

IMPACTS OF PIKITUP'S INTEGRATION AND PARTIAL WORK FORMALIZATION ON INFORMAL RECLAIMERS: THE CASE OF JOHANNESBURG INNER CITY

By: Lethabo Pholoto (1339937)

Supervisor: Dr Melanie Samson

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ABSTRACT

"Formalizing waste-picking through municipal integration will transform the living and working conditions of informal reclaimers in the country" declared the Department of Environmental Affairs during the Waste Pickers Workshop in October 2015 Pretoria. This study conducted in Johannesburg's inner city evaluates the progress made in attaining the informal relaimers' work formalization intervention being implemented through Pikitup's integration programme. This is obtained by analysing the approach adopted by Pikitup when attempting to integrate and formalize the working conditions of informal reclaimers. Insights to the experiences of integration by informal reclaimers participating in and affected by the initiatives were given prime focus in this study to effectively provide an understanding of the impacts of the approach in use. As revealed by the results, the inefficiencies brought about by limited sharing of significant information between various stakeholders has dictated the outcomes of the intervention in this area so far. The study draws perceptions from and contributes to academic literature evaluating work formalization, informal sector integration and waste management strategies particularly in developing cities (Marello and Helwege, 2014; Gupta, 2012; Theron, 2010; Medina, 2007 and Samson, 2009: 2010). Moreover, approaches adopted for both the successful and failed integration interventions in various localities are incorporated. In order to attain validity throughout the study, a qualitative approach was employed along with a sample of eighteen interviews conducted in order to produce this paper.

Keywords: Waste picking, informal reclaimers, integration, formalization, Pikitup

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CHAPTER 1: INTRODUCTION

1.1 Introduction

In South Africa, the National Waste Management Strategy (NWMS) is a legislative requirement of the National Environmental Management "Waste Act" Act No. 59 of 2008 (DEA, 2011:p5), whose purpose is to address and facilitate numerous waste related challenges. Historically, the primary focus of municipal waste management was on collection and disposal of waste (Samson, 2009). This has now developed to a point whereby the municipal and provincial waste management systems have set out strategies to achieve appropriate waste collection standards in every community (DEA, 2011). Recently, this sector has been faced with a challenge to strengthen sustainable waste management methods, particularly material recovery and recycling due to the supposed lack of landfill space in some sites brought about by increased waste generation.

The Department of Environmental Affairs (DEA), at the Waste Picker Workshop in Pretoria in October 2015 stated that "formalizing waste-picking through municipal integration will transform working conditions of informal reclaimers" (DEA Waste Picker Workshop Report, 2015:p10). This is viewed by DEA (2015) as a step towards managing high volumes of waste after quantifying and acknowledging the significant contribution made by informal reclaimers in the formal waste management systems (Gupta, 2012; Theron, 2010 and Samson, 2009).

These affirm the importance of waste-picking and illustrate the necessitated assurance of informal reclaimers to be included in formal interventions relating to waste management in the country (DEA waste pickers workshop report, 2015). Towards achieving its targets of formalizing the working conditions of informal reclaimers, the local government in various municipalities have introduced initiatives designed to help integrate informal reclaimers. This study attempted to better understand the impacts of partial work formalization on informal reclaimers and this was achieved by gaining an insight into their experiences of integration carried out by Pikitup in Johannesburg's inner city. However, the integration approach adopted by Pikitup portrays undesirable circumstances for informal reclaimers who still prefer working informally as they view this approach as another form of exclusion (Samson, 2016).

In the City of Johannesburg (CoJ) municipality, Pikitup (the official waste management service provider responsible for the daily collection of both household and commercial waste

and recyclables) is carrying out the initiatives that incorporate informal reclaimer integration into the municipal waste management systems. With this underway, events perceived subsequently in Johannesburg indicated limited sharing of significant information between Pikitup and the informal reclaimers. This has given rise to the need of examining the methods used by Pikitup (the primary facilitator of the initiatives) when attempting to integrate the informal reclaimers into the formal waste management systems which is the primary focus of this study. To attain in-depth evidence in this study, informal reclaimers (both participating in and affected by) Pikitup's integration initiatives are the primary informants as their experiences of the initiatives helped to comprehend the progress made by Pikitup and the formal solid waste management sector at large.

1.2 Rationale

As the processes of urbanization and modernization increases with development, South African metros have experienced a situation whereby population growth rates exceed the rate of job creation in the formal sector (Whitson, 2011). Marello and Helwege (2014) cited that this situation give rise to the phenomena of surviving by collecting, sorting and recycling what others regard as waste being more relevant to the urban poor. Waste picking, which has been an informal practice contributes immensely to the country's waste and environmental management systems (Samson, 2009; Theron, 2010 and DEA, 2011). Central to this is informal reclaimers who are responsible for the collection of most waste and recyclables generated within urban spaces daily. Lately, reclaimers have been organising collectively (Samson, 2009) throughout the country and to some extent have compelled municipalities to recognize and appreciate the difference they make. This resulted in the idea of "integration" or "inclusion" of informal reclaimers into municipal systems.

The Department of Environmental Affairs (DEA, 2015) stated that formalizing waste-picking will yield good economic, social and environmental benefits and also improve the living conditions of reclaimers who are central to the process. Moreover, integrating reclaimers into formal waste management systems was supposed to have been formulated in a manner which will generate quality jobs and alleviate urban poverty through the extraction of valuable materials out of municipal waste (DEA, 2011). Contrastingly, the current situation of informal reclaimers does not seem to confirm the claim made by DEA with regards to the anticipated outcomes of integration and work formalization in Johannesburg's inner city.

Therefore, carrying out a study that permits an evaluation of how waste management systems are integrating reclaimers and formalizing their working conditions is vital, particularly in a densely populated city like Johannesburg where an increased number of individuals living in poverty see an opportunity in making a living from waste. By understanding waste, waste-picking, waste-pickers and the difference they make in the formal waste management systems from the informal sector, it is easier to comprehend the motives behind the local policy implementation facilitating integration of reclaimers into municipal systems. Conducting this study allows the progress made by Pikitup in integrating reclaimers to be evaluated and investigated. Moreover, in measuring the effectiveness of the approach used by Pikitup to integrate reclaimers, this study permits the experiences and insights of informal reclaimers. These individuals have in most cases been the subject or less considered by decision makers in the proceedings regarding the form of integration appropriate for them. This was to help attain more informed results and to gain guided evidence from both reclaimers participating in and those affected by the integration initiatives.

1.3 Research Aim

Examples of informal sector integration into formal municipal systems, both successful and failed, can be identified from a global context. Implementation of such strategies takes various forms depending on the historical patterns of waste management systems in different cities (Samson, 2016 and Annepu and Mitchell, 2013). This is also guided by the manner in which integrated waste management (IWM) approach to development of effective and sustainable environmental projects is undertaken. For instance, in Belo Horizonte (Brazil), reclaimers were successfully integrated into the formal systems through effective liaison between the municipality and cooperatives (Samson, 2016). In Johannesburg's inner city, a similar strategy is attempted whereby Pikitup as a municipal representative liaise with various cooperatives. However, the manner in which information is shared between the involved stakeholders appears to be ineffective since the informal reclaimers are not part of these cooperatives. Annepu and Mitchel (2013) argue that if there exist one principle to follow, it is advisable to consider the context when attempting a successful integration.

In Johannesburg's inner city, the intervention is carried out in segregation, whereby informal reclaimers whom the initiatives were intended for are continuously excluded (Samson. 2010). According to Samson (2010), their opinions are supposed to be primarily considered in the implementation and decision making stages but in this case they seem to not be appropriated.

This research permitted an evaluation of the advancement made by Pikitup when integrating reclaimers into the formal waste management systems in Johannesburg through exploring the experiences of reclaimers since the integration initiatives' implementation. To achieve this overarching aim, noteworthy information was collected from all involved stakeholders, Pikitup, cooperatives and most importantly the informal reclaimers. This is imperative as it helps comprehend the effectiveness of sustainable integration when formalizing the working conditions of reclaimers and creating quality jobs in the pursuit of combating urban poverty.

