue of having more power, imposed their understanding on all participants. Above all, this study establishes that not only does integration require reclaimers to be involved in designing programmes, but it is essential that they are provided with the platform and allowed to decide what integration will mean in their context.

CHAPTER 9

9. References and sources

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9.3. List of Interviewees

Cooperative Members:

Talefane Cooperative Member #1. Talefane Cooperative. Interviewed by Maite Sekhwela, on 14 September 2016, at Linbro Park sorting facility

Talefane Cooperative Member #2. Talefane Cooperative. Interviewed by Maite Sekhwela, on 14 September 2016, at Linbro Park sorting facility

Talefane Cooperative worker #1. Talefane Cooperative. Interviewed by Maite Sekhwela, on 14 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #2. Talefane Cooperative. Interviewed by Maite Sekhwela, on 14 September 2016, at Linbro Park sorting facility.

Talefane Cooperative Worker #3. Talefane Cooperative. Interviewed by Maite Sekhwela, on 14 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #4. Talefane Cooperative. Interviewed by Maite Sekhwela, on 14 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #5. Talefane Cooperative. Interviewed by Maite Sekhwela, on 15 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #6. Talefane Cooperative. Interviewed by Maite Sekhwela, on 15 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #7. Talefane Cooperative. Interviewed by Maite Sekhwela, on 16 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #8. Talefane Cooperative. Interviewed by Maite Sekhwela, on 16 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #9. Talefane Cooperative. Interviewed by Maite Sekhwela, on 16 September 2016, at Linbro Park sorting facility.

Talefane Cooperative worker #10. Talefane Cooperative. Interviewed by Maite Sekhwela, on 16 September 2016, at Linbro Park sorting facility.

9.2.2. Reclaimers

Reclaimer #1. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 24 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #2. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 24 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #3. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 25 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #4. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 25 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #5. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 27 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #6. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 28 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #7. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 28 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #8. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 28 October 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #9. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 25 October 2016 and 21 November 2016, at Robinson Deep Landfill Site, Booysens.

Reclaimer #10. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 21 November 2016, at Robinson Deep Landfill Site, Booysens

Reclaimer #11. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 23 November 2016, at Robinson Deep Landfill Site, Booysens.

Reclaimer #12. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 21 November 2016 and 22 March 2017, at Robinson Deep Landfill Site, Booysens

Reclaimer #13. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 24 November 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #14. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 24 November 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #15. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 24 November 2016 at Robinson Deep Landfill Site, Booysens.

Reclaimer #16. Robinson Deep Landfill Site Reclaimer. Interviewed by Maite Sekhwela on 24 November 2016 at Robinson Deep Landfill Site, Booysens.

Focus Group Discussion

Cooperaive workers or members #23 – 28. Linbro Park sorting facility cooperative. Facilitated by Maite Sekhwela on 19 October 2016 at Linbro Park sorting facility, Marlboro. Duration: 30 minutes

Reclaimers #17 - #22. Robinson Deep Landfill Site Reclaimers. Facilitated by Maite Sekhwela on 28 November 2016 at Robinson Deep Landfill Site, Booysens. Duration: 15 minutes

Buyers

Buyer #1. Middleman. Interviewed by Maite Sekhwela on 25 October 2016 at Robinson Deep Landfill Site, Booysens.

Buyer #2. Middleman. Interviewed by Maite Sekhwela on 25 October 2016 at Robinson Deep Landfill Site, Booysens.

Buyer #3. Middleman. Interviewed by Maite Sekhwela on 25 October 2016 at Robinson Deep Landfill Site, Booysens.

Pikitup, EISD AND SALGA Officials:

Pikitup Head Office #1, Waste Minimisation Unit. Group Meeting held on 29 June 2016 and interviewed by Maite Sekhwela, on 17 November 2016 at Pikitup Head Offices, Braamfontein.

Pikitup Head Office #2. Waste Minimisation Unit. Interviewed by Maite Sekhwela, on 28 November 2016 at Pikitup Head Offices, Braamfontein.

