

MOIPONE RAKOLOJANE
University of South Africa, SOUTH AFRICA

WASTE RECLAIMING IN EKURHULENI : A CASE STUDY OF HOLOMISA AND VILLA LISA INFORMAL SETTLEMENTS IN SOUTH AFRICA

Abstract:

This paper is about waste reclaiming in the Ekurhuleni Municipality, Gauteng Province, South Africa. It is about the role of informal settlements or shanty towns in waste management, particularly in prolonging the life of a landfill. It documents how government and local community partnerships contribute to waste minimization, in the short term and zero waste management, in the long run. This partnership, it is argued in the paper, contributes also to poverty alleviation for the communities who eke out a living by “working on the dumps”. The argument in the paper is that the Rooikraal example serves as a demonstration project for simple and unsophisticated ways of managing household waste in South Africa and for other major cities in the country, in particular. There is an argument in the literature that marginalized groups still play a limited role in waste management even though they are the main consumers of waste that the richer sections of society generate. This paper concurs with the literature in finding that limited participation cannot be used to give local government the aura of democratic participation. There is a need to recognise the reclaimers as a legitimate constituency in the waste management systems in South Africa.

Keywords:

reclaiming, waste management, South Africa

JEL Classification: Q53

1. INTRODUCTION

This paper is about reclaiming in the Ekurhuleni Municipality, Gauteng Province, South Africa. It is about the role of informal settlements or shanty towns in waste management, particularly in prolonging the life of a landfill. It documents how government and local community partnerships contribute to waste minimization, in the short term and zero waste management, in the long run. This partnership, it is argued in the paper, contributes also to poverty alleviation for the communities who eke out a living by "working on the dumps". Firstly, the author reviews the literature on reclaiming in the Third World. This discussion shows the link between the formal and informal economy of waste.

The debate further narrows down to the African continent and gives an account of innovative examples on reclaiming in the region. Finally it zooms in on South Africa and specifically on the Rooikraal Landfill site where reclaimers in Ekurhuleni go about making a living out of whatever recyclable material they find on the dump. The argument in the paper is that the Rooikraal example serves as a demonstration project for future recycling technologies in South Africa and for other major cities in the country in particular. There is an argument in the literature that marginalized groups still play a limited role in waste management even though they are the main consumers of waste that the richer sections of society generate. Their participation therefore cannot remain a legitimizing process of democratic and participatory processes to waste management

This small scale exploratory study was undertaken to document reclaiming in Ekurhuleni. The aim was to find out more about the reclaimers; who they were, what they did and their forms of organisation, if any and possibly how they fit into the waste management system. The study was also undertaken with the aim of establishing the extent to which reclaiming could be formalised within the existing waste management systems. In order to proceed, the researcher had to interrogate the literature on reclaiming/ scavenging. The literature reviewed then was that of the Third World with a focus on Africa as it was felt there were lessons to be learnt from others just as poor, who are engaged in similar work in other parts of the world.

2 EXPERIENCES WITH RECLAIMING IN THE THIRD WORLD

It is argued that solid waste management and recycling in the Third World show that waste is an important source of livelihood for poor households (Rogerson 2001). Reclaiming (scavenging) is rife in many parts of the world including Asia, Africa and Latin America and is documented in a number of studies (Rogerson 2001; Samson 2008; Zaman & Lehmann 2011; Beall 2002; Medina 2002). It is said to represent an essential survival strategy of the poor (Rogerson, 2001: 247). However these activities are not always welcomed by municipalities in various regions. In some cases the reclaimers are stigmatised and subjected to municipal repression (Rogerson 2001:249).

In this waste management sector various actors are involved and these include waste reclaimers such as those in this study, who regard themselves as entrepreneurs, working on landfills; buy back centres, middlemen and dealers and recycling industries (Rogerson 2001). It is made up of street reclaimers collecting used bottles, card board and

newspapers and those who go through rubbish bins and roadside dumps. Some scholars have remarked on the irony of recycling in developing countries in that “affluence produces abundant waste while poverty does not; livelihoods are predicated upon persistent inequalities in income and consumption” (Beall, quoted in Rogerson 2001: 249).