The objectives of this study include [in] direct contribution to projects facilitating the development of sustainable reclaimer integration strategies in other areas. Analysis of existing strategies derived from both successful and failed interventions with similar intention guided this study. These helped understand different factors facilitating integration intervention and how participation of different stakeholders is vital in a project aimed at addressing environmental issues and attaining sustainable development.

1.4 Research Question

The overarching question this study was framed to answer is:

How has Pikitup's integration and partial formalization transformed the conditions of reclaimers participating in and affected by integration initiatives?

1.4.1 Research Sub-questions

- a. Who are the reclaimers participating in Pikitup's integration initiatives and how do they perceive the job they do?
- b. What form of integration is Pikitup offering the reclaimers?
- c. How do the reclaimers (participating in and affected by integration initiatives) perceive Pikitup's integration approach?
- d. What are the positive and negative aspects of the approach in use?
- e. What form of integration do the reclaimers prefer?

1.5 Overview of the Report

This section of the study presents a short summary of the previous chapter and subsequent chapters in this report and offers a highlight of different themes covered in each chapter. Below are the summaries presented in point format.

CHAPTER 1: INTRODUCTION-This chapter provides background information on the process of integration, reclaimers and Pikitup as the facilitator of integration initiatives within COJ municipality. The aim/objectives of this study are also detailed in this chapter, providing an understanding of the problem at hand and the importance of carrying out such a research. The overarching question and the sub-questions are also entailed in this chapter as they provide direction to the overall paper.

CHAPTER 2: LITERATURE REVIEW-This chapter reviews literature on waste conceptualization, waste-pickers/reclaimers in Johannesburg, their working conditions, challenges they face, integration as a process to attain sustainability in the waste management sector and its benefits to reclaimers. The method adopted in this chapter incorporates comparisons of relevant strategies from a global to a local context, putting into consideration how these strategies are attempted in South Africa.

CHAPTER 3: RESEARCH METHODOLOGY-The study area and methodological approach employed to assist achieve the desired outcomes of this study are outlined in this chapter. Techniques employed to answer the overarching research question and field questions are presented. Ethical consideration is outlined in this chapter as they guided the process of attaining imperative information for the study.

CHAPTER 4: PRESENTATION AND DISCUSSION OF KEY FINDINGS-This chapter presents and discusses the results together with the summary of the main findings obtained from the field. Results presented were compared with results obtained by other researchers in developing and transitional countries to determine their similarities and variations when adopting the integration process. The limitations and errors encountered were also outlined in this chapter.

CHAPTER 5: CONCLUSION-In this chapter, conclusions are drawn from the findings presented and discussed in chapter 5. This was done in relation to the research aim/objectives.

CHAPTER 2: LITERATURE REVIEW

This section of the report reviews literature surrounding the conceptualization of waste and waste picking as a source of income generation for the urban poor particularly in developing countries. It identifies informal reclaimers in South Africa, their working conditions and challenges they are faced with daily when undertaking the activity. With reference to integrated Waste Management (IWM) as an approach adopted in managing various issues concerning the environment, reclaimer integration as a process to attain job formalization and sustainability in the waste management sector will be evaluated. Although waste picking may be viewed by the majority as a deplorable and dirty job, its significance can be identified socially, economically and environmentally. Countless research studies have assessed and made important contributions on understanding the socio-economic characteristics of reclaimers, the difference they make in the formal sector and their need for integration. (Gupta, 2012; Medina, 2007; Hayami et al, 2006; Benson and Vanga-Mgijimi, 2010). However, less attention seem to have been paid to the lessons that can be learned from reclaimers as they are being integrated into municipal systems. The method employed in this chapter incorporates comparisons of relevant strategies from a global to a local context, putting into consideration how these integration strategies are attempted in South Africa.

2.1 Integrated Waste management

To form a basis for this paper, it is essential to draw on literature which illustrates how a matter such as informal reclaimer integration and formalization of their work pertains to environmental management. IWM incorporates numerous ideologies that assist in analysing and managing prevailing issues related to the environment. According to Fiehn et al (2006), when considered from systems' approach, IWM underscores sustainable development integrating various aspects which collectively address waste management and are aimed at providing economic growth, social acceptance and sustainability in any given area (Fiehn et al, 2006). However, it is important to understand that every region has its own history and challenges, different from the rest. In the City of Johannesburg IWM plan of 2011, the primary objective includes integrating and optimizing waste management services in the city, thereby maximising efficiency and improving the quality of life of all citizens while the associated environmental impacts and financial costs are minimised.

In most cases of reclaimer integration, the involvement of multiple stakeholders is key when implementing the strategies (Annepu and Mitchell, 2013). In the Johannesburg, where this study was conducted, municipal waste managers, service providers, private entities, affected communities, NGOs and other civil society groups and most importantly informal reclaimers. However, the way in which information is shared between these stakeholders portrays limited transparency. This is affirmed by undesired outcomes of the intervention with informal reclaimers opting to still operate individually, not under cooperatives. When reclaimers work under cooperatives, they get exposed to advantages such as access to equipment and storage space, improved negotiations with middlemen, and effective lobbying with municipalities for admittance to waste cited Marello and Helwege (2014). This is not the case in the study area as such benefits go to non-reclaimers.

In successful cases, when integrated effectively and sanctioned with a more facilitative framework and collectively organised, waste pickers operating in the informal sector form a significant part of a sustainable resource recovery system (Marello and Helwege, 2014). Using people power in a community to increase recycling and material recovery rates reduces the need for expensive, fixed, high technology solutions. This notion, underscored by the prevailing contribution made by informal waste pickers is known to benefit the environment, municipalities and also yield decent working conditions for informal waste pickers themselves (Marello and Helwege, 2014). At a later stage, the objective of IEM which include achieving sustainable development whereby social costs of environmental intervention should be outstripped by the social benefits.

2.2 Conceptualizing Waste

In simple terms, waste is what we regard as leftovers or unwanted goods or materials that we discard on a daily basis from our households, offices and other commercial areas. Schenck et al (2012: p10) define waste as "any material that is considered to be of no further use to the owner." However, what may be regarded as waste or of no further use by one individual (who discard it) can be perceived differently by the next person. The person who perceives discarded materials or waste as valuable and collects the materials for recycling is referred to as a waste picker, to whom waste provides a livelihood (Medina, 2011). This means that waste pickers are able to make a living only if there are people generating waste. As a result of poverty, high unemployment rates, increases in population densities and urbanization

process in South Africa, those excluded by the formal employment sector see collecting and selling waste as an alternative for income generation (Theron, 2010).

As elaborated by Medina (2007), the supply of waste is greater in developed cities than in developing cities as more waste is produced in the former. This is true to some extent although in developing cities similar to Johannesburg, waste production is problematic to the environment (Theron, 2010) due to great amounts produced on a daily basis. The reality of this problem is too apparent as space for waste in some dumps is maintained to be running out (Godfrey et al, 2016). This is a result of increased waste generation caused by large populations continuously discarding unwanted materials. Moreover, Achankeng (2003) stipulates that waste picking is also essential due to increased waste volumes as a result of an increase in the flow of goods and services that has heightened consumption levels. Therefore, it is feasible that waste is "well managed" in developed cities as opposed to those in the developing stage. As such, reclaimers play a vital role as they make significant contributions to society by converting high volumes of unusable waste into productive resources as well as cleaning the city (Hayami et al, 2006).

Illustrated below is a simple representation of the waste cycle which helps understand the circulation of waste and how much of a multifaceted aspect waste is. Informal reclaimers are self-employed individuals under the waste management sector but cannot function without access to waste and waste buyers (middlemen/buyback centres) (Schenck et al, 2012) and are to be outlined shortly.

