OPPORTUNITIES AND LIMITATIONS OF (SOCIAL) ENTREPRENEURIAL APPROACHES: A CASE STUDY OF THE RECYCLING SECTOR IN CAPE TOWN, SOUTH AFRICA

by

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Abstract

Social entrepreneurship, which can be described as the application of market-based approaches to societal and/or environmental problems, represents a collision between good intentions and the pursuit of profitability. Nearly two decades ago, the democratically elected African National Congress inherited a country in crisis. Neoliberal policies have since promoted the role of the private sector in economic and social development in South Africa. Entrepreneurship is seen as a tool to stimulate poverty alleviation, address staggering unemployment rates and integrate blacks into the mainstream economy. Municipalities are increasingly turning to alternative service delivery, privatization and public-private partnerships to address service delivery crises. Moving beyond traditional methodological approaches of individual case studies, this research adopts a holistic analysis of the recycling sector, which allows reflections on the state and implications of (social) entrepreneurial approaches. Particularly, this research is concerned with the opportunities and limitations afforded by entrepreneurial approaches, including the extent to which contextual variables are acknowledged and unequal power dynamics are challenged or further entrenched. Grounded in entrepreneurship and business theory, this research also pulls from waste management literature, global development, critical and gender studies. Various methodological inquires are undertaken, including structured and semi-structured interviews of participants of recycling initiatives and management of sector organizations, content analysis, and the facilitation of a Recycling Forum. Findings suggest that while there are some opportunities, (social) entrepreneurial approaches are significantly hindered by a lack of acknowledgement of contextual variables and critical investigation into the institutional structures and biases that create particular gendered entrepreneurial spaces. Initiatives risk entrenching apartheid-era inequalities and further disadvantaging the most vulnerable through the creation of competition. The emphasis on recycling deflects efforts from more immediate or hazardous challenges and is insufficient to challenge market inequalities. Moving beyond a guise of good intentions, social entrepreneurship is suggested as a reflective and iterative process that promotes greater self-awareness of one’s impact on the existing value chain, power dynamics and social justice.
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Don’t sit and wait. Get out there. feel life.
Touch the sun, and immerse in the sea.
— Rumi

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Swim out of your little pond.
- Rumi
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Chapter 1
Introduction

1.1 Introduction

*The reasonable man adapts himself to the world: the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.*

– George Bernard Shaw

*Never doubt that a small group of thoughtful committed citizens can change the world; indeed it’s the only thing that ever has.*

– Margaret Mead

Social entrepreneurs have adopted mantras that illustrate the ambitious, innovative, systemic changes that characterize their efforts. Indeed, social entrepreneurship represents the culmination of the collision between good intentions and the pursuit of profitability. The concept, which can be understood as the application of market-based approaches and business acumen to persistent societal and/or environmental problems, often conjures up images of a heroic entrepreneur and of a warmer, more personable form of capitalism. One does not need to look far to witness the proliferation of private sector-led growth on the African continent. New terms – philanthrocapitalism, Africapitalism, venture philanthropy – describe for-profit investment with the aim of stimulating economic development (Hirsch, 2013), suggesting benevolence and context appropriateness. Although the past 30 years has witnessed a surge in interest in social entrepreneurship (Dacin, Dacin, & Tracey, 2011), there continues to be a lack of critical work on the subject.

1.2 Background

Since the emergence of social entrepreneurship, its infiltration into multiple academic disciplines and into popular society has been ever increasing. Much of the current scholarly work is atheoretical and
descriptive, relying on case studies or anecdotal evidence (Benavides-Espinosa & Mohedano-Suanes, 2012; Dacin, et al., 2011; Mair & Marti, 2006). Debates rage over what constitutes social entrepreneurship, what makes it ‘social’, and alternatively, what makes it ‘entrepreneurship’. This blurry theoretical domain is unsurprising, given the lack of consensus on the definition of ‘entrepreneur’, although it has been in our vocabulary since the late 1700s (Tan, Williams, & Tan, 2005). However, a common thread among definitions of social entrepreneurship is the creation of societal value. Subsequently, there is a body of literature that attempts to categorize social enterprises by various determinants, including the type of capital leveraged or the relationship between mission and finances. Research on impact assessment is confounded with the difficulties in quantifying environmental, social, and socio-economic impact. Given the current state of social entrepreneurship research, as well as the uncertainty over whether or not it constitutes a distinct field, or simply a subset of entrepreneurship studies, this research borrows broadly from wider entrepreneurship studies.

While recognizing the potential for further theorizing, of particular interest to this research is scholarly work that critically examines dominant discourses. It is argued that entrepreneurship is based on a North American or European white male archetype of a hero (Ogbor, 2000; Scott, Dolan, Johnston-Louis, Sugden, & Wu, 2012), and there have been calls to analyze the ways in which structures reinforce and perpetuate gender differences and racial and/or ethnic biases (MIRchandani, 1999; Ogbor, 2000). There is generally a lack of research on entrepreneurship in the Middle East, sub-Saharan Africa and Latin America (Bruton, Ahlstrom, & Obloj, 2008). In addition, a number of assumptions are unchallenged in dominant discourses, portraying social entrepreneurship as a positive, participatory phenomenon.

Within South Africa, and Africa more generally, the impact and scale of social entrepreneurship is unknown (Visser, 2011). Even within larger entrepreneurship research, significant gaps exist.
Entrepreneurship, which was legally prohibited to black communities during apartheid, has been assigned a significant role in confronting South Africa’s socio-economic challenges (Ahwireng-Obeng, 1993; Herrington, Kew, Simrie, & Turton, 2012). The government has enacted a number of policies aimed at stimulating entrepreneurship, particularly among black communities (Preisendörfer, Bitz, & Bezuidenhout, 2012; Scott, et al., 2012). However, entrepreneurial activity rates in South Africa are significantly below the average in its cohort of efficiency-driven economies, as demonstrated in figure 1.1 (Turton & Herrington, 2013, p. 17). Moreover, there are large discrepancies among ethnic groups. Black and coloured people have low rates of entrepreneurial activities, and their ventures are more likely to be small-scale and volatile than white or Indian/Asian ventures (Preisendörfer, et al., 2012). A subsequent body of research explores factors that inhibit entrepreneurism, including poor infrastructure, security concerns, poor health and education systems, government corruption and nepotism, and inefficiencies in the labour market (Herrington, et al., 2012; Scott, et al., 2012; Turton & Herrington, 2013). Other explanations are reduced to ethnic and gender essentialism, arguing that black South Africans and women have psychological attributes that are not conducive to entrepreneurial activities (Preisendörfer, et al., 2012; Visser, 2011). It is the view of this thesis that essentialist explanations are inadequate, and instead research must examine the ways in which various structures or biases create particular entrepreneurial spaces and opportunities for various ethnic groups (Ogbor, 2000).

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1 Apartheid refers to the racial segregation imposed by the ruling government, the National Party, and enforced by legislation, from 1948 to 1994.
2 Efficiency-Driven Economies have “higher levels of industrialization and higher productivity, and the growth of small and medium-sized enterprises in the manufacturing sector. Along with South Africa, Brazil, Mexico, and Brazil are EDEs. They are situated between Factor-Driven Economies, which are characterized by lower levels of economic development, and “in which the primary, extractive and agricultural sectors form the basis of sources of income”, and Innovation-Driven Economies, “in which industrial growth is complex and well-established” (Visser, 2011, p. 237).
3 I have used apartheid-era racial categories to remain consistent with terms currently in use by the South African government for program and policy development and by Statistics South Africa, and not as an endorsement of said terms.
The approach adopted here is to take the recycling sector in Cape Town as a holistic unit of analysis, in which the adoption of various social entrepreneurial approaches by a diverse set of stakeholders is examined. The evidence is then used to draw conclusions on the state and implications of social entrepreneurship in South Africa. Waste disproportionately affects the poor, who are more likely to experience refuse removal backlogs and live in close proximity to pollution sources or landfills. Waste picking is a known livelihood strategy for the extreme poor. During the apartheid era, public resources were concentrated in white, middle class communities, and the current ruling party, the African National Congress, have been unable to address the wide disparities among access to services, with waste management a low priority for government (Godfrey & Scott, 2010).
1.3 Objectives

This research is primarily exploratory and descriptive. By undertaking a holistic analysis of a sector, it moves beyond the methodology of individual case studies common in general entrepreneurship literature with the intention of revealing insights regarding contextual factors affecting the sector as a whole. The following research questions are explored:

1) What discourses are created around (social) entrepreneurship in South Africa?

2) To what extent do social entrepreneurial approaches acknowledge contextual variables?

3) To what extents do the social entrepreneurial approaches adopted by the sector organizations display the “emancipatory potential” (Scott, et al., 2012, p. 544) of entrepreneurship? To what extent are existing inequalities or power dynamics challenged or further entrenched?

4) What are the opportunities and limitations of social entrepreneurial approaches within the recycling sector in Cape Town?

It is beyond the scope of this research to provide exhaustive accounts of entrepreneurship and waste management. Hence, this research is limited to community-based initiatives focusing on the collection of recyclables within the Cape Town metropolitan area.

This research adopts a variety of methodological tools among a diverse set of stakeholders. Two in-depth case studies were conducted with recycling initiatives, and included semi-structured and structured interviews of participants and management. Semi-structured interviews were conducted with more than a dozen sector organizations or informants, which provided contextual information, including activity and linkages across the recyclable value chain. A Recycling Forum was organized in October 2012 after initial observations and comments from various stakeholders that a lack of coordination existed in the sector. Additionally, I attended a number of events that brought the design community, academia and citizens together to come up with solutions to waste management problems in townships. Content analysis was also undertaken on publications, websites and reports of the sector organizations and other relevant
stakeholders. A literature review concluded major themes in social entrepreneurship and waste management research.

This writing reflects a multitude of disciplines. While grounded in entrepreneurship and business theory, it is also influenced by waste management literature, global development, gender and critical studies. The recycling and waste management sectors are inherently environmental, encompassing issues of consumption, product design, proper disposal methods and environmental limits to growth. However, interactions with sustainability beyond an artificial level remains to be seen, as demonstrated by the sector organizations.

1.4 Conclusion

The rhetoric of social entrepreneurship is grandiose and ambitious, with tales of heroic, altruistic entrepreneurs and societal change. This research acknowledges the legacy of apartheid and current challenges of extreme inequality and poverty, and as such provides a pragmatic assessment of social entrepreneurial approaches adopted within Cape Town’s recycling sector. This introductory chapter has provided contextual information on social entrepreneurship and waste management in South Africa. This is continued in chapter 2, with particular reference to dominant and critical entrepreneurial discourses, and the context in urban South Africa. This serves to create a foundation on which further methodological inquiry can be conducted, which is outlined in chapter 3. Chapter 4 delivers a profile of the recycling sector in Cape Town, and details of the sector organizations. Research findings, analysis and discussion are presented in chapter 5. The final chapter offers a conclusion and further recommendations.
Chapter 2  
Literature Review

The following chapter serves two functions: to provide an overview of existing literature on social entrepreneurship, with a focus on critical research; and to explore waste management and recycling, with a focus on the South African context and community-based waste management. The latter serves to provide contextual information to ground further methodological inquiry. The recycling sector in Cape Town is used as a holistic unit of analysis, in which the adoption of various social entrepreneurial methods by a diverse set of stakeholders is examined, to draw conclusions on the state and implications of social entrepreneurship in South Africa. As social entrepreneurship and waste management span various disciplines, and encompass numerous subthemes and contexts, it is beyond the scope of this chapter to provide a comprehensive detailing. Hence, a pragmatic approach is adopted where concepts relevant to the goals and research questions of this paper are selected for investigation.

The first section of this chapter will present an overview of the existing literature on social entrepreneurship, exploring dominant discourses, challenges and critiques. This discussion will then be situated within the context of South Africa. The subsequent section describes the waste management and recycling context in Cape Town. The chapter concludes with a discussion of key themes and concepts that will be explored in further chapters.

2.1 SOCIAL ENTREPRENEURSHIP

2.1.1 Introduction and Clarification

In this section, social entrepreneurship will be introduced and clarified by situating the concept within larger entrepreneurship research.

Discussions of social entrepreneurship share the same undefined and murky theoretical terrains as larger entrepreneurship discourses. Although the first definition of ‘entrepreneur’ traces back to Cantillon in
1775, there is a lack of consensus of what constitutes entrepreneurship and an entrepreneur (Tan, et al., 2005). Hence, considering that social entrepreneurship first emerged only some thirty years ago, having been popularized in the 1980s by a network of support organizations, politicians and celebrities (Dacin, et al., 2011), it is unsurprising that much of the current social entrepreneurship research is atheoretical and descriptive, based on anecdotal evidence or case studies (Benavides-Espinosa & Mohedano-Suanes, 2012; Dacin, et al., 2011; Mair & Marti, 2006).