Of all the various types of groups engaged in the informal waste management economy it is mainly the reclaimers working on landfills who bear the brunt of municipal repression (Furedy 1992; Rogerson 2001). In some cases this group is highly organised as will be demonstrated in this study. In other cases this group is highly disorganised and lacks group cohesion thereby rendering itself vulnerable to municipal repression.

An important observation made on some case studies from Asia, Africa and Latin America is that this informal waste management is approached in various ways by differently municipalities. Attitudes range from outright intolerance to accommodative policies (Furedy 1992; Rogerson 2001). This means that there are no formal mechanisms put in place to bring reclaimers into the formal economy of waste, in some cases. However, international practice concerning urban waste involves methods which include the social upliftment component and the promotion of entrepreneurial opportunities, to the traditional model of waste collection, transportation and disposal (Rogerson 2001). Such best practice, it is argued has its major aim to accommodate and incorporate informal recovery practices within programmes of municipal waste management (Rogerson, 2001; Samson 2008).

Clearly initiatives such as those mentioned above represent new forms of partnerships between municipalities and the informal waste reclaimers and those who have the potential to address urban livelihoods. This is addressed by making opportunities available for small and medium enterprises (SMMEs). In fact studies indicate that in most urban municipalities in Asia, there has been a noticeable paradigm shift where reclaimers have been able to earn a living through waste picking (Furedy, 1989:30). In some Asian cities waste picking in the informal sector has relieved under resourced municipalities of the burden of waste collection, transportation and disposal (Furedy 1989:16).

3 WASTE MANAGEMENT IN AFRICA: THE DEBATE

The literature on waste management in Africa is on SMMEs in the informal economy. A good example is from Cairo, Egypt where the Zabaleen community have organised themselves and play an important role that goes beyond being primary waste collectors but as seasoned entrepreneurs in the waste management industry as well (Medina 2002; Rogerson 2001:254). In Sub Saharan Africa, many poor people make a living through reclaiming a variety of recoverable materials from waste sites (Mangizvo 2010). The waste recovery activities of the informal reclaimers provide waste recycling companies with the raw materials they need (Rogerson, 2001; Mangizvo 2010). In contrast to North Africa, as in the example above, reclaiming activities in Sub Saharan Africa are mainly survivalist. Reclaiming on landfills or dumps, as will be highlighted in this case study, provides some income to the urban poor who are unable to participate in the formal wage economy. Unlike the North African case study given above, the majority of these informal

entrepreneurs are said to be unorganised and as such are prone to exploitation by middlemen and recycling companies (Rogerson 2001:254).

It is evident then that in most cases, incomes are low and the working environments are poor. As mentioned elsewhere in the report, municipalities have adopted either accommodative or prohibitive actions towards the informal entrepreneurs. We can deduce then that for this region municipalities have adopted prohibitive than accommodative actions towards them in contrast to Asian municipalities. The best documented cases of reclaiming and waste picking are said to be from Zimbabwe, Botswana and South Africa (Rogerson, 2001). In Botswana, women reclaimers working on the Gaborone dump make money by selling pillows made out of household sponges reclaimed from the dump (Rogerson 2001:254). In Zimbabwe reclaiming in the 1990s continued unabated despite a hostile attitudes from local authorities because this was peoples only means of livelihood (Rogerson 2001).

4 WASTE RECLAIMING IN SOUTH AFRICA

Research on informal businesses in the waste economy is rather limited and it is said to straddle both Apartheid and Post-Apartheid periods (de Kock, 1987, Samson, 2008:255). Writing in the context of reclaiming in the city of Durban, it is argued that reclaiming was, to a large extent, similar to that undertaken in other parts of the Third World (de Kock, 1987). Reclaimers pursue informal means of livelihood as evidenced in this case study. As a result of rising levels of unemployment, informal reclaiming has become a constant feature of the metropolitan land scape in South Africa. Most importantly, in the new policy environment, there has been a positive move to re-examine waste management procedures and practices so that they are more favourable for entrepreneurs in the waste economy. This represents an important move towards the gradual embrace of more accommodative policy and practices as discussed in the literature (Rogerson 2001; Beall 2002; Medina 2002).