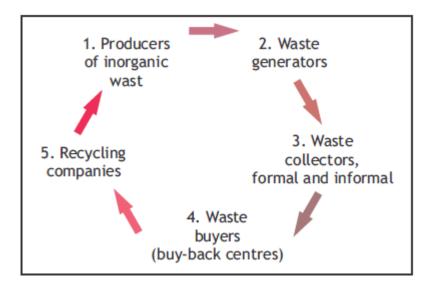


Figure 1: The Waste Cycle

2.3 Identifying Waste Pickers in South Africa

Generally, waste pickers are alleged to have been the preserve of outcasts and marginal groups in various countries (Medina, 2000). These patterns may have been preserved to some extent, however, present individuals engaging in waste picking point out urban poverty and difficulties in attaining employment in the formal sector whose entry requirements are assumed to be high as reasons. Medina (2008) sustains that these socio-economic factors have resulted in the urban poor choosing waste picking over living in absolute poverty. In this case, it is evident that waste picking as a job for others is a representation of the informal sector and its ubiquity. In general, waste pickers appear to be individuals that are poor, typically migrants who lack protection and access to resources, they survive on the collection of garbage comprehensive of waste from household preparation, cooking and serving food; market refuse, handling, storage and sales of produce and meals (Theron, 2010). South African waste pickers are not exempt from these characteristics which suppress the ability to end poverty and advance their working and living conditions.

According to Marello and Helwege (2014), "waste pickers", "waste collectors" and "recyclers" (in Latin America) are individuals who make a living through selling valuable materials found in what others regard as waste. In South Africa, various terms are used in different parts of the country to refer to reclaimers. For instance, in Cape Town, terms such as "skarelling" (scuttling) (Benson and Vanga-Mgijimi, 2010) and in Johannesburg terms like "Baya-Hlupheka" (struggling to make ends meet) are used to identify them (Benson and Vanga-Mgijimi, 2010). Waste pickers can be divided into two categories, those working at landfill sites and those operating in the streets. The former group is continuously in constant clashes with municipal authorities as their operations interfere with the compaction of waste (Medina, 2008). Regardless of the situation, since this activity make economic contribution in different individuals' lives, waste picking is considered by some people a well-established, reasonably secure profession while others perceive it as a temporary role considered during recession periods. In this study, both the groups are incorporated, providing their experiences of integration initiatives underway in Johannesburg's inner city.

In the city of Johannesburg, waste pickers are commonly found in the streets, waste dumps and on trucks that collect and transport waste to disposal locations (Theron, 2010). Their work, which includes daily collection of waste is necessitated in urban spaces and city streets due to an increase in the flow of goods and services that has heightened consumption levels (Achankeng, 2003). In Johannesburg, these duties are carried out by reclaimers who make a notable difference in the city's waste management system while considered informal workers (Marello and Helwege, 2014). Waste picking therefore represents the extension of the informal sector and the degree to which urban poverty is diverse in the country.

2.4 Challenges Faced by Waste Pickers

The appeal of waste-picking derives from low barriers to entry and the capacity to generate income (which they would not make from staying at home) and because waste is easy to access and it has value. Waste picking is regarded by some as an entrepreneurial activity (Marello and Helwege, 2014) however it is not a prosperous one. This is because reclaimers rarely achieve economic mobility through this practice. Dias (2010) perceives waste-picking as a labour-intensive activity as the "waste" which can sometimes be heavy, require individuals to carry or move it over long distances to disposal locations.

Numerous studies indicate that foremost challenges faced by waste pickers comprise exclusion by labour law, exploitation by middlemen, lack of safety, in differential treatment, lack of formalization of their work, harassment, privatisation, technology and stigma due to the association with dirt of their work which affects recognition of their worth (Medina, 2007; Samson, 2009; Dias, 2010 and Marello and Helwege, 2014). The problem of identity is a challenge for reclaimers as worker organisations do not regard them as workers because they are closely associated to business associations while the government rarely implement laws intended at protecting and advancing their interests (Bonner and Spooner, 2012).

For Horn (2004), referring to an individual (reclaimers in this case) as a "worker" instead of "employee" obscures attention from labour laws unless the word "worker" is engaged as it surpasses the employer-employee relationship. In South Africa, the government seems not to be willing to regulate waste picking as a job and this influences any prospects of their improvement (Samson, 2009). As a result, most labour laws in the country do not operate in the interest of the waste pickers and other informal workers which hamper protection against risks and injury as well as job security (Theron, 2003, 2010). From these, it can be learned

that informal reclaimers function in an unreceptive environment that generally prevents their formal inclusion in solid waste management systems regardless of their significant contribution in making cities clean, reducing costs for municipalities as well as environmental sustainability (Dias, 2013; Samson 2010).

2.5 Addressing Waste Pickers' Situation

According to Dias (2010), in countries like Brazil, Argentina and Colombia, reclaimers are already officially recognized. They may not be regarded as part of the formal economy but they are at least accommodated within municipal waste management systems (Schenck et al, 2012). In cities like Buenos Aires where partnerships with the municipality seem to have succeeded, provision of buses and and trucks to transport workers and recyclable materials, and a monthly stipend was given to waste pickers (Marello & Helwege, 2014). Workers further receive health insurance, liability insurance and subsidized child care. Such measures demonstrate recognition of the impact made by reclaimers in communities and give higher standards of living, economic security and a sense of inclusion. Dias (2010) further acknowledged that integration of reclaimers into formal sector produces real benefits for the urban poor.

In South Africa, the nature of waste picking makes it difficult for municipalities to design programs that target the most disadvantaged reclaimers (Cason Family Foundation and Clinton Global Initiative, 2011). Although this is the case, it is still important for the country to implement strategies that allow inclusion of reclaimers into municipal systems, as they contribute significantly to the formal waste management sector. The Department of Environmental Affairs (DEA) waste pickers workshop report 2015 outlines the existence of policies that facilitate reclaimers' inclusion into municipal systems. However, Dias (2013) argued that implementation of these policies is challenging. Notwithstanding this, the department has initiated with attempts designed to quantify and formally acknowledge the work of reclaimers with a vision to come up with concrete action plans that can be implemented in order to facilitate the envisioned growth in the recycling sector, putting into consideration the role played by reclaimers and how they can be included in formal waste systems (The DEA waste pickers workshop report, 2015).

As emphasized above, waste picking is an important source of income for the urban poor in South Africa and it contributes significantly to the informal economy and waste management throughout the country. Over the years, there has been growing enthusiasm with regards to reclaimers' inclusion as part of integrated solid waste management in different countries whereby The World Bank and other multilateral organizations funded numerous projects to support this practice into formal sector recycling (Marello & Helwege, 2014). Multilateral organisations have encouraged intensification through access to credit, technology and partnerships to collect recyclables in underserved communities (Marello and Helwege, 2014).

According to DEA, formalizing waste-picking through municipal integration will yield good results for reclaimers, resulting in job security (DEA, 2011). If successfully implemented, integration of reclaimers will therefore allow a degree of self-control over the content of the job, creating room for the building of a career for these individuals. However, reclaimers fall in the informal economy, without an employer and union rights and this has overtime made their situation a challenging one as they have been and are conducting their work without exclusive rights (Samson, 2008). This situation seems to make it difficult for authorities to recognise and partially formalize waste picking. Samson (2008) further sustains that various municipalities throughout the country are battling to attain a mutual agreement on how to treat reclaimers as some are accommodative while others are hostile. This is clearly affects Pikitup's integration process in Johannesburg be it directly or indirectly.

CHAPTER 3: METHODOLOGY

This chapter outlines the methodological approach employed to assist achieve the desired outcomes of this study are outlined in this chapter. Techniques employed to answer the overarching research question and field questions are presented. Ethical consideration is outlined in this chapter as they guided the process of attaining imperative information for the study.

3.1 Methodology

For the purpose of this study, a qualitative approach was adopted. A qualitative methodology is regarded by Weiss (1994) to be characterised by comprehensive description from accounts and it assimilates numerous perspectives while its flexibility creates room for further investigations if responses warrant further clarification. Corbetta (2003) additionally maintains that a qualitative research methodology is beneficial when the research is aimed at obtaining insight into situations and challenges as it offers in-depth descriptions of procedures and knowledge related to issues at hand and allows for the opinions of respondents to contribute to the outcome or results. From these, it has been apparent that the use of this method is better suited for this study because it is researcher oriented and treats the participants as subjects and not objects therefore it enabled the researcher in gathering relevant data for the question on informal reclaimers work transformation yielded by Pikitup's integration initiatives in inner Johannesburg City. Moreover, factual descriptions based on face-to-face knowledge and understanding of reclaimers in their natural settings was permissible through the application of qualitative approach. Additional to the qualitative approach adopted in this study, the methods and how they were used to further answer the sub-questions derived from the overall research question are presented in the methods table (Table 1) below.