Pikitup Depot #2. Pikitup Separation at Source Programme. Interviewed by Maite Sekhwela, on 01 December 2016 at Pikitup Marlboro Depot, Marlboro.

Pikitup Depot #1. Pikitup Separation at Source Programme. Interviewed by Maite Sekhwela, on 18 October 2016 and 22 March 2017, at Pikitup Marlboro Depot, Marlboro.

Pikitup #1 Robinson Deep. Robinson Deep Landfill site Management. Interviewed by Maite Sekhwela, on 23 November 2016 and 02 March 2017, at Robinson Deep Landfill site, Booysens.

EISD Waste #1. Waste Minimisation Unit. Interviewed by Maite Sekhwela on 25 November 2016, at Environment and Infrastructure Services Department, Braamfontein.

EISD Waste #2. Waste Minimisation Unit. Interviewed by Maite Sekhwela on 12 December 2016 and 22 March 2017, at Environment and Infrastructure Services Department, Braamfontein.

SALGA #1. Waste Specialist. Interviewed by Maite Sekhwela on 12 December 2016, at Braamfontein.

ADDENDUM

Interview Guide

Introductory questions

- Which of Pikitup's integration projects are you part of?
- How long have you been a reclaimer?
- Do you belong to a cooperative?

1. Questions specific for Reclaimers

- Tell me about yourself – where you are from, what you do, for how long and why you're doing it
- What kind of waste materials do you reclaim?
- What do you do with your materials after reclaiming?
- What does integration mean to you?
- What is your attitude towards integration?
- Has your working life changed since integration? If yes, how?
- How has your work ethic been before and after integration?
- Has your livelihood changed since integration? How?
- Has your life changed in any way since you have been integrated in Pikitup's project? Explain.
- What do you think are the factors that need to be accounted for when developing integration projects?
- How do you think government policies on waste management relate to you as a reclaimer?
- Would you consider the current Pikitup integration projects to be a success or a failure, why?
- In your opinion, what should inform integration processes?

2. Questions specific for Pikitup and CoJ

- What does integration mean to you?
- How are reclaimers integrated in municipal waste management strategies?
- What has been your approach towards integration?

- How has your working relationship with reclaimers been since integration?
- After integration, has waste management service provision in the CoJ changed? Explain.
- Explain whether or not integration plans were communicated to reclaimers before development and implementation.
- What are the factors taken into consideration when planning integration projects?
- What are the factors that need to be accounted for when developing integration projects?
- You are familiar with different integration projects, which do you think is more appropriate in terms of effectiveness? Why?
- How do you use national government policies to put integration projects in place?
- How do you think policy relates to reclaimers who are integrated but aspire to work in their own terms?
- In your opinion, what should inform integration processes?

3. Questions specific for BBCs

- Tell me about yourself – who you are, what you do, why you do it, how long you've been doing it and what you were doing before this.
- What kind of waste do you buy from reclaimers?
- In what state do you receive reclaimed materials?
- How do you determine the price of the recyclables you buy from reclaimers?
- Do you work with any cooperatives?
- Is it better to buy from individuals or cooperatives? Explain.
- What do you think of Pikitup's integration project?
- How is the working relationship between you and reclaimers?
- What do you think would improve the service?
- In your opinion, what should inform integration processes?
- What are the positives of working at landfill/kerbside?
- What are the negatives of working at a landfill/kerbside?

- What do you think are the successes and/or failures of Pikitup's integration projects?

Focus Group Discussion (guide)

- Introduction
- Explanation of the process
- Logistics
- Laying down of ground rules

Questions

1. Are you fond of your job?
2. What are the positives of working at landfill/kerbside?
3. What are the negatives of working at a landfill/kerbside?
4. What do you like about working as a reclaimer?
5. What do you not like about working as a reclaimer?
6. Have you ever thought of quitting your job? Before and after integration, why?
7. What would you suggest to be implemented to improve working conditions?

Discussion

- Livelihoods and standards of living
- Relationship between men and women (power dynamics)
- Safety, protective and health measures
- Working conditions
- Recognition and respect from Pikitup, BBCs and others