Although little is known about reclaimers in South African cities and the literature on reclaiming /scavenging is rather limited, reclaimers are an important and constant feature of the landscape in major cities around the country. As government tries to implement sustainable waste management systems, very little reference is made in the legislation on the contribution of the reclaimers to sustainable management.¹ This is in line with government's commitment to the complete eradication and phasing out of salvaging on landfills.² There has not been a clear recognition of reclaimers in existing recycling processes. Some authors assert that "the lack of recognition for scavenging from the highest environmental legislation of the country presents significant tensions with other policy documents. When it comes to policy implementation, the Minimum Requirements for Disposal of Waste by Landfill, allow site managers to decide whether or not to allow reclaiming/salvaging on their sites but this is done on condition that the managers indemnify the relevant municipality from any responsibility" (Benjamin, 2007:29). Clearly this approach creates a very strong disincentive for the legitimisation of reclaimers.

¹ Polokwane Declaration on Waste accessed from www.environment.gov.za/ProjProg/Waste last accessed on June 3 2011.

² Action Plans SA: Action Plan for Waste Minimisation and Recycling, 1999.

Municipalities throughout the country have tended to hide behind this policy document in restricting access to landfills.

However, as a result of lobbying by a number of NGOs, among which was GroundWork which is an NGO working with environmental issues, the Waste Bill, now contains sections that deal specifically with informal reclaimers (Samson, 2008:2). Initially the Bill made no reference to the growing number of informal reclaimers although it is recognised that waste can be a valuable economic resource and that its negative impact is borne mainly by the poor (Republic of South Africa, 2007b). Fortunately for this case study, the Ekurhuleni municipality, through the efforts of the Executive Director, Environment and Tourism, has been proactive in its attempt to implement both the spirit and the letter of the Bill.

5 BACKGROUND TO THE STUDY AREA

South African cities, particularly peri urban cities, consist largely of poor, marginalised black communities. This is so as a result of the legacy of apartheid. As a result of the repeal of a number of Apartheid Acts such as the Group Areas Act in the period leading to the emergence of a post-Apartheid state, it was in the area of housing that problems of overpopulation of the cities were observed. Informal settlements mushroomed and placed a major strain on the provision of social services for the new government. According to some scholars, it is in these settlements that we observe high levels of poverty and unemployment (Cross et al 1996). Other scholars such as (Dewar, 1992) argue that these settlements constitute desperately poor living environments.

It is against this background of well documented history of Apartheid cities that attention is now focussed on the manner in which inhabitants of these settlements eke out a living. For this study the focus is on the reclaimers at the Rooikrall landfill site and their role in the waste management value chain. A number of assumptions have been made where information was not readily available. For instance, with regard to landfill siting, it is assumed that all the processes/guidelines detailed in the Waste Management Systems legislation were followed to the letter (DEAT 1998 and DWAF1998). These are the statutory conditions under which landfills can be developed. One of the requirements pertinent to the study is that of *public participation* of all stakeholders in the process.

In a study on land fill siting in Durban North, it was observed that the process of public participation was fraught with problems (Scott & Oelofse, 2005). Public participation has tended to represent the interests and concerns of the literate and powerful stakeholders who could use the institutional mechanisms at their disposal to exclude the poor and marginalised. The authors argue for a public participation that represents the interests of the "invisible stakeholders" as well (Scott & Roelofse, 2005). Public participation should indeed be approached in this manner. It should not be a mere legitimizing process whose outcome is provision of information to some stakeholders and neglecting important social groupings such as the informal reclaimers who will remain altogether invisible or play a limited role. There are a few instances where attempts have been made at broadening participation and a good example is in the area of Environmental Impact Assessment (EIA) where legislation includes both social, economic and political components of the environment (Scott and Oelofse 2005).

6 THE ROOIKRAAL RECLAIMERS:

This study is about the reclaimers who live adjacent to the Rooikraal Landfill. The two settlements are Villa Lisa and Holomisa. The former is situated about two kilometres and South East of the landfill while the latter is nearer and on the North West. As is the case with most informal settlements in South Africa, the two have inherited the impact of poor land use from the Apartheid era as discussed elsewhere in the paper. The inhabitants of the settlements suffer from social injustice due to underdevelopment and neglect of their living environments. In most cases they act as buffer zones separating any developments such as landfill siting for example, from the more formal and in some cases more affluent residential areas. In this case the perceived negative effects of the example above are borne by these communities. It is therefore morally right that they also enjoy the benefits and opportunities to be gained from the landfill especially with regard to the potential for small and medium sized recycling businesses. As primary stakeholders they bear the direct impact of landfill siting and among these are odour, dust, noise and rotting litter.