3.2 Research Methods

The research techniques/tools (outlined below) were incorporated with the qualitative approach to collect more informed responses or data for the study. The manner in which each technique was used in answering each question and providing information for this study is outlined in details later.

Table 1: Methods Table

Research Sub-Questions	Research Methods	
Who are the informal reclaimers participating	Semi-structured/in-depth interviews and	
in Pikitup's integration initiatives and how do	Participant observations.	
they perceive the job they do?		
What form of integration is Pikitup offering	Semi-structured interviews and a review of CoJ	
the reclaimers?	and Pikitup's plan regarding informal reclaimer	
	integration.	
How do the reclaimers (participating in and	Semi-structured interviews	
affected by integration initiatives) perceive	e	
Pikitup's integration approach?		
What are the positive and negative aspects of	Semi-structured interviews and a review of	
the approach in use?	literature on informal reclaimer integration	
	approaches adopted in various regions.	
What form of integration do the reclaimers	Semi-structured interviews	
prefer?		

3.2.1 Semi structured Interviews

According to Wengraf (2001), these refer to the questions and answer meetings between the participants and the interviewer/researcher on a one-to-one basis within the participants' natural setting. This is believed to increase the confidence of the respondents to answer the questions asked by the researcher (Wengraf, 2001). These type of interviews are comprised of open ended questions in order to allow unlimited responses made by respondents since they are not rigid while at the same time probing clarity on matters that may not be clear enough (Weiss,1994) as opposed to close ended questions. In return, the quality of information obtained through these interviews is maintained to be enriched as the researcher-participant interaction creates room to capture subjectivities through careful pacing and sequencing (Wengraf, 2001). In this study, the researcher was well-informed in terms of the subject so that relevant questions were asked to Pikitup staff, informal reclaimers other interests.

As a data collection technique, these interviews are very important to this study and contributed immensely in answering the research question. They further assisted in gaining insights on transformations brought about by Pikitup's integration process on informal reclaimers in the study area. Semi-structured interviews enabled the interviewer to outline to the interviewee/s the topic to be covered during the course of the interview (Corbetta, 2003). This technique also allowed outline important issues the research focus is based on beforehand so that interviewees could decide in time if they were willing to participate in the conversation. Here, reclaimers or potential informants who felt the issues entailed in the study are sensitive or do not interest them were able to decline or withdraw, allowing alternative or interested informants to take part in the conversation.

The study was carried out between April and September 2016 with the commencement of the actual fieldwork/interviews in July. Interviews were conducted in various regions throughout the study area, with initial interviews were done at the Selby Pikitup Depot. From this stage, referrals were made whereby the next interviews were conducted at the Bathopele buy back centre and at Remade (where street reclaimers were interviewed). The final interviews were conducted at the Pikitup Robinson Deep landfill site where informal reclaimers working at the site were interviewed. In total, eighteen interviews were conducted whereby five comprise the Pikitup staff members (four at Selby and one at Robinson Deep offices), one owner of the Bathopele cooperative/buy back centre and the twelve comprise informal reclaimers (five street reclaimers and seven working at the landfill site). In terms of gender, there was an imbalance as only three females were interviewed and the rest were male. This is because there exist an imbalance in terms gender throughout the study area and this was one of the questions asked to the informal reclaimers. In terms of age of informal reclaimers, it ranged between 35 to above 60 years old.

3.2.2 Participant Observations

Corbetta (2003) defines participant observations as the primary technique that helps in collecting data on non-verbal behaviour. For the researcher or data collector, this technique was relevant to this study as it helped gather important data on who reclaimers are in the study area. This technique also allowed in observing and noting aspects such as behaviour, gender, race and interactions between reclaimers and this data is important for background, interpretation and analysis sections of the study.

The researcher made preliminary visits to Remade buy back centre and Robinson Deep landfill site whereby the intention was to observe aspects. For the observations conducted at Remade buy back centre, the researcher was allowed entry to the receiving area where different trucks and street reclaimers come in to sell the recovered recyclables. Here, the researcher was able to observe who came to sell recyclables, what type of materials were brought and how much some of the materials were charged as reclaimers mentioned they make better income by selling their recyclables at Remade as opposed to the buyback centres. At the Robinson Deep landfill site, one member initially took the researcher around the offices where there is a number of middlemen and two cooperatives. Here, each middleman and cooperative has their own open space to sort the recyclables purchased from informal reclaimers working at the top of the landfill site before storing them in the crane containers that have to be filled in order to be sold to various buy back centres and companies. Important to the observations was the understanding of sorting sections for the different waste categories, scaling area, baling area, storage area for baled materials which can also be the dispatching area.

To get to the top of the landfill, which is very elevated, the researcher was allocated a bakkie and a driver who helped show the researcher where the reclaimers work. Generally, when they are working, all reclaimers are scruffily dressed and dirty, they have no protective equipment fitted and operate in a setting that is equally dirty, smelly and dusty. There is a movement of big trucks and bakkies driving everywhere at the top with some reclaimers invisible as they are covered in dust. What happens generally is that when the trucks come to dump waste within which recyclable material is contained, informal reclamers run to the where each truck dump the material with their sack and start obtaining and sorting what can be sold. The process is repetitive but from the observation made, cordial relations exist between the reclaimers as some work together in generating increased volumes of recyclables.

3.3 Research Site

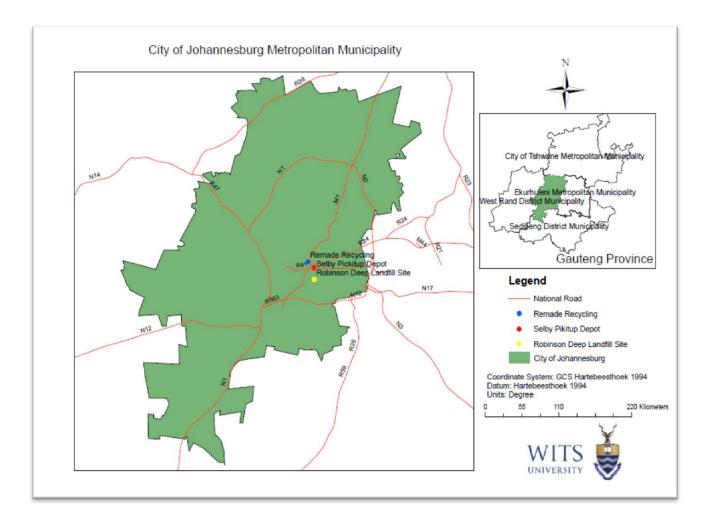


Figure 2: Study Area Map

(Source: researcher's map)

This study was conducted in the Inner Johannesburg City in South Africa, covering Selby Pikitup Depot, Robinson Deep Pikitup Landfill Site and areas around Newtown and Fordsburg where street reclaimers were liaised with. The Johannesburg inner city forms part of Region 8, consisting of mainly the CBD, and lower density residential areas to the east and higher density residential areas to the west of the city centre (Pikitup Business Plan, 2015). Johannesburg's inner city is situated at the heart of Gauteng province which is regarded the economic hub of Southern African and it is home to over 200 000 people encompassing of both South Africans and foreign populations (Pikitup Business Plan, 2015). However, some of the population throughout the CoJ municipality is unemployed or informally employed, therefore affected by urban poverty. Within the inner city, Pikitup, is responsible in provision

of the daily waste management and refuse removal services to the residents of Johannesburg (Pikitup Business Plan, 2015), with informal reclaimers operating alongside this formal waste management service provider.