Social entrepreneurship is often situated and differentiated in comparison to other forms of entrepreneurship. Whereas traditional entrepreneurship is typically characterized by a focus on maximizing profits or shareholder wealth (Bornstein & Davis, 2010), ecopreneurship and social entrepreneurship are seen to deviate from this concept. In addition to the creation of economic value and profit, they seek to address environmental and societal problems respectively (Schaltegger & Wagner, 2011). Academics point to several influences for the emergence and proliferation of social entrepreneurship. Firstly, traditional market forces and the public sector are perceived to have failed in addressing persistent social and environmental problems (Austin, Stevenson, & Wei-Skillern, 2006; Jeffs, 2006). Secondly, not-for-profits are increasingly adopting business acumen to increase cost-effectiveness and achieve sustainability (Dees & Anderson, 2003; Smith-Hunter, 2008).

The existing literature on social entrepreneurship is often preoccupied with a lack of definition of the concept. Numerous papers have compiled extensive reviews of the various descriptions employed by researchers and institutions (Austin, et al., 2006; Dacin, Dacin, & Matear, 2010; Zahra, Gedajlovic, Neubaum, & Shulman, 2009), finding a common thread among definitions of the derivative of social value. This is reflected in the often grandiose rhetoric. Building on the heroism of a traditional entrepreneur, a social entrepreneur encompasses “transformative social ambition” (Mair, Battilana, &

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Cardenas, 2012, p. 353), employing “innovation” (Austin, et al., 2006; Urban, 2008) to achieve an amelioration of “adverse social conditions” (Zahra, et al., 2009, p. 520). There is a subsequent discussion in literature regarding whether or not social entrepreneurship constitutes a distinct field of study (Desa, 2007; Mair & Marti, 2006).

For the purpose of this paper, social entrepreneurship will be understood as the application of a market-based approach and business acumen to address societal and/or environmental problems, in and across not-for-profit, business, and/or government sectors. Of particular interest is the application of social entrepreneurial approaches to “alleviate social problems and catalyze social transformation” (Mair & Marti, 2006, p. 37).

2.1.2 Dominant Discourses

2.1.2.1 Themes in Social Entrepreneurship Literature

A review of leading social entrepreneurship literature reveals a number of key themes and discussions. As previously mentioned, researchers have sought to demystify the concept of social entrepreneurship through attempts to arrive at an appropriate definition. Similarly, there have been efforts to devise models and frameworks through which social enterprises can be researched in a more systemic way. Alter (2006) offers a classification system based on the relationship between finances and mission. Embedded social enterprises are those with synonymous business activities and social programmes, whereas integrated social enterprises have overlap between business activities and social programmes, sharing costs and assets. External social enterprises have distinct business activities and social programmes. Other models are based on the type of capital leveraged by the social enterprise. While the model presented by Mair, et al. (2012) focuses on human, political, economic or social capital, Dacin, et al. (2010) explore how institutional, cultural or relational resources are leveraged. Zahra, et al. (2009, p. 522) organize social enterprises according to their relationship to the existing order. Social bricoleurs act on a small-scale to “maintain social harmony”, social constructionists seek to “mend social fabric” and provide “alternative
structures” for goods and services provision, and social engineers attempt to disrupt existing social structures on a large-scale, replacing them with more socially efficient ones.

Performance metrics constitute another focus in social entrepreneurship literature. Socio-economic, environmental and social impact are difficult, or even impossible, to quantify (Mair & Marti, 2006). Vague and undefined goals of ‘empowerment’ and findings are susceptible to statistical manipulation (Urban, 2008). Currently, there is no universally accepted assessment metric. Zahra, et al. (2009) propose a standard of total wealth to evaluate ventures, encompassing economic and social wealth, as well as economic, social and opportunity costs.

Early research on social entrepreneurship focused on the economic function of entrepreneurship or on the actor of the social entrepreneur. Social entrepreneurs are envisioned to possess characteristics similar to traditional entrepreneurs, which are typically associated with masculinity, such as “ambition, independence, individualism, competitiveness, self-reliance and risk-taking behaviour” (Eichler, 1980, p. 63 as cited in Mirchandani, 1999, p. 226). In recent years, however, there has been increasing acknowledgement that social entrepreneurship requires ‘distributed agency’ (Mair, et al., 2012, p. 355), and research has shifted to the ‘how’ of entrepreneurship (Austin, et al., 2006). It is argued that research must subsequently capture the influences of contextual variables (Zahra, et al., 2009), social networks and wider processes (Lindgren & Packendorff, 2009; Manolova, Manev, & Gyoshev, 2010) in a more systematic way (Mair, et al., 2012). This is reflected pragmatically in organizations supporting social entrepreneurs. Mandates are expanded to acknowledge contextual variables, and there has been a subsequent facilitation of collaborative entrepreneurship. Two examples are Ashoka Changemakers and MakeSense. The former is described as “a global community of action that grows the impact of changemaking”, has over 500,000 participants in over 125 countries sharing 10,700 social innovations, and has resulted in $600 million USD of funding to social innovators (“About us: Changemakers”). MakeSense is an online and offline platform that connects ‘sense-makers’, ordinary citizens with various
skills, talents and connections, with social entrepreneurs to help collaborate on solutions to challenges facing the social enterprises (“About: MakeSense”). This follows a similar, albeit stunted, pattern to general entrepreneurship research, which, for nearly 4 decades, has been exploring the role of individual characteristics, contextual and sociological variables on entrepreneurship (Mair & Marti, 2006; Muhanna, 2007).

2.1.2.2 A Critical Exploration Of Dominant Discourses

The disciplines that engage with social entrepreneurship and the chosen research questions and methodologies reinforce a dominant discourse with gender, ethnic and class biases. Assumptions and implications are discussed henceforth.

A number of unquestioned assumptions are maintained within dominant discourses. Social entrepreneurship is generally regarded as a positive phenomenon, a way to unleash creative thinking to solve persistent social challenges. Social entrepreneurs are framed as competent, knowledgeable and noble. This “confounds issues of ability with issues of motivation and interest” (Dacin, et al., 2011, p. 1205), and assumes altruistic intentions (Tan, et al., 2005). Social entrepreneurial approaches are framed as “challeng(ing) and dismantl(ing) institutions” (Dacin, et al., 2011, p. 1207)\(^5\), without a serious discussion of systemic inequalities or of its relationship to neoliberalism\(^6\). Additionally, there is an assumption that social entrepreneurship, in contrast to efforts from traditional market forces or the public sector, comprises a bottom-up approach, thus promoting assumptions of equality and empowerment. Bornstein and Davis (2010, p. 40) describe “yesterday’s” activists as “outsiders to power – like uninvited guests”. “Today’s” social entrepreneurs, on the other hand, operate from the inside and the outside. This

\(^{5}\) Dacin, et al. (2011) encourage social entrepreneurship researchers to learn from the experiences and conceptual tools of social movements, which effectively places them in the same realm and extends legitimacy to social entrepreneurial approaches.

\(^{6}\) Neoliberalism is understood as a doctrine “characterized by fiscal austerity, deregulation, privatization. There is a distinct withdrawal or shrinking of state and a transfer of competence to private sector” (Narsiah, 2002, p. 3).
assumption repeats in Base of the Pyramid (BoP)\textsuperscript{7} discourses, “whereby the firm presumes to know the needs and desires of the BoP consumer” (Bonsu & Polsa, 2011, p. 239).

Entrepreneurship research has constructed and reinforced dominant discourses centred on an archetype of a North American or European white male hero (Ahl, 2004; Mirchandani, 1999; Ogbor, 2000). This has resulted in a concentration of Anglo-Saxon researchers (Ahl, 2004), a shortage of research on entrepreneurship in the Middle East, sub-Saharan Africa and Latin America, and a lack of investigation into the impact on subsistence economies (Bruton, et al., 2008). Feminist theory was first adopted in entrepreneurship literature in the mid-1990s, although gender as a variable was introduced in the 1970s (Kuada, 2009), emerging from an anti-enterprise foundation. Ahl (2004) provides an overview of frameworks traditionally adopted in research on women and entrepreneurship. One stream employs sex as a variable, that is, psychological or structural differences are used to explain variances in entrepreneurial activity. A second stream negates the existence of differences between the genders, arguing that there are more similarities. Alternatively, a third stream adopts a social constructionist view, and advises against taking an essentialist view. Within leading social entrepreneurship journals, a dismal amount of articles exist on gender and social entrepreneurship. In Social Enterprise Journal, an abstract search for ‘social enterprise’ or ‘social entrepreneur’ and ‘gender’ or ‘female’ yielded one result. The same search in the Journal of Social Entrepreneurship yielded no results. A wider search on Scholars Portal Journals yielded paltry results\textsuperscript{8}. Given the construction of social entrepreneurship as more caring and altruistic than traditional entrepreneurship, and the social construction of the female sex as caring (Mirchandani, 1999)

\textsuperscript{7} The Base of the Pyramid scheme (BoP, also known as Bottom of Pyramid) asserts that selling to the poor can yield significant profits, and promotes the role of multi-national corporations. However, it is argued that the size of this market, which has ranged from individuals living on $2/day to $8.2/day, has been vastly overestimated (Karnani, 2011, p. 62).

\textsuperscript{8} In a search of journal abstracts on Scholars Portal Journals for ‘social entrepreneur’ and ‘gender’ yielded no results; ‘social enterprise’ and ‘gender’ 1 result; ‘social entrepreneur’ and ‘female’ 1 result. When ‘Africa’ was added to the search limits, there were no results. A search in the same Portal for ‘social enterprise’ and ‘social entrepreneur’ yielded 198 and 32 results respectively. When the search limit was modified from abstract to anywhere, there were 102 results (‘social entrepreneur’ and ‘gender’), 75 results (‘social entrepreneur’ and ‘female’), 311 results (‘social enterprise’ and ‘female’), and 433 results (‘social enterprise’ and ‘gender’).
and embodying “greater sensitivity towards the needs of their environment” (Benavides-Espinosa & Mohedano-Suanes, 2012, p. 54), the adoption of feminist theory in social entrepreneurship research is warranted.

Dominant discourses tend to present entrepreneurship as a neutral concept, even though there are compelling arguments to expand research boundaries and to challenge assumptions. Rather than using psychological or racial traits, the ways in which structures reinforce and perpetuate gender and racial and/or ethnic biases should be explored (Mirchandani, 1999; Ogbor, 2000). Although research on social entrepreneurship has emerged in disciplines ranging from accountancy, finance, health, law, management, marketing, non-profit, international studies, sociology and technology, published research is concentrated in management journals⁹. There have been calls to extend research boundaries, suggesting the incorporation of gender theory, critical management (Lindgren & Packendorff, 2009), and network analysis (Dacin, et al., 2011). Within gender theory, alternative theories, such as pragmatist feminism, urge the development of “theory or praxis that engage in a positive way with market activity” (Scott, et al., 2012, p. 544). Despite the aforementioned acknowledgement of the significance of contextual variables, there is still a tendency to assume the individual as an obvious “focus”, “core” and “essence” of the conceptualization of an entrepreneur (Smith-Hunter, 2008), and a predisposition toward individual case studies and small in-depth descriptive studies (Dacin, et al., 2010; Desa, 2007).

Social entrepreneurial approaches, which are increasingly being adopted in countries and sectors with scant governance and oversight, are often criticized for the incompatibility of the generation of economic and social impacts (Desa, 2007; Edwards, 2010; Zahra, et al., 2009). In other words, the emphasis on efficiency and profitability of business may be in direct opposition of the values of traditional social models that emphasize community, participation, transparency, due process and stewardship (Zahra, et al.,

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⁹ Desa (2007) undertook a search of journal articles. Out of 100 articles, 48 were in management journals, 18 in non-profit, 17 in international studies, and the remainder in accountancy, finance, health, law, marketing, sociology and technology.
Projects that require long-term commitment and seek systemic changes may be overlooked in favour of short-term initiatives that yield a more straightforward return on investment. Additionally, there is an unquestioned acceptance of neoliberal dogma. Academics and business leaders have failed to critically assess the “seemingly exploitative approach” of market-based interventions and the entrenchment of neoliberal doctrines that lead to concentration of wealth among few (Bonsu & Polsa, 2011, p. 237).

2.1.3 Entrepreneurship in South Africa

The spread and impact of social entrepreneurship in South Africa, and the continent more generally, is unknown (Visser, 2011). This sub-section explores entrepreneurship in the country, making specific mention to the distinct cultural, historical and socio-economic context.