7 THE RESEARCH PROCESS

The research methods used were qualitative. The process consisted of field work which was conducted from April to May 2009 and again during the month of August 2011. This process included both structured and unstructured interviews with Ekurhuleni municipal officials, management of the Rooikraal landfill site and reclaimers working on the landfill or their representatives. The qualitative research methodology was important in that it helped tease out important issues that impacted heavily on the reclaimers in the area of waste management. These methods of inquiry are more open and allow for further probing. The in-depth interviews conducted with the reclaimers elicited very real concerns and aspirations. Great care was taken to adhere to the ethical code of conduct for researchers. Some reclaimers agreed to have their first names used while others preferred to remain anonymous.

The first meeting was with the executive committee, followed by visits to two demarcated sorting sites; individual in-depth interviews with various reclaimers in both Holomisa and Villa Lisa; a focus group discussion with the Executive Committee; telephone and face to face interviews with municipal officials; interviews with site managers. The Rooikraal landfill, which is about 63 hectares, is said to have operated for a long time without a permit and this is the period some of the reclaimers who have been working here longer than 20 years, remember very well because they used to be chased away from the dump by the then Apartheid security personnel.³ According to the IDP for Ekurhuleni Municipality⁴, approval of the landfill permit was envisaged for 2004 while land for waste disposal was planned for 2006/7. It was envisaged that by July 2008 the site would be in a position to operate as per the minimum requirements for waste management mentioned elsewhere in the paper.

Clearly the discussion above supports the assertion that the reclaimers have previously worked on the landfill for a long time and under very difficult conditions and in fact some

³ Interview with the Chairman of the Executive Committee, Hlanganani Reclaimers

⁴ IDP for Ekurhuleni Municipality, Vol 2 of 2 2005/2009

of them remember vividly and painfully relate how they used to be harassed, chased away and beaten up by security guards, who sometimes would set their dogs on them.⁵ It is said that one reclaimer died in 2000 as a result of the actions of the security guards employed by the municipality to guard the site.⁶ Towards the end of 2000, the relationship with council is said to have improved in that the reclaimers were now allowed onto the site to work. In fact they speak fondly of one Mr Mthombeni who was the site manager at the time. This cordial relationship continued during the period of the research with the then site manager.⁷

8 RESEARCH FINDINGS

FORMS OF ORGANISATION

According to the reclaimers, roughly between 200 and 500 people work on the landfill at different times and the majority are from Holomisa and the rest from Villa Lisa as well as Vosloorus, a more formal township establishment.⁸ They call themselves Hlanganani Reclaimers. In contrast to other parts of the country where reclaimers are fighting among themselves for this resource, this group is highly organised.⁹ The reclaimers at Rooikraal have organised into a well-functioning management committee comprising of forty four people representing the reclaimers from Holomisa and Villa Lisa. This committee deals with broader issues of reclaiming including setting the rules and regulations for the members. Within this management committee is elected an executive committee comprising of eight people who represent the communities on a 50/50 basis and execute management decisions as well as serve as an important link with the Ekurhuleni municipality.¹⁰ This committee meets on a regular basis and when the need arises to iron out any problems that may arise from time to time as well as address concerns the reclaimers may have.

The reclaimers have a clear division of labour that seems to work exceptionally well for them with young people, men and women working on the site during the morning slot while the older people work in the afternoon. It is therefore not surprising that there is no indication of competition for this resource (waste), as is the case at Simmer and Jack, another landfill site in Germiston, Ekurhuleni where violence has erupted among the reclaimers in competition for access to the landfill.¹¹ The reclaimers at Rooikraal adhere to the rules and regulations that they helped set up themselves. One of the rules the researcher found interesting was that any member who broke the rules would be barred from working on the site for a set period and because reclaiming is most reclaimers' only means of livelihood, the rules are seldom broken.¹²

EFFORTS AT LEGITIMISING ACCESS

⁵ Interview with Zondi, April 3; focus group discussion with the EXCO, Hlanganani Reclaimers April 25

⁶ Interview with Skhumbuzoa, Zondi, a female reclaimer, April 3- 4

⁷ Interview with the EXCO, May 5, 2009; August 20, 2011

⁸ Interview with the reclaimers; interview with Zondi, May 5 and 7; August 15, 2011