The study forms part of a project titled "Lessons from waste picker integration initiatives: development of evidence based guidelines to integrate waste-pickers into South African municipal waste management systems" coordinated by Dr Melanie Samson. It is a study funded by CSIR and DST, with the authorization by Pikitup and it is conducted under the memorandum of understanding (MOU) between Pikitup and the University of Witwatersrand. The initial steps which allowed for conducting the study in this area were embarked on by Dr Melanie Samson, organizing meetings with relevant stakeholders (Pikitup in particular) and thereafter, preliminary visits were done for familiarisation with Selby Piktup Depot staff and this later allowed for the diversity of the researcher to interact with various reclaimers.

3.4 Sampling

Statistics Canada (2003) defines sampling as a means of selecting sets of units within a population in an area and this assists in collecting information that enable interpretations to be made about this population of interest. Furthermore, sampling can be divided into two categories including probability and non-probability sampling. Probability sampling requires that samples are selected at random or by chance while in non-probability sampling, assumptions are that the samples are a representation of the population it came from (Katz, 2006). For the purpose of this study, a technique derived from the latter known as snowball or chain referral sampling was employed to identify key participants or respondents. Through the use of this method, a sample whereby current subjects recruit future subjects from their acquaintances was enabled (Katz, 2006). As stated above, the initial steps in liaising with key informants (Pikitup staff) was established by Dr Melanie Samson and later this allowed for various referrals to a final point where informal reclaimers were found and provided their insights regarding the integration initiatives being carried out by Pikitup. This sampling technique was beneficial as informal reclaimers working in the landfill site are a hidden population, difficult for to the researcher access, however, the snowball sampling technique allowed for this group to be accessed for even more constructive information in the study.

3.5 Data Collection

For the purpose of this study, interviews were the essential medium of collecting imperative data whereby some questions were generated beforehand and some were developed as the study unfolded. The questions were formulated in the simplest format possible to avoid participant to not understand the subject. This is because it is advised that researchers better under estimate respondents' ability to answer than to overestimate the respondents' ability (Wengraf, 2001). In terms of saving the responses of participants for later revisions and transcriptions for this paper to be produced, a digital voice recorder was utilised along with a digital camera to take photographs where necessitated.

3.6 Data Analysis

For the purpose of this research Thematic Content Analysis was employed to analyse data collected. This analysis approach is defined by (Braun and Clarke, 2006) as a theoretically flexible approach to analysing qualitative data by examining themes or patterns in relation to different epistemological and ontological assumptions. The application of thematic analysis in research arises from its ability in providing rich and detailed accounts of data. After data collection, all the data collected are divided into data sets of themes for a particular analysis such as interviews with a category or particular topic as well as data items like individual interviews.

This method helped to search for experiences, meanings and the reality of participants or informants and their effects on discourses operating within society. The data set is organised and described in detail including the interpretation of various aspects of the research topic (Braun and Clarke, 2006). For this to be a success, the data, research questions and the overall research topic were formulated in a manner that they correlate with each other, allowing the final write up to convince the reader as it is anticipated to contain sufficient evidence. Advantages of using this method include flexibility due to broadness of theories, it helped expand the range of study beyond the individual, interpretation of themes is supported by data, it allows categories to emerge from data.

3.7 Ethical Considerations

Before commencing with fieldwork in this study, ethical clearance application to the Human Research Ethics Committee in the school of geography, archaeology and environmental studies at University of the Witwatersrand had to be completed. The approval presented green light to proceed with the research after being satisfied with the ethical considerations of the study. Moreover, since this is a CSIR and DST funded research study, with authorization by Pikitup, MOU between Pikitup and the University of Witwatersrand assured permission. Every data collection process of research whereby informants are necessitated to contribute personal views should put ethics in consideration. Similarly, for this study to become success information from reclaimers is required. The initial step taken in this regard includes providing the interviewees/informants with the researcher's information and clarity on the purpose of the research and interviews (Babbie, 2013). In this case, the participant information sheet was explained to each respondent who all complied through answering all questions while consent was shown by way of signing the consent form.

Confidentiality and anonymity terms was also outlined and promised to the informants so that the information they provide will not be used elsewhere except for academic purposes within the university premises. Any subjective, confidential and sensitive information provided is treated as high rank and kept safely away from accessible areas. Wiles et al (2008) denote confidentiality as confidence imparting private information. In this case information gathered relating to reclaimers during the course of the study is not be revealed without the participants' consent. Participants were also informed that taking part in the interviews is voluntary so that they do not feel obliged and that they have any right to withdraw at any stage should they feel uncomfortable.

3.8 Limitations

Since this study required scheduling of interviews with individuals, some participants did not find the times suitable. Since this was the case, rescheduling of interviews took place and this was time consuming and delayed the processes of data analysis and interpretation. Moreover, in attempting to comprehend the sharing of information between various stakeholders, numerous individuals have to be met and interviewed. For this to be done, the use of focus

groups required meetings to be scheduled on times when everyone is available. In this study, a focus group meeting was scheduled and when the researcher arrived at the meeting venue, only four individuals showed up. When contacted, one Pikitup staff member claimed to have forgotten about the meeting and individuals from cooperatives mentioned they were busy and the researcher should come and interview them while they working. This situation resulted in the focus group being cancelled, however, in-depth interviews were conducted with the individuals that made it to the venue instead.

Fieldwork in this study was done between July and September which is a short period to acquire fully informed responses from a wide range of respondents. Therefore, time constraints limited the number of interviews, interview questions and participant observations conducted. The number of questions and interviews conducted had to be limited to a manageable quantity although this might have an impact on the validity of results and the level to which the question can be appropriately answered (Mouton, 1996). Lastly, certain questions appeared to be difficult for some respondents to answer, particularly when asked about "integration", some reclaimers do not know what integration is. This became more severe in situations where participants do not understand English. Words such as "integration" are not easy to translate or do not exist in some languages spoken by respondents.

CHAPTER 4: PRESENTATION AND DISCUSSION OF KEY FINDINGS

The purpose of this chapter is to present the key findings/results of the study, as well as their discussion guided by the overarching question which sought to evaluate how Pikitup's integration programme has transformed the conditions of reclaimers participating in and affected by the initiatives. In a broader context, this was based on the understanding of IEM and IWM as approaches aimed at addressing a variety of issues concerning the biophysical, chemical and the social/human aspects of the environment within which the issue at hand is contained. This was then narrowed down to the testing of whether the reclaimers appreciate the approach being employed by Pikitup in integrating and partially formalizing their working conditions. This chapter is divided into three sections with each theme contributing to answer the overarching research question of this study.

SECTION ONE

4.1 Informal Reclaimers

4.1.1 Informal Reclaimers in Johannesburg inner city

Informal reclaimers are repeatedly regarded as individuals that mediate the waste management sector without being formally recognised and registered when providing these waste management services (Gupta, 2012). These individuals are normally found within the recycling peripheries, sorting through street, household, landfill, commercial and dump sites waste for recyclable materials which they sell for income. Throughout the study area, individuals involved in informal waste picking, who are the core focus of this paper, refer to themselves as "reclaimers" and the work they do as "recycling". In various countries, most of the waste generated is managed by informal reclaimers and this in return yields both economic and environmental benefits to the formal waste management sector (Gupta, 2010). Annepu and Mitchell (2013) further sustains that these individuals provide a wide range of services to municipalities such as waste collection and recovery as well as cost saving yet they are hardly remunerated for these benefits.

In Johannesburg, some reclaimers work in the streets whereas some work in the landfill sites. The similarities between the two groups include the fact that they work informally, determining the number of hours they want to work and how much income they need to make

for their survival needs. These individuals scavenge for recyclable materials from bins, dump sites, streets, malls, households etc. and are seen throughout the city carrying out their daily activity. Although informal reclaimers are self-employed individuals, their apparent contribution in solid waste management is significant. In the inner Johannesburg city, where this study was conducted, informal reclaimers possess all the qualities mentioned here and measures (integration and partial formalization) are put in place to try address the informal reclaimers' situation to some extent. As this is the case, the research was driven into a direction where it is essential to understand the needs of informal reclaimers before tackling various concepts and the understanding of integration and partial job formalization by various stakeholders in the study area. The photo depicted below shows some of the reclaimers from the study area.