Since the establishment of democracy in 1994, entrepreneurship has been recognized as a significant tool in confronting South Africa’s socio-economic challenges (Ahwireng-Obeng, 1993; Friedrich & Isaacs, 2010; Herrington, et al., 2012), including high levels of unemployment, poverty and inequality. During the apartheid era, over 1000 laws, local bylaws and regulations restricted the activity of black entrepreneurs (Iheduru, 2003). Urban (2008) notes the ideal context for the emergence of social entrepreneurship, including shortcomings of government initiatives and attempts to ease dependency on social welfare programs. Subsequently, the South African government has enacted a number of policies aimed at stimulating entrepreneurship, particularly among black communities (Preisendörfer, et al., 2012; Scott, et al., 2012). As of yet, however, the government has refrained from engaging directly with social entrepreneurs, seeing them “as innately risky, and their activities as maverick endeavours” (Urban, 2008, p. 347).

The Global Entrepreneurship Monitor (GEM) “explores the role of entrepreneurship in national economic growth” and provides “an annual assessment of the entrepreneurial activity, aspirations and attitudes of
individuals across a wide range of countries” (Global Entrepreneurship Research Association). GEM data is obtained through adult population surveys and national expert surveys. For the 2012 survey in South Africa, there was a random representative sample of 2655 adults and 38 experts (Turton & Herrington, 2013). Following a surge of entrepreneurial activity in 2010, corresponding with the FIFA World Cup, rates have become rather bleak in South Africa. The country, ranking midway in its cohort of efficiency-driven economies, had a Total Early-Stage Entrepreneurial Activity (TEA) rate of 7.3% in 2012, significantly below the TEA average of 14.1% for its cohort, and a decrease from the previous year’s rate of 9.1%. Table 2.1 illustrates the low rates of entrepreneurial activities in South Africa, as compared to sub-Saharan Africa (Turton & Herrington, 2013, p. 18). Namibia and South Africa are categorized as efficiency-driven economies, while the rest are factor-driven economies. A comparison of structures and processes for Ugandan and South African entrepreneurs suggest that the former are of a higher and more advanced level (Visser, 2011). Especially concerning are the low TEA rates for South Africans aged 18-24 years, and 25-34 years, given the staggering youth unemployment rates of 48%. On the continent, South African youth have the lowest rate of perceived opportunities (39% versus average of sub-Saharan Africa of 70%), and lowest rate of perceived capabilities (40% versus 76%) (Turton & Herrington, 2013). South African entrepreneurs are characterized as “driven by their work”, “risk-takers”, and “greedy” (Muhanna, 2007, p. 101). Gaps in research have been identified, including factors contributing to survival or success of an enterprise, the informal economy, and the proportion of population engaged in activities (Preisendörfer, et al., 2012).
Blacks, who represent nearly 80% of the population, have low participation rates in entrepreneurial activities. The TEA rates for various ethnic groups in South Africa are as follows: blacks 4.3%, coloureds 2.9%, whites 13.2%, and Indians/Asians 16.1%. This is represented in table 2.2 (Preisendörfer, et al., 2012, p. 5). Moreover, enterprises owned by blacks and coloureds tend to be “small-scale and volatile ventures that mainly serve to secure or aliment the survival of a single person or family” (Preisendörfer, et al., 2012, p. 5). However, 39% of blacks perceive good business opportunities, compared to 33% of coloureds, 22% of Indians, and 16% of whites (Turton & Herrington, 2013). Men are 1.6 times more likely to be engaged in early-stage entrepreneurial activity than women (Herrington, et al., 2012).

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10 Some experts claim that if unregistered and informal businesses were included in the tallies, “the gap between whites and non-whites may shrink or even completely vanish” (Preisendörfer, et al., 2012, p. 7).
Research has attempted to explain low entrepreneurial activity in South Africa. Among factors that inhibit entrepreneurship include fear of failure, poor infrastructure and health and education systems, security concerns, government corruption and nepotism, and inefficiencies in the labour market (Herrington, et al., 2012; Scott, et al., 2012; Turton & Herrington, 2013). Limited financial resources, or lack of knowledge of said resources, are also suggested as negatively affecting entrepreneurial activities (Preisendörfer, et al., 2012), while other studies find government entrepreneurship programmes ineffective (Herrington, et al., 2012). Other explanations are reduced to ethnic essentialism, arguing that black South Africans have limited social capital, and embody a mindset and traits that “are not very well suited for entrepreneurial activities, noting that “on average – blacks have a low level of self-confidence … and a tendency to avoid risks”, a “culture of dependency” and “collectivist orientation” (Preisendörfer, et al., 2012, p. 11). Low entrepreneurial rates for women are deduced to low levels of self-confidence, lack of skills and low levels of education (Visser, 2011). This reinforces the myth of non-dominant groups having psychological traits that hinder entrepreneurship, and fails to challenge the dominant European or North American male archetype that characterizes entrepreneurship (Scott, et al., 2012). Ogbor (2000) argues that research must examine how various structures or biases create particular spaces and opportunities for various ethnic groups, suggesting that although institutional and historical conditions have defined the entrepreneurial spaces of African Americans’ and other minority groups, these conditions are neglected in entrepreneurial discourses. Scholars have also noted contextual variables that complicate the replication of a universal model of entrepreneurship in Africa, noting the importance of social values and obligations (Kuada,
2009). Given the high rates of female-headed households and absence of male providers, entrepreneurship has been interpreted by some as facilitating the survival of South African families, whereas in mainstream entrepreneurial discourses, childrearing and the family have different implications (Scott, et al., 2012).

As a whole, South Africa has low entrepreneurial rates; however, the situation in the Western Cape is more optimistic. The province, as illustrated in table 2.3, has the highest percentage of involvement in entrepreneurial activity, and 73% of its early-stage entrepreneurs are found in the Cape Town metropolitan area (Turton & Herrington, 2013, p. 44). The city has launched a number of initiatives aimed at increasing entrepreneurial activity, including Cape Town Activa Web Portal and the 3rd Annual Cape Town Entrepreneurship Week. The former offers online resources, tools and links for entrepreneurs and job seekers (“Cape Town Activa: About”), while the city hosted the latter, which included competitions, workshops, information sessions and networking opportunities (“Cape Town invites stakeholders”, 2012). Entrepreneurs also benefit from the University of Cape Town (UCT) Centre for Innovation and Entrepreneurship, based out of the Graduate School of Business. Over 350 township enterprises have received finance, training and advice (Turton & Herrington, 2013). The Raymond Ackerman Academy offers a six-month course to young entrepreneurs at the UCT School of Business and the Soweto Campus of the University of Johannesburg (Herrington, et al., 2012). Cape Town has a population of 3,740,025. Over 23% of Capetonians are unemployed, and 35.7% of households live on less than R3500 per month (equivalent to $382.53 CAD) (City of Cape Town, 2012a).
Although limited research on social entrepreneurship has been conducted in South Africa (Urban, 2008; Visser, 2011), several indicators suggest further development of this field. There has been a surge of interest in and application of social entrepreneurial approaches, documented by databases such as the Trickle Out Project. However, there is a lack of understanding of the relationship between development and social entrepreneurship (Smith, 2010 as cited in Visser, 2011), including its impact on poverty alleviation and inequality. The study on Avon’s micro-entrepreneur model in South Africa conducted by Scott, et al. (2012) provides initial insights into this relationship, suggesting an ‘emancipatory’ feature of entrepreneurship, evidenced by increased incomes and improvement of female entrepreneurs’ self-confidence.

### 2.2 WASTE MANAGEMENT AND RECYCLING

The recycling sector of Cape Town was chosen as a unit of analysis from which conclusions can be drawn on the state and implications of social entrepreneurship in South Africa. This will be fulfilled in upcoming chapters through a holistic analysis of various social entrepreneurial methods adopted by a diverse range of stakeholders.

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11 As of July 2013, the Trickle Out Africa Project included 1171 registered eco/social enterprises, cooperatives and associations, and donor and support agencies in South Africa, with a focus on sustainable development at the Base of the Pyramid (“Enterprise Directory: South Africa”).

12 Avon is a multinational corporation that relies on networks of female entrepreneurs to market and distribute its products.
of stakeholders. This section therefore serves to provide a brief overview of relevant literature on waste management and recycling, and will provide a snapshot of the context in South Africa, noting the informal recycling economy and community-based waste management.

2.2.1 Snapshot: Waste Management in South Africa

The collection of household refuse – or the lack thereof – is one of the most powerful visual benchmarks of inequality in South Africa.

(Qotole, Xali, & Barchiesi, 2001, p. 1)

During the apartheid era, public resources were concentrated in white, middle-class communities (Qotole, et al., 2001), and waste management in developing urban areas received scant attention (Korfmacher, 1997). Waste management is known to disproportionately affect the poor, as landfills and sources of pollution are likely to be in close proximity to low-income areas, and waste collection, transfer and disposal is a known survival strategy of the extreme poor (“CORC: Solid Waste Network”). For example, the township of Khayelitsha noted 58 days in 2011 of particulate matter (PM\textsubscript{10}) exceedances, whereas the city centre registered only one (City of Cape Town, 2012a). The largest waste collection backlogs are also concentrated in black and coloured townships and rural areas (Council for Scientific and Industrial Research, 2011). Although the government has initiated baseline reports and legislation, waste management remains a low priority (Council for Scientific and Industrial Research, 2011; Godfrey & Scott, 2010; Phiri, Godfrey, & Snyman, 2012), indicating “government denial towards the growing challenge … (of) waste management in South Africa” (“groundWork South Africa: Waste Campaigns”) and resulting in a scarcity of waste figures (Urban Earth, 2013).

In 2011, approximately 108 million tonnes of waste were generated in South Africa, of which 55% was
general waste, 44% was unclassified waste, and 1% was hazardous waste\textsuperscript{13}. Figure 2.1 illustrates general waste composition for 2011 (Revised from Department of Environmental Affairs, 2012, p. 15).

Approximately 10% of waste is recycled (Department of Environmental Affairs, 2012). National averages for waste generation and refuse removal vary significantly across socio-economic and geographical lines. In more developed areas, average waste generation is 0.8 kg/capita/day, and there is universal kerbside refuse pickup. In less developed areas, waste generation averages are 0.3 kg/capita/day, and 65% of households have refuse removal. In rural areas, this drops to only 35% of households (Karani & Jewasikiewitz, 2007). Table 2.4 illustrates the differences in access to service delivery by population groups, with weekly refuse removal rates varying between 87 and 95% for coloured, Indian/Asian, and white populations, and dropping to 54% for black households (Stats SA, 2012, p. 98).

Figure 2.1 General Waste Composition (percentage by mass) (2011)

\[\begin{array}{c}
\text{Non-recyclable municipal waste} \\
\text{Tyres} \quad 1% \\
\text{Metals} \quad 15% \\
\text{Glass} \quad 4% \\
\text{Plastic} \quad 7% \\
\text{Paper} \quad 9% \\
\text{Construction and demolition waste} \quad 22% \\
\text{Organic Waste} \quad 14% \\
\end{array}\]

\textsuperscript{13} General waste refers to waste from domestic and business sources, inert waste, and building and demolition waste. Hazardous waste is characterized as “any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment”(Department of Environmental Affairs, 2012, p. 3). Unclassified waste refers to relatively low hazard wastes which are generated in high volumes, and includes sewage sludge, mineral waste, e-waste, brine, slag, bottom ash, and fly ash and dust from miscellaneous filter sources (Department of Environmental Affairs, 2012, p. 18).
Table 2.4 Type of refuse removal by population group of household head

<table>
<thead>
<tr>
<th>Refuse Removal</th>
<th>Population group of the household head</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black African</td>
<td>Coloured</td>
</tr>
<tr>
<td>Removed by local authority/private company at least once a week</td>
<td>6 194 102</td>
<td>923 909</td>
</tr>
<tr>
<td>Removed by local authority/private company less often</td>
<td>170 123</td>
<td>21 721</td>
</tr>
<tr>
<td>Communal refuse dump</td>
<td>240 556</td>
<td>15 291</td>
</tr>
<tr>
<td>Own refuse dump</td>
<td>3 895 806</td>
<td>71 453</td>
</tr>
<tr>
<td>No rubbish disposal</td>
<td>751 702</td>
<td>15 916</td>
</tr>
<tr>
<td>Other</td>
<td>108 282</td>
<td>7 786</td>
</tr>
<tr>
<td>Total</td>
<td>11 360 570</td>
<td>1 056 076</td>
</tr>
</tbody>
</table>

It is essential to recognize the unique context of the City of Cape Town and the larger Western Cape province in relation to this research. The province, producing 675 kg/capita/annum, accounts for 20% of national waste generation, as illustrated in table 2.5 (Department of Environmental Affairs, 2012, p. 9).