⁹ See Samson, M 2008 in *gRoundWork: Petermaritzburg*

¹⁰ Interviews with the Site Manager, Rooikraal Landfill, April 2; Zondi, Apr 3 2009

¹¹ Interview with Ekurhuleni municipality official, April 3 and August 20, 2011

¹² Interview with the EXCO, May 5, 2009 and August 20, 2011

The municipality has demarcated a working site for the reclaimers, within the landfill but further from the main area where waste is offloaded. This site is nearer to the Holomisa informal settlement and is used primarily by the reclaimers from the informal settlement. The reclaimers are allowed onto the site in the morning, between 07h00 and 09h00 and in the afternoon, between 15h30 and 17h00¹³ this is done after the trucks carrying waste have offloaded. Within this one and half hour period allocated, they are expected to collect as much waste as they can and then transport it to the demarcated sorting site. The reclaimers make their own arrangements on how the recyclable material is transported to the site. On one of the days the site was visited, the researcher observed that lighter recyclable material such as plastics and cardboard was placed on each reclaimers back and carried to the sorting site at Holomisa.

For reclaimers from Villa Lisa, their sorting site is much further from the landfill, about 500 metres away but nearer the informal settlement. The site was allocated to the reclaimers with the help of a local councillor. Before the area was fenced, the reclaimers allege that some residents, who often times looked upon them with disdain as a result of the kind of the work they did, used to help themselves to their goods at night when no one was looking!¹⁴ They speak with pride that they were able to raise about R21 000 to have the area fenced so that it would be difficult for thieves to help themselves to their goods.¹⁵ Like the reclaimers from Holomisa, they also carry whatever recyclable material they can on their backs and make their own arrangements for the transportation of heavier material.¹⁶ A number of light vehicles were seen offloading the material at the two sorting sites during one of the researcher's visits. As soon as all the recyclable material has been offloaded at the site, it is now divided into plastics, cans, metals and bottles and each reclaimer has his /her own sorting space within the sorting area. Some reclaimers deal only in plastics while others collect scrap metals or paper or bottles and others who are very few, sell all recyclable waste.

The EXCO mentioned earlier maintains order at the two sorting sites as well. The reclaimers share information among themselves on who to sell to and at times sell collectively to different companies or anyone who is willing to pay a good price.¹⁷ The observation however is that the reclaimers do not determine the price but they agree among themselves the absolute minimum that they will accept from the recycling companies and or their middlemen. In most cases the middlemen adopt a take it or leave it attitude which leaves the reclaimers vulnerable to unscrupulous middlemen. In discussions with the reclaimers they related an incident where one recycling company ripped them off about R16 000 worth of goods!¹⁸

In spite of all this the reclaimers are indeed shrewd business people, well aware of the environment they operate in. They make good money on some occasions and very little on others but they assert that their families never go hungry.¹⁹ When asked how much

¹³ Interview with Zondi and Site Manager, April 4, 2009

¹⁴ Interview with Manthabeleng and Skhumbuzo, EXCO members, Villa Lisa sorting site, May 9, 2011

¹⁵ Interview with Skhumbuzo and Manthabeleng May 7, 2009

¹⁶ Interview with Majola and Manthabeleng, May 7, 2009

¹⁷ Interview with Majola, Manthabeleng, Zondi at the Villa Lisa and Holomisa sorting sites, May 9, 2009

¹⁸ Interview with Zondi, May 9; Focus group discussion with the EXCO, May 16, 2009

¹⁹ Interview with the EXCO, April 4, 2009

money they made on average per week, one reclaimer remarked that when “business is good I make about R800 per week and about R100 when business is slow.”²⁰



Older reclaimers at work in the afternoon, August 2011

THE RECLAIMERS' SHORT AND LONG TERM GOALS

ON ACCESS

- The reclaimers, while acknowledging the allocated time slots are of the opinion that their incomes would increase more if they could be allowed onto the site for a longer period and a bit earlier, at about 14h00. The reason for this is that they have observed that most trucks carrying waste offload in big numbers from 11h00 until 13h00 and by the time they get to the site at 15h30 most of the recyclable material has been compacted.²¹