Figure 3: Reclaimers at the Robinson Deep Landfill Site

(Source: researcher's photo)

4.1.2 Informal Reclaimers' Conditions

Common in various studies conducted on informal reclaimers comprise the ideas that these individuals are marginalised/discriminated against, lack formal employment, live in poverty and also experience adversities in numerous dimensions of their well-being (Marello and Helwege, 2014, Medina, 2007, Dias, 2010; 2013, Schenck, 2012 and Samson, 2009; 2010). More significant to this study is the working conditions of informal reclaimers which is an aspect that necessitates partial formalization through Pikitup's integration into the formal waste management systems that is underway.

a. Reclaimers' working and well-being conditions

As a means to attempt alleviate urban poverty, informal reclaimers engage in dangerous work related activities. According to Gupta (2012), the job itself is unsafe and those working in the landfill sites are continuously exposed to a great quantity of toxic substances which can result health disparities. At the Robinson Deep landfill site and the temporary dump site in Fordsburg observations included reclaimers physically picking recyclables, which had to be found by going through huge loads of mixed waste with no protective equipment. When interviewed for clarity, one of the reclaimers responded. "It is a waste of money which I do not have to buy protective clothing (overall suits, protective gloves and masks) because in one day I would have to use more than one pair of gloves and masks" (Respondent 6 01/09/2016). In this case, it can be argued that lack of education to accurately assess risks, emotional disabilities and income imperatives prevent reclaimers from protecting themselves when undertaking this risky activity (Marello and Helwege, 2014).

Moreover, it was observed that there were no female reclaimers at the landfill site. This was one of the questions asked to respondents and majority emphasized that women are not allowed at the landfill site because the conditions are unfavourable. One respondent pointed out, "we prefer working as men here because women bring children and the conditions are bad, there was once an incident where a child got really sick and had to be rushed to the hospital" (Respondent 7 01/09/2016). This is more indication that reclaimers' conditions necessitate state and institutional intervention in the attempt to provide social benefits as their contribution in the waste management sector is already perceived. Marello and Helwege (2014) argue that these individuals general aspect such as health and pension insurance should be considered in later stages of integration, acknowledging the circumstances of

reclaimers. The working conditions of informal reclaimers operating from the landfill site are unfavourable (as illustrated in figure 4) such that one can understand the absence and restrictions of women and children on site thereof.



Figure 4: Working conditions at the Robinson Landfill Site

(Source: researcher's photo)

From a labour perspective, the majority of informal reclaimers that this research focused on do not have fixed working hours nor fixed income generated monthly. This is because the individuals are self-employed and their work is regarded informal. However, the capacity to work on own time and own schedule imply making a living as opposed to earning a living which is something formal employees do. Several studies have pointed out that informal reclaimers lack an employer, they are not protected by state labour laws ,they are largely denied access to social benefits and lack representational rights (Marello and Helwege, 2014, Horn, 2005, Dias, 2013 and Medina, 2007). Notwithstanding the situation informal reclaimers find themselves in, they are able to determine the income they generate and this is regarded flexible and efficient. With regards to income, various respondents gave different remarks and they all mentioned it depends on the number of hours they work. For instance, one respondent stated, "I make about R250 a day and I arrive here at 06h30 in the morning

and leave at 17h00, in a month I make roughly R5000 or more if I work every day and it makes a huge difference at home" (Respondent 6 01/09/2016). Another respondent mentioned, "I make enough to pay rent and school fees for my child but the money is not stable every month" (Respondent 7 011/09/2016). This can be regarded an indication that many informal reclaimers are not poor by income-based official benchmarks (Marello and Helwege, 2014).

b. <u>Recyclables transportation conditions</u>

It is apparent that waste picking is a labour intensive activity (strenuous and risky) (Marello and Helwege, 2014) which requires informal reclaimers to physically transport recyclables between geographically distanced localities. One respondent interviewed (reclaimer working in the streets) mentioned, "I physically collect my recyclables from Northcliff and along the way all through to Newtown Remade where the buying prices are favourable" (Respondent 5 10/08/2016). From this, it is apparent that although waste-picking is an activity that the urban poor make a living from, it is not prosperous. The other informal reclaimer (working in streets) interviewed stated, "I am only able to come sell the recyclables once a week because I reside very far, so I gather the material during the week so that I can make one trip since the distance is very long" (Respondent 4 10/08/2016). From these two responses, the issue of insufficient facilities with favourable prices for informal recliamers to sell the recyclables in areas of the city is also presented.

For informal reclaimers working at the landfill site, transporting the recovered recyclables does not require carrying the material over long distances as opposed to reclaimers working in the streets. At the Robinson Deep Landfill Site, there exist numerous cooperatives and middlemen who purchase the recyclables recovered by informal reclaimers from the top of the landfill site. When asked how the recyclables get transported from the top of the landfill site, most respondents interviewed quoted that some of the trucks are there to help individual reclaimers with transport and each sack loaded on the truck is charged R10. However, one respondent mentioned, "I have two bakkies and I use one to transport materials here at the landfill site to the bottom and the other one collects recyclables from households in the Eastrand, I also help some of my colleagues with transport which they pay for" (Respondent 8 01/09/2016). From this, it is clear that for some reclaimers waste-picking is turning into an entrepreneurial activity (Marello and Helwege, 2014, p3) through which increased income is

earned. Figure 5 below illustrates some vehicles used for transporting recyclable materials from the landfill site to various buyers.



Figure 5: Transport conditions at the top of the landfill

(Source: researcher's photo)

SECTION TWO

4.2 Integration as a Solution

4.2.1 Integration

According to Dias and Alves (2008), there exist countless positive effects on the environment and waste management sector yielded by various informal recycling activities. These positive effects put forward an indication that the informal waste management sector requires to be factored in the plans of the formal waste management sector particularly in developing countries (Gupta, 2012). In various regions of South Africa, where the difference made by the informal sector is too apparent, networks that allow for incorporation of this sector into municipal systems are being established to a higher extent. Integration of informal reclaimers into municipal system through Pikitup is underway throughout the CoJ municipality. Integrating the informal stakeholders intensifies the efficiency of the waste management

system and these integrative strategies, if implemented appropriately will provide economic, environmental and social advantages, providing sustainable measures in the city (Dias and Alves, 2008), transforming the conditions of informal reclaimers outlined above.

In simple terms, integration implies combining various aspects to form a whole and come into equal participation in a body. Marello and Helwege (2014) acknowledge that up to now, there has been emergent enthusiasm on the idea of waste picker inclusion, often forming part of integrated solid waste management. When being implemented in different regions, integration of informal reclaimers is considered to take various forms depending on the political, legal, cultural and social conditions of the country (Dias and Alves, 2008, Annepu and Mitchell, 2013). What can be done is to draw lessons from both failed and successful attempts of integration forms tried out elsewhere (Annepu and Mitchell, 2013). For Cohen (2008), a prosperous intervention in any project concerning the environment or in SWM should take into consideration the views and positions of various stakeholders and in this case very important are the needs of the informal reclaimers.

Integration of informal waste pickers into municipal solid waste management is a strategy to effectively manage increased waste volumes generated in cities as a result of large population densities and high rates of urbanization. It is a result of waste pickers organizing collectively so that municipalities can respect their rights and meet their immediate survival needs. From the municipality/state perspective, integration yields several benefits for waste pickers (ranging from improved living standards to provision of economic security). Problems associated with integration of informal waste pickers into formal systems emerge when cities move supporting independent informal waste-picking to subcontracting municipal services to competitive cooperatives.

4.2.2 Integration according to Pikitup

Acknowledging how various studies have defined integration and outlined various aspects it encompass and how integration has failed or succeeded in various regions globally, Pikitup, which is the key facilitator of informal reclaimer integration in Johannesburg has its own understanding on what the process is and should entail. This study has made efforts in investigating what integration is according to Pikitup so that its impacts could be documented accordingly, yielding an understanding of its effects on the reclaimers and their working conditions thereof. Within the 2015/16 Pikitup Business Plan, the role of reclaimers

throughout the city is acknowledged and emphasis on integration of their services is specified (although unclear) along with the transition from uncoordinated waste management to integrated waste management (Pikitup Business Plan, 2015: p51). Additionally, outlined in the NWMS plans in 2011 included an emphasis on the notion that informal waste picker conditions are to be formalized. Therefore, providing these marginalised individuals with decent work (DEA, 2011). Thus, the need for probing what is meant by reclaimer integration was necessary in this study.