Cape Town produces approximately 6,000 tonnes of waste daily, fluctuating between 1.5kg in low-income households and 2kg daily in high-income areas (“The case for less waste”). Other figures place affluent households generating half of total household waste, although they comprise only 14.5% of the population (Swilling & Annecke, 2012). Figure 2.2 illustrates municipal waste composition, with non-recyclables accounting for 38%, recyclables 22%, organics 18%, and builders’ rubble 22% (reproduced from Department of Environmental Affairs, 2012, p. 10). Other figures estimate food or green waste comprising between 20-35% of total generated waste, representing low-income and affluent households respectively (Swilling & Annecke, 2012). Figure 2.3 provides an alternative composition of municipal waste generation, with formal households generating 28% of total waste, informal households 11%, and commerce and industry accounting for 57% of total waste that is sent directly to landfill (de Wit, 2009, p. 11). Cape Town is serviced by three landfills, and an additional site is currently being sourced. Combined, Coastal Park, Bellville South and Vissershok have 148 Ha remaining, and all three landfills will reach capacity by 2015-16 (de Wit, 2009; “Western Cape”, 2010).
Table 2.5 Municipal waste by province (2011)

<table>
<thead>
<tr>
<th>Province</th>
<th>Kg/capita/annum</th>
<th>Waste generated as % of Total Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>675</td>
<td>20</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>113</td>
<td>4</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>547</td>
<td>3</td>
</tr>
<tr>
<td>Free State</td>
<td>199</td>
<td>3</td>
</tr>
<tr>
<td>KwaZulu Natal</td>
<td>158</td>
<td>9</td>
</tr>
<tr>
<td>North West</td>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>Gauteng</td>
<td>761</td>
<td>45</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>518</td>
<td>10</td>
</tr>
<tr>
<td>Limpopo</td>
<td>103</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 2.2 Municipal Waste Composition, Cape Town, Western Cape (2008)
Refuse removal rates in the Western Cape are among some of the highest in the country, as demonstrated in figure 2.4 (Stats SA, 2012, p. 39). Cape Town also boasts high levels of service delivery, although black households are the most likely to experience backlogs, have communal refuse dumps, or have no rubbish disposal (City of Cape Town, 2012b). Table 2.6 illustrates these discrepancies; as 98.7% of white households have weekly refuse removal, this falls to only 88.5% of black households (City of Cape Town, 2012b, p. 15). The city’s operating expenditure amounts to R726.3 million (approximately $79.3 million CAD)\(^1\), and projected revenues are R376 million (approximately $41 million CAD). Annually, 560,000 tonnes of refuse is collected from 744,000 formal (81%) and informal (19%) service points (Jeffares & Green (Pty) Ltd & Ingeróp Africa (Pty) Ltd, 2004).

\(^1\) 1 Canadian Dollar = 9.14958 Zuid Afrikaanse Rand (as of May 2013).
Any interventions in the recycling or waste management sectors are influenced by the aforementioned trends. Issues of consumption, for example, are significant. While Cape Town’s population increased by 1.57% between 1996 and 2001, the quantity of waste increased by 3.8% (Phiri, et al., 2012).

Consumption, and subsequent waste generation, differs among socio-economic areas. Addressing this issue is particularly relevant given that most South African municipalities choose disposal to landfills (Nahman, 2010), despite only 10% of landfills being managed to standard (Karani & Jewasikiewitz, 2007).
Although accepted as a responsibility of the local government, few resources are allocated to recycling (Theron & Visser, 2010). Rather, the City of Cape Town Integrated Waste Management Policy relegates responsibility to create and drive the recycling industry to business and industry initiatives (City of Cape Town, 2006). Recycling in South Africa is therefore primarily facilitated through private sector initiatives run by packaging manufacturers. Recycling operations are determined by financial value and, as a result, 10.2 million tonnes of less valuable general and hazardous waste ends up in landfills (Karani & Jewasikiewitz, 2007). Opportunities and potential for further recycling activities are demonstrated in table 2.7 (reproduced with selected information from Department of Environmental Affairs, 2012, p. 15). For example, recycling percentages for paper, plastic and glass stand at 57, 18 and 32% respectively. Extended Producer Responsibility, described as “an environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle” (OECD), has also been gaining importance in South Africa. However, government-imposed regulations, such as in the plastic bag industry, have been shown to be less effective than voluntary industry initiatives, such as the steel beverage can industry\(^\text{16}\), that create viable recycling industries and employment (Nahman, 2010). Non-governmental organizations and community-based organizations may also institute initiatives that encourage waste separation and recycling as a job and income generating opportunity (Karani & Jewasikiewitz, 2007). There exists a lack of legislation that requires communities to recycle (Langenhoven & Dyssel, 2007).

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\(^{16}\) The voluntary industry initiative Collect-a-Can increased the recovery rate of steel beverage cans by over 50%. Sales of plastic bags, on the other hand, have approached pre-intervention levels (Nahman, 2010).
Table 2.7 Selected general waste and recycling rates (2011)

<table>
<thead>
<tr>
<th>General Waste</th>
<th>Generated Tonnes</th>
<th>Recycled Tonnes</th>
<th>Landfilled Tonnes</th>
<th>Recycled %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Waste (non-recyclable)</td>
<td>8062934</td>
<td>8062934</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Commercial and Industrial Waste</td>
<td>4233040</td>
<td>3259441</td>
<td>973599</td>
<td>77%</td>
</tr>
<tr>
<td>Organic waste</td>
<td>3023600</td>
<td>1058260</td>
<td>1965340</td>
<td>35%</td>
</tr>
<tr>
<td>Construction and demolition waste</td>
<td>4725542</td>
<td>756087</td>
<td>3969455</td>
<td>16%</td>
</tr>
<tr>
<td>Paper</td>
<td>1734411</td>
<td>988614</td>
<td>745797</td>
<td>57%</td>
</tr>
<tr>
<td>Plastic</td>
<td>1308637</td>
<td>235555</td>
<td>1073082</td>
<td>18%</td>
</tr>
<tr>
<td>Glass</td>
<td>959816</td>
<td>307141</td>
<td>652241</td>
<td>32%</td>
</tr>
<tr>
<td>Metals</td>
<td>3121203</td>
<td>2496962</td>
<td>236766</td>
<td>80%</td>
</tr>
<tr>
<td>Tyres</td>
<td>246631</td>
<td>9865</td>
<td>236766</td>
<td>4%</td>
</tr>
</tbody>
</table>

Until 2008, local government was primarily responsible for waste management “in accordance with a hodgepodge of regulatory provisions located within a wide range of different sectorally specific pieces of legislation” (Swilling & Annecke, 2012, p. 272). The lack of a coherent national strategy complicated the amalgamation of municipalities that occurred in the post-apartheid era (Swilling & Annecke, 2012). Most local governments lack the capacity to address the service delivery tasks delegated to them (Koelble & LiPuma, 2010). A 2003 study revealed that 60% of municipalities could not enact their waste management mandate to standard. Despite a 24% increase in the 2005/06 budgets, few performance improvements were noted (Godfrey & Dambuza, 2006 as cited in Phiri, et al., 2012). A 2007 government study found that 87% of municipalities lacked the capacity and infrastructure to pursue waste minimization activities (Council for Scientific and Industrial Research, 2011). South African municipalities face a number of challenges in administering service delivery: refuse removal constituting only one aspect of their tasks. They are also responsible for the enforcement of litter laws (Environmental Conservation Act 73 of 1989) and street cleaning (Karani & Jewasikiewitz, 2007). Constraints to effective service delivery include fiscal challenges, inadequate institutional capacity, corruption and/or non-communication, and equipment management (Council for Scientific and Industrial Research, 2011; Godfrey & Scott, 2010; Karani & Jewasikiewitz, 2007; Koelble & LiPuma, 2010). Municipalities have increasingly turned to privatization, outsourcing and commercialization to address service backlogs (Qotole, et al., 2001; Samson, 2003). Cape
Town is one of the many municipalities to secure public-private partnerships, in which a private company is partially or fully responsible for public goods or services. As a result, formal residential areas tend to be serviced by local government, whereas private contractors service informal areas (Theron & Visser, 2010).

Since 1994, the African National Congress has instituted a number of pieces of legislation pertaining to waste management. The Environmental Management Policy for South Africa outlines objectives and administration of integrated waste management and pollution control, including waste minimization targets (Karani & Jewasikiewitz, 2007). The National Waste Information System (SAWIS), part of the Waste Act (Act No. 59 of 2008), provides a centralized data bank (Council for Scientific and Industrial Research, 2011). The Polokwane Declaration on Waste Management of 2001 put forth as a goal to reduce waste generation by 50% and disposal by 25% by 2012, and to develop a plan for zero waste by 2022 (Karani & Jewasikiewitz, 2007). Additionally, the government has endorsed Africa’s inaugural Waste Indaba\(^\text{17}\) and Expo, Wastex Africa, which took place in May 2013 in Johannesburg, Gauteng province. The event included a policy track and attendees ranged from policy makers, investors, entrepreneurs, private companies, researchers and regulators (“Wastex Africa”). The City of Cape Town has adopted a Waste Management Hierarchy, which is illustrated in figure 2.5 (City of Cape Town, 2006, p. 9). Despite this commitment, and increasing ecological crises and threats, including deteriorating air quality, river pollution, depleted fisheries and biodiversity (Swilling & Annecke, 2012), very few waste minimization initiatives have been implemented in South Africa (Urban Earth, 2013).

\(^\text{17}\) The term ‘Indaba’ has its origin in the Zulu language, and refers to gatherings or meetings.
2.2.2 Informal Recycling Economy

In 2004, the African National Congress acknowledged the existence of ‘two economies’: “The first is an advanced economy based on skilled labour, which is becoming more globally competitive. The second is a mainly informal, marginalized, unskilled economy populated by the unemployed and those unemployable in the formal sector” (ANC, 2004). Between 20-30% of total employment in South Africa is provided by the informal sector (Bhorat & Oosthuizen, 2006), which is characterized by poorer working conditions. In cities in low- and middle-income countries, the informal economy plays a significant role in the recycling sector, recovering an estimated 15-25% of generated waste and providing livelihoods for thousands of entrepreneurs “who form the base of the recycling supply chain pyramid” (Scheinberg, Spies, Simpson, & Mol, 2011, p. 189).

There is generally a lack of research on recycling systems in low- and middle-income countries and their relationship to solid waste management (Scheinberg, et al., 2011). Literature on informal recycling economies in Africa has tended to neglect external influences, including policies, practices, social relations and international markets (Samson, 2010). In South Africa, research has focused on informal waste pickers who work and live on landfills, neglecting street waste pickers (Samson, 2008; Schenck &
Blaauw, 2011). Limited studies have been undertaken on the former, mainly consisting of exploratory and descriptive studies. Schenck and Blaauw (2011) developed a socio-economic profile of street waste pickers in Pretoria, based on 142 interviews. All of the waste pickers were black, and 97% were male. Nearly half were between the ages of 41 and 50 years of age. Income levels varied significantly, but the average weekly income was R156.35 (equivalent to $17.09 CAD), which supported an average of 4 people. Benson and Vanqa-Mgijima (2010) sought to explore ways in which waste pickers in Cape Town were informally and formally organizing. In the three study areas, ages ranged from 30-60, 50-80, and 23-76, in Salt River/Woodstock, Khayelitsha, and Philippi-Gugulethu respectively. The waste pickers were characterized as “disillusioned work seekers, who perform reclaiming as an alternative means of survival” (Benson & Vanqa-Mgijima, 2010, p. 9). The waste pickers experienced insecure working and living conditions and high levels of competition. The researchers reflected on the gendered nature of street picking, noting that only a small percentage of women were involved, mainly collecting plastics, paper, cardboard and glass bottles. These recyclables yield a smaller return than the iron ore, steel, copper and metal that men generally collect (Benson & Vanqa-Mgijima, 2010). Langenhoven and Dyssel (2007) studied the factors influencing recycling employment and opportunities in the Cape Flats, Cape Town. Almost half of respondents were between 50 and 65 years of age, and nearly 75% of respondents earned less than R80 per week (equivalent to $8.74 CAD).