ON WORKING CONDITIONS

²⁰ Interview with the EXCO April 4, 2009

²¹ Interview with Zondi, Majola and Manthabeleng April 2009. August 2011

- The reclaimers would like to have access to social services such as water, sanitation and electricity on the sorting site. At present they work under conditions that are not pleasant. Luckily for both groups, they work closer to their communities and these services can be negotiated with neighbours.²²
- Their long term goal is to form SMMEs focussing on collecting the different material at the landfill. They also see themselves as company owners with an ability to develop composting and recycling facilities at the site
- They aspire to formalise their place in the waste management system and have their role recognised in the public sphere.
- The fact that the reclaimers have already begun selling collectively to take advantage of economies of scale is clear indication that they are shrewd business people and are ready for formalisation into the waste management processes/economy. In a nutshell they have a proven track record of managing themselves and the sale of their goods with formal enterprise. The Ekurhuleni municipality is poised to be in the forefront of implementing programmes that help people move out of the so called “second” economy into the “first” economy characterised by formal employment and integration into the global markets.²³

9 CONCLUSION AND RECOMMENDATIONS

1. The cordial relationship that the reclaimers enjoy with the municipality as well as the conducive environment created for reclaiming, has reduced the health and safety hazards of reclaiming in that the reclaimers have now internalised the rules and regulations under which they work at the landfill.
2. This experience clearly demonstrates that safe and regulated methods of reclaiming serve as motivation towards the formalisation of reclaiming activities for the reclaimers in this case study. At this stage the reclaimers have access to a relatively secure income.
3. The municipality could be more proactive by opening up access more subject to the municipality’s minimum requirements for salvaging/reclaiming. There is a need to recognise the important contribution that reclaimers make to sustainability by reducing the amount of waste going to the landfill, thereby extending the life of the landfill. This paper recommends that more rigorous research needs to be carried out to determine the extent to which reclaiming on landfills extends the life of a landfill.
4. It is also hoped that this small scale, exploratory research will, to an extent, help sensitise the municipalities more to the role of reclaimers in the recycling industry

²² Interview with Zondi, Majola and Manthabeleng

²³ See Bond in *AFRICANUS*, 2007 for a fuller discussion of the “first” and “second” economies

and most importantly, in waste minimisation. After all South African cities, like many cities in other parts of the world, are grappling with issues of waste management as a result of the ever increasing rate of urbanisation.

5. Although the literature on reclaiming is rather limited, there is agreement in the existing literature that there is a need for national policy processes that recognise reclaiming as an important waste management process. The Ekurhuleni Municipality could serve as a model for other municipalities in South Africa on how to formalise reclaiming, even if it is on a small scale because it fulfils an important function by feeding the poorest of the poor who have no other means of livelihood. Other municipalities are said to be anti-poor and pro- business (Samson, 2008:13). Ekurhuleni, on the other hand, is pro poor and depending on whether or not it has a healthy budget, it could do more by effecting policy changes at the local level which would make space for meaningful participation of reclaimers in waste management processes. In this manner participation would be for all stakeholders and not legitimising process for government. The high level of organisation demonstrated by the reclaimers is clear indication that they are ready to take part in these processes, as key stakeholders, if they are made accessible to them.
6. Although research in South Africa indicates that a deliberate shift has been made towards democratic policy making processes and an inclusion of all stake holders, these participatory approaches to waste still remain, in the main, a legitimising process with marginalised groups playing a limited role (Scott & Oelofse, 2005:462).
7. The Ekurhuleni municipality on the other hand, needs to be commended for taking this giant leap- of tackling these issues as development issues, requiring a more participatory and inclusive approach.
8. Drawing from the Asian and African experience discussed above and due to the observation that the reclaimers are highly organised, there is indeed room to open up SMME opportunities and thereby integrate this informal waste recovery activity into a national solid waste management economy and system. This is an opportunity that one is hoping the municipality will not miss. In fact this presents a real opportunity for the adaptation of action plans which aim to phase out reclaiming/ salvaging on landfill sites in the long term.²⁴ Rooikraal has the potential to serve as a demonstration project for future recycling technologies in South Africa and for other sites in the municipality, in particular.
9. There is a need to recognise the reclaimers as a legitimate constituency in the waste management systems. There should be proper consultative processes and empowerment programmes should be put in place for the reclaimers to move from the informal to the formal economy of waste. Space should be provided for