To adequately address integration, Pikitup has developed programmes that incorporate strategies aimed at attaining sustainable integration and community empowerment. Separation at Source (S@S) and Jozi@work are the main programmes utilised by Pikitup in facilitating integration and related interventions. The former is active throughout the study area and is aimed at diverting recyclables away from landfill sites while promoting the idea of waste as a valuable resource (Pikitup S@S update, 2013). Both the programme facilitates the notion of the "recycling economy" in the municipality and this situates informal reclaimers at the core as they recover high volumes of recyclables. S@S in the study area has provided resources (trucks, drivers and access to waste sites) to cooperatives for informal reclaimers to better their working conditions. One vital principle incorporated is the inclusion of both groups of informal reclaimers (street and landfill reclaimers) in finding solutions. This can only be the case if the reclaimers form part of cooperatives which is not the case.

When asked what is actually meant by "integration" of reclaimers, various members of Pikitup organisation provided varying responses. For instance, one respondent mentioned: "integration is when we merge with the informal reclaimers, the city has come to an agreement that these people are no longer illegal and their services need to be integrated into our systems" (Respondent 1 04/08/2016). Another response included: "integration of reclaimers is when we give these people an opportunity to work along our employees for instance at the temporary waste dump in Fordsburg, by letting them pick what they can recycle and sell for a living is a way of accepting them in the formal waste sector" (Respondent 2 04/08/2016). From this, it is apparent that integration means different things to different individuals within the organisation. Therefore, an initial step when integrating informal reclaimers in the Johannesburg inner city should incorporate reaching a consensus amongst Pikitup staff with regards to what integration is exactly.

The question on what form of integration is being used by Pikitup to formalize the conditions of informal reclaimers was responded to in the following manner: "the form of integration we use here at Selby is that we as Pikitup provide reclaimers with resources (truck and a driver) for them to collect recyclables from our customers and sell the material, taking the money they make from this" (Respondent 1 04/08/2016). At the Robinson Deep Pikitup landfill, allowing the informal reclaimers to work unlimited and unrestrained hours at the top of the landfill site, recovering and sorting as much recyclables as possible to make income from is what is provided to informal reclaimers. According to (Annepu and Mitchell, 2013), the integration success include the provision of transportation (municipal trucks) to reclaimers as transportation of large volumes of recyclables is enabled, resulting in positive environmental and economic effects. This is also helpful as informal reclaimers would not have to physically travel long distances with the recyclables or pay money to private transport providers.

Utilisation of cooperatives (indirect liaising with reclaimers) supposed by Pikitup and DEA to be an efficient way of information sharing between them and the informal reclaimers. However, individuals working under these cooperatives are not the informal reclaimers. One of the cooperative managers stated this when asked who the individuals working under his cooperatives were, "...I do not have any reclaimers working here... the only contact I have with them is when i buy their recyclables, the people working here are my own employees" (Respondent 4 05/08/2016). Another respondent mentioned: "we are not integrating the informal reclaimers directly but we communicate with them through cooperatives, so we organise meetings with cooperatives and inform them on what we need" (Respondent 1 04/08/2016). Additionally, informal reclaimers interviewed in this mentioned that they do not operate under any cooperative and that they work individually.

The lesson that can be learned from this includes the apparent provision of work formalization to individuals the intervention was never intended for. Although the use of cooperatives to integrate informal reclaimers succeeded in other cities Belo Horizonte (Samson, 2016) and Bogota, Colombia (Annepu and Mitchell, 2013), this is not the case in Johannesburg's inner city. Cooperatives were formed for this purpose but this study reveals that it is non-reclaimers benefiting from Pikitup's integration.

a. Challenges encountered by Pikitup when integrating reclaimers

When questioned about challenges associated with integration of informal reclaimers, the common aspect that the majority Pikitup staff emphasised was the inability or difficulty in attaining identity numbers and other person information needed by the municipality in order to register and keep record of the informal reclaimers. One staff member noted: "we have communicated with cooperatives several times to get personal information of reclaimers so that we can know how many reclaimers we are dealing with but we only received information from eight reclaimers" (Respondent 3 04/08/2016). It was then assumed by members of the organisation that most individuals working as informal reclaimers may be foreign nationals (who do not have required information) or if they are of the native country may have criminal records, and this to the Pikitup staff explains the hesitance of informal reclaimers in providing their personal information.

Moreover, the challenge of being unable to control or give orders to informal reclaimers by Pikitup staff (particularly dump site supervisors) was highlighted. In this case, one respondent mentioned: "the challenge I have with reclaimers is that once I let them pick what they can recycle and go sell they just go through the whole load of waste selecting what they want but littering and leaving the rest of the waste on the ground, leaving a lot of work for me and my team to do" (Respondent 2 04/08/2016). In order for such challenges to be addressed effectively, measures to give informal reclaimers to raise their concerns are necessitated. If they become fully recognised as public service providers, acknowledged for their contribution to the environment and public health in the city (Annepu and Mitchell, 2013) such challenges will be overcame as they will respect and view Pikitup staff as their employer in a way.

4.2.3 Integration according to cooperatives

According to Marello and Helwege (2014), when comparing the notion of waste picking to the idea of reclaimers organising to form cooperatives, the latter is fairly recent. Through organising into social movements, some reclaimers in various cities have managed to secure political legalisation of their job to some extent. In the study area, this has taken a different form escalating to a point where individuals currently working under cooperatives are differential from informal reclaimers. Instead, it can be said that cooperatives are used to extract municipal resources for a varied purpose. Cooperative managers buy recovered

materials from informal reclaimers who still operate informally and sell them, using the resources which were proposed by municipalities for the reclaimers. Therefore, the process of corporatization has become a business opportunity for those who possess improved bargaining power with the municipalities. This situation has motivated informal reclaimers to stick with working informally.

Generally, what integration has been made out by the cooperatives is too complex. The fact that informal reclaimers are supposed to operate under the cooperatives and be supplied with resources to better their working conditions is acknowledged. However, the resources are utilized by non-reclaimers. When asked what integration is one cooperative manager mentioned: "It is a very complicated process where Pikitup and the city are using cooperatives to help reclaimers get resources to make their working conditions better but the reclaimers do not want to work with us" (Respondent 4 05/08/2016). Moreover, it was outlined that integration implies registration of reclaimers so that they can trained on how to work with the recyclables separated from waste. (Respondent 4 05/08/2016). Street reclaimers/trolley brigades should also be considered and be provided with appropriate resources (trolleys) so that they can work effectively rather than only focusing on the reclaimers on the landfill site.

"The municipality is supposed to on an annual basis register reclaimers so that they can be trained prior to provision with resources stated respondent 4 05/08/2016. The interviews were conducted in time for the registration of street reclaimers which was scheduled to take place on the 10th August 2016 at various centre throughout inner Johannesburg city. The researcher was invited to attend this event in order to observe the actual reclaimer registration take place. However, the event did not take place as Pikitup and CoJ representatives did not arrive at the venues. Street reclaimers that saw the invitation waited at the venue as they were looking forward to be registered. Follow-ups were made with regards to whether there is a new date when reclaimer registration will take place but until presently there has not been any. An occurrence like this raises questions regarding the importance of informal reclaimers to the formal sector, as to whether they indeed intend on formalizing their working conditions.

a. Challenges encountered by cooperative when integrating reclaimers

Marello and Helwege (2014) acknowledge the point that the process of corporatisation comes with disadvantages. Initially, this process requires reclaimers to organise collectively

(Samson, 2009) which usually takes time and can be challenging. The process of reclaimers coming together into cooperatives is seen by Godfrey et al (2016) as a policy aim in municipalities pursuing waste picker inclusion. In this study, the challenge of informal reclaimers being part of the cooperatives still needs to be re-examined for a successful integration. Since this should be the initial step of implementing integration, it can be argued that the approach should be revised. Although this may be the case, cooperative managers encounter other challenges when working with reclaimers from the informal sector. The prevailing challenges within the cooperative studied seem to be administrative and problem solving.