The studies showed price discrepancies at the buy-back centers. Prices paid for recyclables could vary at buy-back centres as much as 50% (Schenck & Blaauw, 2011). The relationship between waste pickers and buy-back centers was often described as “interdependent” (Schenck & Blaauw, 2011, p. 427) or “symbiotic” (Langenhoven & Dyssel, 2007, p. 126). However, some felt the bigger buyers and processors were manipulating market prices in their favour (Langenhoven & Dyssel, 2007), or that the buy-back centers were exploitative, “earning huge profits at (the waste pickers’) expense” (Benson & Vanqa-Mgijima, 2010, p. 14). Although there are no data available to support this claim, Samson (2010) notes
2.2.3 Participatory Waste Management

Within the revisionist neoliberal discourses of the past 20 years, community-based waste management projects are presented as one means to “enhance service delivery and local democracy by empowering the most marginalized, especially women” (Fredericks, 2012, p. 124). A number of initiatives have embedded themselves within the recycling value chain in an attempt to create pro-poor employment and livelihood strategies. Projects range from providing capital to facilitating access to markets. The former, for example, may include the provision of vehicles and equipment to informal recyclers and allowing them access to collection routes (Scheinberg, et al., 2011). The latter includes organizations such as Waste for Life, who partner with local cooperatives to manufacture waste-based composites which are sold at local markets, creating an income stream for waste pickers (Baillie, Matovicb, Thamaeb, & Vajab, 2011). Other initiatives offer incentives to encourage recycling activities, such as the one in Curitiba, Brazil, which in the early 1990s boasted participation rates of 90% of its 1.6 million households. Citizens, in exchange for recyclables, would receive agricultural or dairy produce, or transit tokens (Coutts, 1991; Korfmacher, 1997).

A number of criticisms of participatory waste management have surfaced. Community-based management schemes are criticized for taking advantage of unemployed and desperate communities by offering short-term and dangerous work with poor compensation (Qotole, et al., 2001). Women are generally tasked with household waste responsibilities with no compensation, whereas men handle waste only with paid employment (Scheinberg, Muller, & Tasheva, 1999). As such, community-based waste management can serve to entrench gender and racial inequalities. Fredericks’ (2012) research revealed the community-based waste management project in Senegal used women as cheap waste management solutions,
extending their social reproductive duties into the communal sphere with little compensation\textsuperscript{18}. A South African example is the Siyazenzela initiative, in which women and child-headed households collect waste from households in exchange for basic household supplies and fresh produce (Council for Scientific and Industrial Research, 2011). However, these schemes run counter to women’s preference of door-to-door waste collection because of issues of mobility and convenience. Communal skips may be located far from the household, or may not be user-friendly, and waste collection schedules may conflict with women’s household duties (Poswa, 2004). Low-tech, high-labour projects are also criticized in that they preclude “any opportunity to provide mechanised services of any sort and on the scale provided in historically white neighbourhoods, thereby entrenching many of the apartheid-era service inequalities of the city” (Qotole, et al., 2001, p. 18).

2.2.4 Key themes and concepts
From this chapter, a number of key themes and concepts can be identified that will be further explored through the case studies and discussions. Within the realm of (social) entrepreneurship, this research is less concerned with theoretical debates concerning the essence of social enterprises or entrepreneurs. Rather, of interest are discursive analyses, and how both the implementation and participation in initiatives creates and reinforces assumptions and roles. By undertaking a holistic analysis of a sector, this research is better suited to acknowledge limitations and opportunities of social entrepreneurial approaches than individual case studies. Key themes in waste management literature include municipalities failing to fulfill their mandates, and citizens’ subsequent unequal access to service delivery, based on geographical, class and racial lines. In South Africa, there are limited studies on informal recycling economies, specifically, informal waste picking. Research on community-based waste management projects are often concerned with gender and social justice.

\textsuperscript{18} The project, initiated in the Yoff district in Dakar, relied on women’s free or low-paid participation as a replacement to municipal waste removal.
Chapter 3
Methodology

3.1 Introduction

This research is primarily concerned with exploring opportunities and limitations of social entrepreneurial approaches. By enlisting a holistic analysis of one sector, this study moves beyond the methodology of individual case studies common in general entrepreneurship literature. Consequently, this research is primarily exploratory and descriptive, identifying with social change research (Kirby, Greaves, & Reid, 2006, p. 69). The following section describes the various methodological tools adopted, concluding with a discussion of my positionality.

3.2 Process and Rationale

Seven months of field research was conducted in Cape Town, South Africa. Prior to departure from Canada, a number of initial contacts were established, including with the host organization African Social Entrepreneurs Network (ASEN). The first phase of field research involved familiarizing myself with and exploring trends in the social entrepreneurship sector. This involved visiting a variety of ventures and not-for-profits, as well as attending talks, seminars and networking events. ASEN, which seeks to provide a platform for social entrepreneurs in South Africa and beyond (“About us: African Social Entrepreneurs Network”), provided information on key institutions in the sector and contextual information, and facilitated introductions to various social enterprises. During this time, I took extensive field notes, established a network, and followed up on leads. The second phase of field research included the establishment of research design. Initially, the research was to assess similar enterprises, in approach, size or geographical location, across a variety of sectors. However, upon further analysis of established literature and the context in Cape Town, it was decided that the analysis would consist of a variety of enterprises within a specific sector.
A variety of reasons influenced the decision to focus on the recycling and waste management sector in Cape Town. Given that collection and disposal of refuse and recycling is a known strategy of the extreme poor (“CORC: Solid Waste Network”), the sector is ideal to examine the ‘emancipatory potential’ of entrepreneurship (Scott, et al., 2012). Moreover, the recyclable value chain in Cape Town consists of a range of stakeholders with various value propositions. Coinciding with my field research was a number of design-related events focusing on waste refuse in townships. Thus, the sector was active, vibrant and presented a number of engagements that crossed sector and disciplinary boundaries. As the field of waste management is expansive, it was beyond the scope of this research to comprehensively examine elements of the waste stream in South Africa; therefore, this research was primarily focused on small-scale initiatives that adopt social entrepreneurial approaches in low-income communities. It was also limited to the context of Cape Town, which is characterized by high rates of urbanization and high per capita municipal budget (Koelble & LiPuma, 2010). The Western Cape also accounts for the highest proportion of households with at least weekly refuse removal (Stats SA, 2012). As there are vast inequalities and discrepancies in municipal expenditures and access to service delivery, especially for the poorer and more rural municipalities, the research findings may not be replicable in other geographical settings. An additional limitation concerns the relative importance of waste management, as opposed to inadequate housing, water and sanitation, and lack of employment that often trigger service delivery protests (Alexander, 2010).

The research design was iterative in nature. Initially, it involved interviewing participants of incentivized recycling schemes (see Appendices D and E for letter of approval and renewal of ethics clearance from Queen’s University General Research Ethics Board), with the objective of exploring advantages and disadvantages between not-for-profit and for-profit ventures, and financial versus non-financial awards. However, what became apparent was the lack of coordination at the organizational level. Thus, the design shifted from an assessment of initiatives to a more holistic analysis of a sector, noting stakeholder
relations and contextual variables. Detailed descriptions of the various methods adopted are discussed hereafter.

3.3 Sector organizations

This research was informed by numerous sector organizations with different value propositions and strategies. Table 3.1 illustrates the range of sector organizations, which can be categorized as social enterprises, green enterprises, educational initiatives, rights-based approaches, waste minimization or job creation. Clarification on the type of interview and the interviewee’s position within the organization is provided, as well as an indication of their attendance at the Recycling Forum. Where possible, interviews were audio recorded and extensive notes were taken.
Table 3.1 Overview of Methodology

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<th>Organization</th>
<th>Position</th>
<th>Collector/Participant</th>
<th>Employee</th>
<th>Mgmt.</th>
<th>Semi-structured</th>
<th>Structured</th>
<th>Audio recorded</th>
<th>Attendance at Recycling Forum</th>
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</table>
The Glass Recycling Company
Waste Plan
City of Cape Town

Total
22  17  5  20

* Audio recorded

Two recycling initiatives, Recycle Swop Shop and TrashBack, were selected as in-depth case studies. These organizations were chosen because of the social and environmental aspects of their value propositions and the use of social entrepreneurial approaches in low-income communities. They represent different geographical areas and theoretical underpinnings: one is a for-profit social enterprise, the other a not-for-profit organization. Moreover, scholars have called for further analysis into organizations that leverage economic capital, and this research provides an assessment into the conditions under which these models are effective (Mair, et al., 2012). A mixture of qualitative and quantitative research methods was employed. Semi-structured interviews of management were conducted, lasting approximately 60 minutes each. Follow-up interviews were conducted, either in person or via email. Structured interviews of participants\(^\text{19}\) of the initiatives were also conducted, lasting approximately 15-20 minutes each. Recycle Swop Shop is open twice a week: Tuesday afternoons for child participants and Thursday mornings for adult participants. As this research sought to understand the impact of the initiatives as a livelihood strategy, adults were targeted. As a result, interviews were conducted on-site on Thursdays as the

\(^{19}\) ‘Participant’ refers to individuals who participate in the initiative by collecting recyclables.
participants waited in line to enter the Shop. The selection of participants was determined by asking their willingness to participate in the survey. A total of nine interviews were conducted with the help of an interpreter. Two different interpreters, both from the community and volunteers of the initiative, were used over the course of the interviews due to availability. TrashBack does not have a regularly scheduled gathering of its participants; therefore, interviews were conducted off-site within the community.

Interviews were mainly held on Saturday mornings or afternoons when individuals were most likely to be at home. TrashBack facilitated the introduction to an interpreter, who was from the community and was one of the second-hand clothing retailers that purchase products from TrashBack. A total of 17 individuals were interviewed, nine of whom were participants of the initiative. Participants were selected through a door-to-door process, as the interpreter and I walked through the areas immediately surrounding the Hout Bay Recycling Depot, where TrashBack is based. After encountering some challenges finding active participants, TrashBack provided suggestions of which community members to approach. Document analyses were also undertaken of the organizations’ blogs, websites and other documents.

Document analyses and semi-structured interviews of other organizations in the sector were also conducted. Although these organizations did not receive in-depth analyses that extended to their customer or participant base, they are significant to this research as they allow further conceptualization of the recycling sector in Cape Town and a holistic analysis of various approaches. Of particular interest were the interactions between stakeholders, and the level of engagement with informal economies and concepts of environmental sustainability. Semi-structured interviews with members of 14 organizations or initiatives took place, lasting between 15 and 60 minutes each. All interviews took place in person, except for one telephone interview, and were audio recorded when possible. The interviewees included an organizer and three community advocates from the community-based organization Social Justice Coalition, the Marketing Director of Ilima Cleaning and Recycling, the project manager for Solid Waste Network, a director for the Institute for Zero Waste in Africa, an organizer of the recycling initiative at Jan van Riebeek Primary School, the Sales and Marketing Director for NewLife Plastics, the general manager
for EcoPack, and the project manager of Straatwerk. Representatives from Oasis, CocoaFair, Clearer Conscience, and Mothers Unite were also interviewed. When applicable, site visits allowed access to projects. Beyond the sector study organizations pictured in figure 3.1, interviews were conducted with other informants, including an entrepreneur from RLabs who developed the MiGox mobile platform, and a managing member of Atlantic Plastic Recycling, a private recycling company. I was unable to make contact with representatives from groundWork, which is based in Pietermaritzburg; therefore websites and documents were analyzed. Sector organizations and informants were discovered through networking events, research on the sector, and through introductions in my personal networks. I also engaged in informal conversations with members of various communities, social entrepreneurs and academics.

3.4 Recycling Forum

Given the initial observation that a lack of coordination existed within the sector, which was confirmed by various stakeholders, I organized a Recycling Forum for October 29, 2012. Twenty-four representatives, representing fifteen different stakeholders, including academia, the City of Cape Town, social enterprises, green enterprises, not-for-profit organizations, community-based organizations, recycling companies and parastatals, participated in a 4-hour forum. The afternoon began with an introduction of participants, followed by small discussion groups. Key concepts, challenges and ideas were noted on flip chart paper. After initial discussions, participants were able to travel to other groups to offer their contribution. Due to time constraints, participants were able to visit only two of the four discussions groups. At the end of the session, individual votes were tabulated on what participants perceived as the most significant obstacles or themes. The main findings and themes of each group were shared in electronic format to all participants. An online survey was distributed to all participants, with a response rate of 20.83% (5 responses out of a total of 24).

The forum was limited because of several factors. The timing of the event corresponded with student exams at the University of Cape Town, and thus I was unable to enlist additional facilitators. The number
of participants was initially estimated at 10; however, there was overwhelming interest. Numerous attendees suggested a longer forum in the future. Although I attempted to achieve balance and effectiveness in the group discussions through reiterating rules of brainstorming\(^\text{20}\) and providing a list of potential questions for reflection, there were cases of unequal participation and rigidity of opinions, which may have inhibited progress. Additional facilitators would have been useful to monitor discussions and to provide context. I did enlist the help of a colleague to videotape the forum; however, there were technological difficulties. The simultaneous engagement of the discussion groups prevented audio recording, but sections of the forum were recorded when possible. I did travel among the groups and took notes when possible, and transcribed the notes from the various groups; however, it can be assumed that a portion of relevant findings were lost, including the interactions between group members and ideas or challenges that were not noted on flip charts.