²⁴ National Waste Management Strategies and Action Plans, South Africa, 1999

reclaimers to envision their dreams, determine their agenda and to manage their own processes

APPENDIX

1. Focus group discussions

Executive Committee (EXCO), Hlanganani Reclaimers April 25, 2009

2. Interviews

Zondi, Chairperson, Executive Committee (EXCO), Hlanganani Reclaimers
 Skhumuzo, member EXCO, Hlanganani Reclaimers
 Manthabeleng, member EXCO, Hlanganani Reclaimers
 Vera, member EXCO, Hlanganani Reclaimers
 Ekurhuleni Municipality official
 Site Manager, Rooikraal Landfill Site, Boksburg
 Executive Director, Environment and Tourism, Ekurhuleni Municipality

REFERENCES

- Beall, J. 1997. Thoughts on poverty from a South Asian rubbish dump: ender, inequality and household waste, *IDS Bulletin*, 28 (3), pp73-90.
- Beall, J. 2002 Globalization and social exclusion in cities: framing the debate with lessons from Africa and Asia. *Environment&Urbanization* (14)1, pp41-51.
- Benjamin, S. 2007. Rapid assessment on scavenging and waste recycling work by children in South Africa. Pretoria: Programme Towards the Elimination of the worst forms of Child Labour. ILO.
- Bond, P(Ed). 2007. Special Issue. Transcending Two Economies: Renewed Debates in South African Political Economy. *Africanus* 37(2).
- Cross C, Luckin, L Mzimela, T & Clark, C. 1996. On the edge: poverty, livelihoods and natural resources in rural KwaZulu- Natal, in M, Lipton & F Ellis(Eds) *Land Labour and Livelihoods in Rural South Africa*, Durban: Indicator Press.
- De Kock, R. 1987. The garbage scavengers: picking up the pieces, *Indicator South Africa* 5, pp51-66.
- Dewar, D. 1992. Urbanisation and the South African city: a manifesto for change, in D, Smith (Ed.) *The Apartheid City and Beyond: urbanisation and Social Change in South Africa*. London: Routledge.
- Department of Environmental Affairs and Tourism 1998. Environmental impact management Guideline Document, EIA Regulations. Pretoria: DEAT
- Department of Water Affairs and Forestry, 1998. Minimum Requirements for Waste Disposal by Landfill, 2nd Ed Pretoria: DWAF

- Fahmi W, & Sutton, K. 2010. Cairo's Contested Garbage: Sustainable Solid Waste Management and the Zabaleen's Right to the City. *Sustainability* (2), pp1765-1783.
- Furedy, C. 1988. Enterprise with urban wastes. *Development and Cooperation* 6.
- Furedy, C. 1989. Social considerations in solid waste management in Asian cities. *Regional Development Dialogue*, 10(3).
- Furedy, C. 1992. Garbage: exploring non-conventional options in Asian Cities, *Environment and Urbanization* 4(2).
- Hardoy, J & Satterwaite, D. 1992. Environmental Problems in Third World Cities, London: International Institute for Environment and Development.
- Medina, F. 2008. The informal recycling sector in developing countries; organizing waste pickers to enhance their impact. *GRIDLINES*, Public-Private Infrastructure Advisory Facility, World Bank: Washington DC, pp1-4.
- Republic of South Africa, 2007. National Environmental Management: Waste Bill. Government Gazette No. 30142 of 3 August 2007.
- Rogerson, C. 2001. The waste sector and informal entrepreneurship in developing world cities. *URBAN FORUM*. 12(2), pp247 – 259.
- Samson, M 2008. Reclaiming livelihoods: the role of reclaimers in municipal waste management systems. Pietermaritzburg: groundWork
- Scott, D & Oelofse, C 2005. Social and Environmental Justice in South African Cities: Including "Invisible Stakeholders in Environmental Assessment Procedures. *Journal of Environmental Planning and Management*. 48(3).
- Zaman, A & Lehmann, S. 2011. Challenges and Opportunities in Transforming a City into a Zero Waste City. *Challenges* (2), pp73-93.
- Department of Environmental Affairs and Tourism. 2006. Draft national environmental Management: Waste management bill. Available at www.cameroncross.co.za/modules
- Mangizvo VR. 2010. An overview of the management practices at solid waste disposal sites in African cities and towns. *Journal of Sustainable Development in Africa* (12)7.