From the interviews conducted, when asked if there was any reclaimer being integrated by Pikitup working under the cooperative, the response was "no, at the moment I do not have reclaimers working here, the people working here are my own employees and they help me collect and sell the recyclable materials on the side" (Respondent 4 05/08/2016), A situation similar to this one indicates that there are difficulties experienced when reclaimers are working under cooperatives. It also raises questions how reclaimers are then being integrated. When questioned about the form of integration from used by the cooperatives to integrate reclaimers, the response was "I communicate with those in the streets... we have to register these people so that we can know how many reclaimers we are dealing in the city and then take them for training whereby they will teach them on how to work with the recyclables, street reclaimers will be provided with better trollies" (Respondent 4 05/08/2016).

The problem of material being stolen from the cooperative by reclaimers was mentioned in the interviews. Moreover, it was mentioned that when given the trollies to better their working conditions, street reclaimers sell the trollies at the buyback centres and make money. These are some of the challenges encountered. According to Marello and Helwege (2014), waste pickers are often unable to resolve problems when working collaboratively under cooperatives and some end up leaving going back to work as individuals. Moreover, a study conducted by CSIR on corporatization demonstrated that up to 92 per cent of cooperatives in the waste sector fail (Godfrey et al, 2016).

SECTION THREE

4.3 Informal Reclaimers' Experiences of Integration

As stated above, informal reclaimers studied include those working in the streets and those working at the landfill site in Johannesburg inner city. Between the two groups, knowledge about Pikitup's integration differs to a great extent and so does their experiences of integration. The majority in the former group (street reclaimers) do not know about Pikitup's integration and have never experienced any of the benefits. Whereas the majority in the latter (informal reclaimers working at the landfill) know about Pikitup's initiatives of integration and some have experienced integration. Although they have experienced integration to some extent, there is no informal reclaimer, either on the streets or at the landfill who is currently (at the time the study was conducted) working under any cooperative and experiencing partial work formalization as declared by DEA during the waste picker workshop in 2015. Therefore, it was important to understand the reasons for this situation from the responses of informal reclaimers.

4.3.1 Experiences of street reclaimers

Although one cooperative member mentioned that they are working closely with street reclaimers to register, train and provide them with working resources, integration is not known or understood by informal reclaimers working in the streets in Johannesburg inner city interviewed in this study. For these individuals, the way in which their daily activities are carried out and the income they make is merely a result of their own work, which to them is known as "recycling". There has never been any intervention by Pikitup, CoJ's Department of Environment or cooperatives. When asked how long they have been recycling if they state there has been any sort of intervention to help integrate their work, some respondents gave these responses, "I have been recycling since 2005 which makes it eleven years this years and I have been self-employed this whole time" (Respondent 17 15/08/2016). "I have been recycling in the streets for seven years" (Respondent 15 15/08/2016). These individuals have been working as reclaimers for years and none of them have experienced any form of integration from Pikitup.

One finding regarding street reclaimer (trolley brigades) integration is the attempt by CoJ and Pikitup to register these individual. This includes the distribution of pamphlets by the municipality at main buyback centres throughout the city, inviting street reclaimers to a registration event on the 10th August 2016. Some of the reclaimers who can read saw the invite and were present on the day of registration (so was the researcher). On this day, reclaimers brought identity books and they were looking to be registered so that they can be taken in for training in October 2016. However, the event did not take place because municipal and Piktup representatives responsible for registration did not arrive at the venues where they invited reclaimers. The researcher waited at one of the venues interviewing some of the street reclaimers and no message was directed to the reclaimers informing them of the cancellation or postponement of the event. From the interviews, reclaimers mentioned that they have required documents and they would like to be registered into the systems, majority of the ones interviewed are South Africans. This then raises questions regarding the "value" of reclaimers to the cooperatives as the envoys between the informal reclaimers and Pikitup.

4.3.2 Experiences of landfill site reclaimers

According to Hayami et al (2006), informal reclaimers can be exceedingly effective in diverting waste from landfill sites. As observed in this study, informal reclaimers at the landfill certainly put much of their time and vigour in obtaining and sorting recyclable materials from waste. This is the case regardless of unfavourable and hazardous conditions they operate in. However, initiatives to integrate their conditions have been attempted in their case as the majority of those interviewed had an understanding of integration to some extent. For informal reclaimers operating from the landfill who know about Pikitup's integration do not support the manner in which it is carried out and this resulted in some who joined the cooperatives end up leaving as they felt the form of integration is ineffective. From this, insights on experiences of informal reclaimers were grasped.

For this group of reclaimers, the foremost form of integration ever provided included a onceoff training where COJ provided them with safety clothing (which they do not have
currently). When questioned about when the training took place, one respondent mentioned:
"I and the others guys I work with here we were taken for training by city (municipality) in
2009 for a month" (Respondent 8 01/09/2016). With regards to the purpose of the training,
participants stated they were trained on different recyclables they work with and how to sort
and pack the materials. Although this happened seven years, environmental education was
attempted by the municipality and this can be seen as an encouraging factor by informal
reclaimers in the early stages of undertaking a job in recycling. Contrastingly, the

shortcomings arise with regards to their working conditions when they work without protective clothing. Respondent 9 01/09/2016 mentioned: "if they could provide us with services like mobile clinic where we get checked at least once in a week it would be better".

The other form of integration mentioned was that there are cooperatives which they have to work under provided by Pikitup. Here, the ability to utilise trucks to allow them move around transporting collected recyclables is aided. However, informal reclaimers are not happy with working for the cooperatives for various reasons. One respondent mentioned: "I stopped working through cooperatives because the working hours allocated to use the truck are less, when I work by myself I cover way more hours and make more money for myself" (Respondent 12 01/09/2016). Another respondent stated: "...the money i made working under cooperatives was less compared to what I make when i work alone, and the little money we made under cooperatives we still had to be shared amongst all of us" (Respondent 11 01/09/2016).

Moreover, reclaimers highlighted the fact that when working under cooperatives there is unequal labour contribution by different members (reclaimers), some felt they worked more while others did less work and still got paid equally or some getting paid more whereas they worked less. Therefore, some reclaimers felt exploited. Reclaimers at the landfill also emphasized that they were hardly consulted with regards to important decisions making about them and their needs, cooperatives managers only come to them with the final word and they had to work based on that. Lastly, foreign reclaimers are not considered in the integration initiatives whereas some are in the process of applying for South African citizenship, Pikitup only considers individuals with South African identity. Marello and Helwege (2014) cited that such limitations within an organization usually impact the success to a sustainable function and further affect the success of inclusive partnerships with municipalities.

CHAPTER 5: CONCLUSION

This study has presented numerous factors that hinder the advancement of informal sector integration into municipal systems. One key lesson that can be derived here is the use of cooperatives in the study area is ineffective as this approach continue to exclude the informal reclaimers. It is apparent that a more useful and effective approach to carry out the integration and work formalization initiatives is necessitated. This can either be through cooperative reassessment and evaluation by the municipality or implementation of cooperatives that consist of informal reclaimers as opposed to the current cooperatives. To achieve this, Pikitup along with CoJ can consider establishing transparent communication strategies with informal reclaimers so that agreements for a successful integration intervention can be attained. This will also help attain the objectives of programmes like S@S and Jozi@work designed to promote active citizenship and alleviate urban poverty while diverting recyclable material away from landfills.

Informed decision-making, accountability for decision taken, open participation at all stages and consultation with all interested and affected parties (reaching a mutual understanding to some extend) crucial in environmental management interventions. Combination of existing environmental legislation, information from multiple disciplines and stakeholders into a highly effective group to tackle any issue concerning the environment at any stage is vital in any environmental intervention similar to informal waste picker integration and work formalisation initiatives in my study area. If such issues are revised between stakeholders, agreeing on what essentially integration is and what it should incorporate, putting into consideration the voices of informal reclaimers, chances of the city attaining a successful and sustainable integration can be elevated.

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