Even in the midst of challenges, the participants did indicate interest in such platforms for collaborative action and cross-sector discussions. Future events should enlist an appropriate number of facilitators, experiment with different formats and types of attendees, and be of appropriate length. Discussions, sector-wide knowledge sharing, meetings and expansion of professional networks have also been emphasized in academic literature for their impact on for social enterprises (Austin, et al., 2006; Lindgren & Packendorff, 2009).

### 3.5 Additional Research

I also engaged with the design community and traveled within the greater Western Cape. I was first introduced to the concept of Design for Development early in my field research because of its association

\(^{20}\) I was influenced by the techniques provided in *The Medici Effect: What Elephants and Epidemics Can Teach Us About Innovation* by Frans Johansson (2006), specifically, those on brainstorming and lowering associative barriers. Forum participants were reminded to refrain from dismissing or critiquing ideas outright, and to think creatively.
with waste management. The City of Cape Town, in its bid for World Design Capital 2014\textsuperscript{21}, “committed itself to transforming lives through design” (“Design Storming”, 2012). As such, a number of design-centered events were organized, of which I attended two. Creative Cape Town, in collaboration with Cape Town Design Network and in partnership with the community-based organization Social Justice Coalition, organized a Design Storming event to confront the challenges of refuse collection and removal in the township of Khayelitsha. Talkoot! was organized 4 months later during the official Helsinki Meets Cape Town series, which in part built upon ideas presented in the Design Storming event (Alto Global, 2013).

Although primarily based in the Cape Town area, a few opportunities were presented to travel within the greater Western Cape. In July 2012, I attended a Trash to Treasure Festival in the Transition Town\textsuperscript{22} of Greyton\textsuperscript{23} (Stodgel, 2012). In September 2012, I traveled to Hermanus to meet with the founder of Recycle Swop Shop in South Africa, and visited the site in Zwelihle township. This travel allowed for greater understanding of various contexts in the Western Cape.

3.6 Theoretical Frameworks

This research undertook a community-based perspective, and sought to provide a holistic analysis of the various social entrepreneurial approaches within the recycling sector in Cape Town, taking note of influences ranging from policy and governance, economics, and social justice. This was to avoid undertaking studies in isolation, which is a noted weakness in both waste management and entrepreneurship literature. Additionally, this study sought to contribute to social constructivist

\textsuperscript{21} “The World Design Capital is a city promotion project that celebrates the merits of design. Held biennially, it seeks to highlight the accomplishments of cities that are truly leveraging design as a tool to improve the social, cultural and economic life of cities, throughout a yearlong programme of design-related events” (International Council of Societies of Industrial Design). Cape Town is designated the 2014 World Design Capital.

\textsuperscript{22} Transition Towns can be found in 35 countries and implement small-scale local responses to global challenges of climate change, inequality and diminishing supplies of cheap energy. Responses range from community supported agriculture, shared transport and local currencies, to the formation of Energy Descent plans, starting local energy companies, social enterprises and cooperative food businesses (“What is a Transition Initiative?”).

\textsuperscript{23} Greyton is a small town in the Overberg area in Western Cape, situated approximately 140 km from Cape Town. In 2012, Greyton became one of South Africa’s first Transition Towns. (“Greyton Transition Town”, 2013; “Our History: Greyton”).
discussions of (social) entrepreneurship. As such, assumptions, concepts and ideas of gender, township residents and entrepreneurship were challenged. Finally, this research was founded upon pragmatist feminism, which is not ideologically bound to any political system but seeks “to charge patriarchy wherever it exists” (Scott, et al., 2012, p. 546). This theory is thus appropriate to explore the potential and limitations of (social) entrepreneurial approaches.

3.7 Positionality

Positionality theory maintains that an individual’s identities, including race, class, and gender, construct and reinforce perspectives (Kezar & Lester, 2010). Researchers are seen as “co-producers of social reality” (Ahl, 2004). Aspects relating to my positionality are noted as they have implications on the processes, structure and direction of this thesis. This section explores my rationale and identities, and concludes with a discussion of ethics.

The rationale for this study was influenced by my exposure to market-based interventions. Prior to commencing graduate work, I spent 13-months in Zambia with Engineers Without Borders Canada (EWB). At the time, the non-governmental organization was active in four countries in sub-Saharan Africa, and focused on leverage points within systems in order to catalyze innovation and systemic changes. Zambia, a land-locked country in Southern Africa, relies heavily on the agricultural sector. Although it comprises only 20.9 % of the GDP, 85% of the population is engaged in agricultural activities (Central Intelligence Agency, 2013). EWB, seeking to address the 43% of the population who live below the poverty line, aims to improve small-scale farmers’ access to agricultural inputs (Engineers Without Borders). I was involved in business and value chain development with MRI Agro, a Zambian-owned seed and distribution company, as well as providing key insights and field realities to CARE Zambia on their Ago-Dealer Project (ADAPT). Market-based approaches, reflecting a perceived failure of traditional approaches to enterprise development, seek to contribute to ‘firm and industry level competitiveness’, while achieving sustainability and impact without distorting private sector markets (Lusby & Panlibuton,
Market facilitation is seen as “an innovative intervention approach”, with the “potential to catalyze broad scale market growth” (Engineers Without Borders, 2011), which is increasingly being applied by various organizations, including USAID, DFID, and the World Bank. My experience in Zambia sparked a number of questions regarding the efficiency of market-based approaches in achieving systemic change, and its relationship to civic society and environmental sustainability. This formed the initial motivation for this research.

My multiple identities influenced the process and procedures of the field research. Firstly, as a Caucasian female from Canada, I was able to connect with stakeholders ranging from grassroots organizations to government officials with relative ease. There were no challenges in securing participants from both the management and participants of various initiatives, and interviewees were forthcoming with information. However, this could have negatively impacted the collection and accuracy of data, as interviewees may have felt compelled to alter information. Interviews with participants of initiatives were conducted with the use of a translator, and although the letter of information did specify that I was not connected to any initiative or agency, participants may have altered their responses about organizations to be more favourable. My movements in some parts of the municipality were also constrained by security concerns.

I undertook a number of strategies to negotiate expectations as an outsider. Firstly, when possible, I was introduced to individuals or organizations through pre-established contacts. Interpreters were recruited from the local community, and were provided compensation for their time. Secondly, I took on various roles, namely that of systems analyst, innovator, relationship builder and communicator (Engineers Without Borders, 2011). When I was confronted with requests for funding or resources, I would refer the individual to existing support organizations. I sought to introduce stakeholders in an attempt to encourage the formulation of mutually beneficial relationships, without distorting the market.
3.8 Conclusion

This chapter provided an overview of various methodological tools adopted during the course of this research, while accounting for my positionality. The iterative and flexible research design allowed for modifications while in the field. The mixture of qualitative and quantitative research methods across a wide range of sector organizations, representing diverse theoretical underpinnings, activities, and value propositions, allowed for an understanding of the relationships between various stakeholders. Chapter 4 provides an overview of sector organizations and the recycling sector.
Chapter 4
Profile of Sector and Sector Organizations

4.1 Introduction and Objectives

This chapter provides an overview of the recycling sector in Cape Town, with a particular interest in initiatives with a strong social or environmental and entrepreneurial focus. It is beyond the scope of this research to provide a comprehensive and exhaustive detailing of all stakeholders; hence the objective is to present contextual information from which a holistic analysis of various entrepreneurial approaches can be undertaken. Chapter 2 provided information about waste management in South Africa, including legislation, responsibilities, and current trends. This chapter further explores the context in Cape Town, through the illustration of a recyclables value chain and detailed descriptions of the sector organizations.

4.2 Recyclables Value Chain

In order to understand and assess the sector organizations, it is first necessary to explore the multitude of stakeholders in the recyclable value chain in Cape Town. Figure 4.1 illustrates the various channels of recyclables from households and/or businesses through the phases of collection, processing/treatment, and disposal/reuse. It is beyond the scope of this research to provide a comprehensive detailing; therefore, this value chain is concerned with dry recyclables, and does not account for the importation or exportation of waste, street cleaning, wet organic waste or waste from institutions. Approximately 2.19 million tonnes of waste is generated yearly in the municipality (“The case for less waste”), and although local recycling rates are unknown, nationally they stand at 10% (Department of Environmental Affairs, 2012). Service providers, contracted by the city, extend kerbside refuse removal services on a weekly basis to 93.3% of households (City of Cape Town, 2012a). Almost 3% of households use a communal refuse dump, and 0.7% have no rubbish disposal (City of Cape Town, 2012b). If households or businesses do not separate their recyclables, they are collected with their mixed garbage and sent to landfill. There are also dedicated recyclable collection services. Think Twice, the free door-to-door recycling collection service offered by the municipality, extends collection services to 120,000 households (11.2% of total households) (“Think
Twice”, 2011), located in more affluent areas24, demonstrated by the shaded lines in figure 4.2 (“Residential Collections in Cape Town”). Households and/or businesses may enlist private collection services that, for a fee, offer kerbside pickup of recyclables. There are a number of community-based initiatives that encourage recycling. Additionally, the city has twenty free drop-off sites, plus numerous private recycling drop-off points, including select schools, shopping centres, charities, and petrol filling stations (“Recycling”). Informal waste pickers25, who collect from discarded waste, are embedded at each stage of the recyclable value chain, from kerbsides to landfills. They generally lack access to transport, and sell directly to buy-back centers or to intermediaries that may be entrepreneurs, middlemen, associations, cooperatives, or NGO programmes. Buy-back centers/depots, or junk shops are small, medium or large traders of recyclers, often supported by private recycling firms (Langenhoven & Dyssel, 2007; Scheinberg, et al., 2011). For example, PETCO has 65 recovery stations for polyethylene terephthalate (PET) plastic recycling, 15 of which are in Cape Town (“About PETCO”). Material recovery facilities are large private firms that may grade, sort, recycle and/or sell recyclable material to converters in the recycling industry. This research is primarily interested in the collections phase, and in community-based initiatives. A range of collection methods are used throughout the country, including wheelbarrow, hand-drawn carts, push carts, bicycles, donkey carts, tractor-trailer combinations, railway trucks, bakkies (pick-up trucks), bush trucks, cage trucks and compactor vehicles (Council for Scientific and Industrial Research, 2011).

24 Think Twice is currently available in the following areas: Gordon’s Bay, Strand, Macassar, Hout Bay, Camp’s Bay, Fresnaye, Bantry Bay, Clifton, Pinelands, Parklands, Melkbostrand, Bloubergstrand, Sea Point, Green Point, Mouille Point, and Three Anchor Bay (“Think Twice”, 2011).

25 Various terminologies are used to describe informal waste pickers, including scavenger (which is regarded as derogatory), collector, recycler, salvager, reclamer, and garbage picker (Samson, 2010). To maintain clarity and consistency, the term informal waste picker is adopted in this research.
Figure 4.1 Recyclables Value Chain, Cape Town

Households without access to weekly refuse removal (71,594 households)\(^1\)

Service Providers (contracted by City)

ThinkTwice Campaign (120,000 households)

Mixed material

Private Collection Services

Waste Pickers

Community-based initiatives

Private Drop-Off Points

City Drop-Off Points (20)

Disposal/Reuse

Unlicensed dump

Communal refuse dump

Landfill

Recycling Industry

Mixed material

Intermediary

Buy-back centers

Material Recovery Facility

\(^1\) The extent to which these households participate in recycling is unknown.

Figure 4.2 Think Twice Collections, Cape Town
4.3 Sector organizations

The sector organizations in this research represent a range of geographical locations across the municipality of Cape Town. Figure 4.3 presents the geographical area of operation of selected sector organizations. Some, such as TrashBack or Recycle Swop Shop, operate within a limited area. Others, such as Oasis Recycling and All Women Recycling, have operations that extend to other regions in the municipality, the country, or even internationally. Some sector organizations are not included in this figure for practical reasons, for example, commercial ventures with expansive distribution networks.
Figure 4.3 Sector organizations by geographical region of operation

Figure 4.4 categorizes selected sector organizations according to value propositions, theoretical foundations and/or methods. The following categories are employed: social enterprises, educational focuses, rights-based approaches, green enterprises, waste minimization, and job creation. For-profit organizations are differentiated by solid outlines, not-for-profits by dashed lines. Some organizations can be categorized under multiple headings, and thus are connected by corresponding lines. There are multiple

1 Denotes where Solid Waste Network is based. Collections extend to much of the municipality.
2 Denotes where Oasis Association is based. Private drop-off and collection services extend to much of the municipality.
3 Denotes where Ilima Cleaning and Recycling is based.
4 Collections extend from Milnerton south to Simon’s Town (not pictured, located south of Muizenberg)
ways to categorize the sector organizations; the following is one example and serves to provide clarification. The remainder of this section provides a relevant description of the organizations and geographical data, organized under logical headings.

Figure 4.4 Sector organizations

4.3.1 Social Enterprises

4.3.1.1 Social Enterprises

In-depth analyses were conducted on two organizations in the recycling sector. TrashBack and Recycling Swop Shop are projects that incentivize recycling through the provision of tokens and are based in Imizamu Yethu and Du Noon respectively. These initiatives were inspired by the ‘Garbage Purchase’ program in Curitiba, Brazil, which has expanded to 22,000 families in 52 communities, and involves citizens ‘selling’ their garbage for bus tickets, agricultural or dairy produce (Korfmacher, 1997).

TrashBack and Recycle Swop Shop fall within the Market Intermediary Model, an embedded model that “provides product development, market access, and credit services to its target population” (Alter, 2006, p.
216). The organizations purchase recyclable materials from their clients, in exchange for tokens that are redeemable for goods and/or services. The recyclable materials are sold to private recycling companies, the profits of which are used to cover operating costs.

TrashBack (TB), launched in September 2011, self-identifies as a “social enterprise that changes apathy into action through an altered perception of waste” (“TrashBack: Rewards for rubbish”). TB’s recycling project, uphinda-phindo!, allows participants to exchange recyclable materials for vouchers, which are redeemable at local stores, excluding informal bars (locally known as ‘shebeens’) and stores that sell cigarettes or alcohol (locally known as ‘spaza shops’). Rewards consist of food, clothing, shopping vouchers, travel vouchers, stationary, airtime for cell phones and high school textbooks. Uphinda-phindo! means ‘to repeat’ in isiXhosa, and is reflective of TrashBack’s “philosophy of encouraging a behavioural shift toward re-use and recycle” (“TrashBack: Projects: uphinda-phindo!”). Uphinda-phindo! is in part funded by the UrBin clothing recycling program, which supplies second-hand clothes at reduced costs to local community vendors (“TrashBack: Rewards for rubbish”). Working in conjunction with the Hout Bay Recycling Depot Cooperative, participants bring in their recyclables throughout the week. The material is weighed, and points are added to their profiles on the electronic uphinda-phindo! system\(^\text{26}\). Top collectors are rewarded, bringing their count back to zero, while the points of those not rewarded are carried to the next collection period. TrashBack operates in partnership with the Broccoli Project and Mobilitrix, and is sponsored by Hosken Consolidated Investments Limited, hubspace, Bulk SMS, Hout Bay SuperSpar, the Clothing Bank, Fish on the Rocks, Cape Town Group Travel & Events, Hemporium, Scales Incorporated, and Seiler Language Services. TB currently averages approximately two tonnes per month of recyclable materials. TB operates in the township of Imizamo Yethu (IY) in Hout Bay, Cape Town. According to the most recent statistics, IY had a population of over 8000 in 2001 and unemployment was close to 47%.

\(^{26}\) It should be noted that TrashBack’s business model centres around the electronic system that tracks the recyclables participants bring in, as well as the voucher system. Imizamo Yethu serves as a pilot project, and TrashBack aims to advertise the electronic system to other stakeholders in the recycling sector, such as buy-back centres, government, social enterprises and not-for-profit organizations.
Nearly 84% of residents lived in informal shacks, with a further 10% living in traditional dwellings, huts or structures made with traditional materials. Almost 85% of residents lived under the Household Subsistence Level of R1,600 a month (equivalent to $174.87 CAD) (City of Cape Town, 2001b).

Recycle Swop Shops (RSS) are not-for-profit community development projects. The first RSS was established in 2003 in the marginalized township of Zwelihle in Hermanus. Since then, approximately 18 other RSS have been established throughout South Africa, adapted to local context and conditions. The first RSS in Cape Town was founded in 2007 in the township of Du Noon, an initiative of the not-for-profit organization Beyond Education. Twice a week, Tuesday mornings for adults and Thursday afternoons for children, participants bring in their paper, plastic and tin recyclables in exchange for tokens. The tokens are redeemable on site for toiletries, clothing, stationary and foodstuffs (“Projects: Recycle Swop Shop”). In the first nine months of 2012, over 27,000 kg of recyclables were collected, with an average of 3.3 tonnes per month. RSS Du Noon is supported by the Cape Town International Airport, Elkanah House, Pick n Pay de Goede and Fruit & Veg Tableview (“Beyond Education: Recycle Swop Shop”). In 2011, Du Noon had a population of over 9,000 residents, and an unemployment rate of over 53%. Over 81% of residents lived in a house or brick structure and approximately 14% lived in informal dwellings or shacks. 85% of residents lived under the Household Subsistence Level (City of Cape Town, 2001a).

4.3.1.2 Access to Markets

In low- and middle-income countries, waste collection, transfer and disposal are known survival strategies for the extreme poor, yet informal waste pickers are often excluded from decision-making processes and the formalization of waste streams. Solid Waste Network (SWN), a not-for-profit social enterprise established in 2005, aims to increase informal waste pickers’ access to markets, providing both greater

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27 Interviews with founder of Recycle Swop Shop, September 12, 2012.
28 Household Subsistence Level refers to monthly incomes of less than R1,600 (equivalent to $174.87 CAD).
security and profit margins, and increased engagement with waste management policies. SWN has engaged 25 savings groups consisting of 130 women in some of the poorest regions in Cape Town, including Atlantis, Khayelitsha, Du Noon and Mbekweni. These savings groups negotiate contracts with local businesses to collect, sort, and bulk solid waste (“CORC: Solid Waste Network”). SWN can also be described as a Market Intermediary Model. SWN has set the following monthly averages for 2013: 60 tonnes of glass, paper, tin, and plastic, 50 crates and 100 crates returnable bottles (Fieuw, 2012). Monthly incomes are determined by the tonnage capacity of groups, and vary between R800- R2000 per individual (equivalent to $87-218 CAD) (“SDI South African Alliance: Solid Waste Network”, 2012). SWN’s implementation agencies include Community Organization Resource Centre (CORC) and the Coalition of the Urban Poor (CUP); community partners include Federation of the Urban Poor (FEDUP) and the Poor People’s Movement (PPM); and funding partners include CESVI Cooperation and Development, Ford Foundation and the City of Cape Town Solid Waste Department (“CORC: Solid Waste Network”). SWN is based in Philippi, but services more than 250 waste pickers throughout the Cape Town metropolitan area (“SDI South African Alliance: Solid Waste Network”, 2012). Almost 83% of Philippi residents lived under the Household Subsistence Level, and 56% lived in informal dwelling/shack or traditional dwelling (City of Cape Town, 2001d).

4.3.2 Educational Initiatives

Mothers Unite (MU) is a not-for-profit organization that aims to provide a holistic and supportive environment for children. Troubled by the realization that some children in her neighbourhood were at times failing to secure a daily meal, Carol Jacobs founded the not-for-profit in 2008. Initially, Jacobs and two other mothers were working with 30 children; currently, they work with 100 children between the ages of 3 and 18 years of age. There are five areas of focus: educational programs and a feeding scheme, food garden, library, arts and crafts, and community volunteer development (“About us: Mothers Unite”). In July 2012, MU began a recycling scheme. Children are encouraged to collect recyclables in their neighbourhood, which are exchanged for stationary supplies. MU saw that many of the community
children did not have access to stationary supplies, supplies were frequently stolen, or that parents could not afford them. No collection amounts are known at this point. Mothers Unite is based in Lavender Hill, Southern Suburbs. As of 2001, the township had over 28,000 residents, 69% of whom were employed. 70% lived under the Household Subsistence Level. Approximately 10% lived in informal dwelling or shacks (City of Cape Town, 2001c).

A number of schools in Cape Town have become private recycling drop-off points, in which receptacles are placed on or near school property. Students, parents, and members of the community can drop off their recyclables, with revenue reinvested into the school. This provides a tangible addition to curriculums, as students learn about environmental issues. I visited the Jan Van Riebeek Primary School, located in Tamboerskloof, which has a recycling initiative.

4.3.3 Rights-Based Approaches

Social Justice Coalition (SJC) is a community-based organization formed in 2008 in response to the xenophobia crisis. One of the newest and fastest growing mass-member based social movements; SJC protests government failures of service delivery, accountability, and attacks on the Constitution and Judiciary. SJC promotes active citizenship through education, policy and research, and community organizing. It has 11 branches and over 40 partner organizations. There are two main programs: the Clean and Safe Sanitation Campaign, and the Justice and Safety for All Campaign. The former seeks to address a lack of clean and safe sanitation in Khayelitsha township by demanding improved maintenance, monitoring and coordination (“About us: Social Justice Coalition”, 2011). SJC Community Advocates survey communities, tracking data on access to services, including type and quality of sanitation facilities and experiences with refuse removal. SJC has recently embedded itself in design-centered events. A Design Storming event was organized by Creative Cape Town, in collaboration with Cape Town Design

29 Interviews with management, June 14, 2012.
30 In 2008, xenophobic violence erupted across Cape Town, leaving 100,000 people displaced and over 60 people dead (“Government must acknowledge and address Xenophobia in Cape Town”, 2010)
Network and in partnership with SJC ("Design Storming", 2012). The event, held in Khayelitsha, had participants from academia, design, and other industries and included a walking tour to increase familiarization with challenges of waste removal. Members of SJC actively collaborated within the groups. In November 2012, SJC and the African Centre for Cities at the University of Cape Town organized the 5th annual Irene Grootboom Memorial Dialogues, which brought together a range of individuals to critically discuss design, looking at whether it can be used as an instrument for advancing social justice and reducing urban inequality ("Grootboom Dialogues", 2012).

groundWork is a not-for-profit environmental justice service and developmental organization, based in Pietermaritzburg, South Africa, and operational in Southern Africa. One of their campaigns focuses on waste, and on the lack of adequate policies at the governmental level. They work specifically with waste pickers, who are frequently excluded from decision-making processes ("groundWork South Africa: Waste Campaigns").

4.3.4 Green Enterprises

Ilima Cleaning and Recycling (ICR), formerly Protea Cleaning and Recycling, delivers household and commercial cleaning and recycling. According to its website, ICR is the only recycling company based in Khayelitsha\(^\text{31}\), and comprises 100% black ownership ("About us: Protea Cleaning and Recycling"). ICR, founded in January 2012, self-identifies as a social enterprise, and seeks to address challenges of unemployment while promoting environmental awareness and sustainability. They currently collect recyclables from approximately 11 companies, for a total of approximately 26 locations, and an additional 10 households\(^\text{32}\). Khayelitsha comprises a population of over 329 000 individuals. From 1996 to 2001, the average growth rate per annum was 5.3%, and there is a consistent high rate of migration from Eastern

\(^\text{31}\) A handful of recycling collection companies are noted in the next paragraph that are active in the Cape Flats; however, it is unknown if these companies are based elsewhere or are still active. The Group Areas Act forced thousands of blacks and coloureds to move to the flat area north of Cape Town, known as the Cape Flats. It includes the townships of Khayelitsha, Mitchell’s Plain, Gugulethu and Lavender Hill, to name a few.

\(^\text{32}\) Interviews with management, August 7, 2012.
Cape. Three quarters of Khayelitsha adults above 20 years obtained below matric level\textsuperscript{33} as their highest educational attainment. In 2001, the unemployment rate in the township was a staggering 51%.

Approximately 57% of residents lived in shacks in informal settlements, and 72% of households lived below the Household Subsistence Level (Information and Knowledge Management Department, 2005).

A number of green enterprises streamline the recycling process for households and businesses, who may not otherwise recycle because of time constraints or a lack of awareness of how or where to recycle. A semi-structured interview was conducted with a manager of Clearer Conscience. For a fee, the company collects recyclables from the curb and transports them to appropriate recycling depots and charities ("About us: Clearer Conscience"). An online green directory\textsuperscript{34} listed an additional 22 ventures offering similar collection services, varying in service locations and type of recyclables collected. A number of ventures are limited to the Cape Flats area, including Cosmic Waste and Recycle (Khayelitsha), DJ Waste (Cape Flats), and Prusent Cleaning Environmental Services (Cape Flats) (“Recycling Western Cape”).

Alternatively, there are ventures that modify the life cycle of a product. EcoPack seeks to minimize the environmental impact of food packaging by offering a range of single-use biodegradable and compostable food and beverage containers (“About us: EcoPack”). NewLife Plastics (NLP) offers a variety of products made from plastic lumber, which consists of 100% recycled plastic packaging. NLP products are made up of polyolefin plastics, including HDPE, LDPE/LLDPE and PP\textsuperscript{35}, which are used in packaging, and constitute the major plastic types in the polyolefin product family. Polyolefin constitutes 57% of the total polymer market in South Africa. NLP products are zero maintenance, and its non-porous composition prevents mould, mildew, or moss growth. NLP products are typically targeted to both residential and commercial buyers. For example, a play structure was built at Yzerfontein Caravan Park that used 1,474

\textsuperscript{33} Matric refers to the final year of high school.
\textsuperscript{34} For a complete directory, visit Urban Sprout: http://www.urbansprout.co.za/directory/cause/recycling/western+cape
kg of recycling plastic packaging waste. NLP allows its consumers to offset carbon and are provided a Mitigation Certificate with every purchase (“Outdoor Plastic Furniture”). One challenge facing companies attempting to transform the life cycle of a product is overcoming the consumer predisposition to cheap disposable goods.

Alternatively, green ventures may seek to transform their production waste stream. CocoaFair is an environmental/social enterprise with a goal to create “social wealth for the underprivileged” (“CocoaFair: Social innovation”), while maintaining a commitment to environmental sustainability. Founded in May 2011, CocoaFair incorporates equitable relationships with cocoa growers and promotes organic and sustainable farming practices. Within the factory in Cape Town, numerous green building practices have been adopted. Innovative ways are also sought to repurpose waste products, such as creating compost mulch from the residue of the cocoa bean. CocoaFair seeks to start one major social program a year, and also supports existing programs. It founded the Children’s Recycled Tube Art Project after noticing an adjacent factory was throwing out a large amount of thick cardboard tubes. By enlisting local schoolchildren and providing art supplies, children decorate the tubes that are later used as chocolate packaging. CocoaFair intends to extend a line of affordable organic chocolates to local townships as part of a future social project. They have a partnership with All Women Recycling (see section 4.3.6 for more information) and sell some of their chocolate in kliketyklikboxes™.

4.3.5 Waste Minimization

Since 2000, South Africa has adopted reforms aimed at minimizing environmental impact and waste to landfill to achieve a long-term “zero waste” goal (City of Cape Town, 2006). Whereas some organizations have offered piecemeal interventions, for example, EcoPack or NewLife Plastics, others strive for a more holistic approach, aiming to change overall lifestyle and consumption choices. One such organization is the Institute for Zero Waste in Africa (IWZA), a not-for-profit organization that provides public education and practical applications of zero waste principles (“About IZWA”).
4.3.6 Employment Creation

All Women Recycling, Oasis Foundation and Straatwerk have adopted the Employment Model, in which “employment opportunities and job training (is provided) to its target population: people with high barriers to employment” (Alter, 2006, p. 217). All Women Recycling (AWR) self-identifies as a “sustainable and profitable business, (that supports) the environment and empower(s) other women” through upcycling (“About us: All Women Recycling”). AWR’s primary product is the kliketyklikbox™, an ‘eco-friendly’ gift box recycled from 2-litre plastic bottles. Approximately 350 kliketyklikboxes™ are produced daily by women who were previously unemployed. The products are sold at 30 retail outlets, and approximately 60% are exported internationally to countries including Germany, Switzerland, United Kingdom, United States, and Australia. AWR has partnerships with other social/green enterprises; for example, CocoaFair (see section 4.3.4) sells some of their products in kliketyklikboxes™. AWR is located in Diep River, in the Southern Suburbs of Cape Town; however, it is unknown where the employees are based.

Oasis Association is a not-for-profit organization that provides a range of services to 450 individuals in the Greater Cape Town area with moderate, mild or severe intellectual disabilities, including employment opportunities, skills development training, day care centres and residential homes. One of their projects is the Recycling and Waste Management Project. Individuals drop off their recyclables at the centre located in Claremont, and businesses are provided with free collection. Over 260 tonnes of waste is processed each month, creating employment through sorting and securing a revenue stream (“Oasis Management: Recycling and Waste Management”). Recyclables are received from throughout the municipality; however, it is unknown where the employees are based.

Straatwerk is a not-for-profit organization with a strong evangelical focus, founded in the 1960s, which provides outreaches to vulnerable people, or those in distress. One program area relevant to this research is OPHELP-Projekte (‘Upliftment Projects’): a variety of rehabilitation programmes for the
‘unemployable’. Projek OPRUIM (‘Project Cleanup’) provides a range of cleaning services, including the removal of graffiti and illegal posters, and general street cleaning. Clients include the City of Cape Town, City Improvement Districts,36 schools, businesses and individuals (“Outreach Ministry to the Destitute: Straatwerk”). The teams will separate organic and recyclables that are picked up by a company contracted by the City. Straatwerk is based in the City Centre due to the higher concentration of homeless and homeless shelters. The majority of Projek OPRUIM sites are also located in the City Centre.

4.3.7 Additional Relevant Stakeholders

4.3.7.1 Private Recycling Companies

Table 1 presents a sample of private recycling companies operational in Cape Town. Although these stakeholders were not a focus in this research, they are of significance because of their interactions with various sector organizations, either directly or through an intermediary. In order to understand stakeholders at this stage of the recycling value chain, an interview was conducted with a Managing Member of Atlantic Plastic Recycling. Their main tasks include providing collection services for plastic waste collection centres, and grading, sorting, and pelletizing services.

36 A City Improvement Districts (CID) is a non-profit organization in a designated geographical area, in which property owners contribute a levy for supplementary and complimentary services set to enhance the physical and social environment of the area (“CCID: about us”).
Table 4.1 Sample of Private Recycling Companies, Cape Town, South Africa

<table>
<thead>
<tr>
<th>Company</th>
<th>Plastic</th>
<th>Glass</th>
<th>Polyethylene Terephthalate (PET)</th>
<th>Metal can</th>
<th>Paper/ Cardboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic Plastic Recycling</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass Recycling Company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrupet (Pty) Ltd.</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Collect-a-Can</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Consol Glass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mpact Limited (formerly Mondi Recycling)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Nampak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>PET Recycling Company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.7.2 Private Sector Initiatives

Private recycling companies in South Africa have initiated a number of not-for-profit organizations. As mentioned in Chapter 2, government-imposed regulations have been shown to be less effective than voluntary industry initiatives. Two examples are presented henceforth: Collect-a-Can (beverage can recovery) and PETCO.

Collect-a-Can is a not-for-profit organization founded in 1993 in South Africa by the can industry, and its stakeholders include ArcelorMittal South Africa and Nampak. Since 1997, South Africa has had one of the highest recovery rates in the world of used beverage can recovery (72%). One of their initiatives aims to strengthen small-scale entrepreneurs. Approximately R20 million (approximately $2,185,893 CAD) is dispensed yearly to an estimated 100,000 collectors. Collectors sell their cans to agents or entrepreneurs who transport the material to one of Collect-a-Can’s various branches. Between 300 and 500 schools participate in Collect-a-Can’s school competitions (“About us: Collect-a-Can”).

PETCO was established in 2004 by the Polyethylene Terephthalate (PET) industry. Financed by voluntary levies from all PET converters, bottlers and importers, PETCO promotes consumer awareness and supports PET collection and recycling networks. Over 430 recovery stations have been established.
throughout the country, and income-generating opportunities have been provided to an estimated 26,000 South Africans (“About PETCO”). In 2011, leaders of polyolefin plastic packing companies founded a similar initiative: Polyolefin Recycling Company, trading as POLYCO (“Introducing POLYCO”).

4.4 Conclusion

The recycling value chain in Cape Town, as demonstrated in this chapter, composes a multitude of stakeholders, both within the formal and informal economies. Waste management remains an issue marked by racial, class and geographical lines. Although nearly 160,000 in low-income black and coloured communities lack access to at least weekly refuse removal, a pilot project has extended free door-to-door recycling collection services to 120,000 households in affluent areas. Chapter 3 provided an overview of methodological processes, and this chapter expanded on the recycling sector in Cape Town through an exploration of the recyclable value chain and the sector organizations. Chapter 5 presents findings, analysis and discussions.
Chapter 5
Research Findings, Analysis and Discussion

5.1 Introduction

The previous chapters have provided contextual and descriptive information on (social) entrepreneurship and waste management, both generally and within the context of South Africa. Detailed descriptions of the sector organizations have also been provided. This chapter delivers findings, analysis, and discussions, as related to the research questions, primarily that of exploring the opportunities and limitations of (social) entrepreneurial approaches within a particular sector. The first section presents research findings, while the subsequent section situates them within larger discourses of gender, social constructionism, informal economies, and social justice. This chapter concludes with implications and recommendations for the recycling sector in Cape Town and (social) entrepreneurship research.

5.2 Research Findings

The dominant discourses in social entrepreneurship research are preoccupied with individual enterprises or entrepreneurs. In an attempt to move beyond this predisposition, this thesis undertook a holistic analysis of a sector, exploring the various social entrepreneurial approaches adopted by a range of organizations while acknowledging the influences of contextual variables: taking into account relevant legislation, municipal documents and external influences. This section provides an overview of the sector organizations, followed by themes that emerged from the research findings. Finally, opportunities of social entrepreneurial approaches afforded by this holistic analysis will be explored.

5.2.1 Summary of Sector Organizations

Semi-structured interviews and/or document analyses were undertaken with a variety of stakeholders involved indirectly or directly with the recycling sector in Cape Town, South Africa. Figure 5.1, first presented in chapter 4 along with detailed descriptions of the sector organizations, illustrates the range of

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37 groundWork is based in Durban, South Africa, but their program and approach are relevant to this research. A number of additional stakeholders were analyzed, but are not represented in this figure.
actors from the for-profit and not-for-profit sectors, which are categorized by solid and dashed lines, respectively. Of interest were not only individual mandates, but also the placement of organizations within the recyclable value chain and interactions with other stakeholders.

**Figure 5.1 Sector organizations**

It was the objective of this research to move away from traditional business metrics to allow for a larger systemic analysis and non-monetary variables more suited to the assessment of environmental and/or social impact. As such, this research was less concerned with economic performance, efficiency and return on investment. This flexibility also allowed for the inclusion of start-up ventures or those still in the concept stage. However, table 5.1 presents the average monthly collection rates of four selected sector organizations. It is not intended for any conclusions to be drawn from these data by equating a greater volume of recyclables with better performance or higher efficiency. Rather, these figures aid to further conceptualize the range and scale of operations, as well as their impact on the city’s Department of Solid Waste. These initiatives result in decreased volumes of refuse to be picked up at kerbside, and a diversion...
of waste from costly landfills, which results in a decrease in required government expenditure. The sector organizations also engaged in interactions with local communities, of varying levels and intensity. Oasis Management recovered the greatest volume of recyclables, with the most recent data standing at 260 tonnes per month (“Oasis Management: Recycling and Waste Management”). Their high totals are aided by their collection service, and drop-off centre, which are used by individuals and businesses. The remaining three sector organizations, although accounting for a fraction of recovered recyclables, adopted more community-oriented approaches. The 2013 monthly targets for Solid Waste Network include: 50 tonnes of glass waste, five tonnes of paper, three tonnes of tins, two tonnes of plastic, 50 crates and 100 crates returnable bottles (Fieuw, 2012). In the first nine months of 2012, Recycle Swop Shop Du Noon averaged 3.3 tonnes per month, and had a total of over 1800 visits. TrashBack averaged two tonnes in collected recyclables per month.

Table 5.1 Monthly recyclable collection rates, selected sector organizations

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Not-for-profit Monthly Average (tonne/per month)</th>
<th>For-profit Monthly Average (tonne/per month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Waste Network</td>
<td></td>
<td>60 tonnes, 50 crates and 100 crates returnable bottles¹</td>
</tr>
<tr>
<td>Recycle Swop Shop Du Noon</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Oasis Association</td>
<td>260</td>
<td></td>
</tr>
<tr>
<td>TrashBack</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

¹ 2013 monthly targets

5.2.2 Themes that Emerged from the Research Findings

The themes that emerged from the research findings can be divided into two parts. Firstly, operational aspects will be examined, including financial constraints and working conditions. The second part will explore how initiatives are framed and conceptualized, taking into account the informal economy, gender, and sustainability. As the sector organizations represent a range of value propositions, theoretical

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³⁸ Data provided by management, November 2012.
³⁹ Interview with management, August 8, 2012.
underpinnings and activities, not all indicators or themes may be applicable. This section presents the research findings; a critical analysis follows in section 5.3.

5.2.2.1 Operations

In terms of operational aspects of the sector organizations, the exploration of working conditions and transportation of recyclables provide a description of the participants’ experiences. At the organizational level, challenges of gaining buy-in and finances are noted.

Previous research has shown that waste pickers generally have “extremely insecure working and living conditions”, and frequently encounter theft and bodily assault (Benson & Vanqa-Mgijima, 2010, p. 10). The research findings, represented in table 5.2 below, reinforce that participants of recycling initiatives did not use any protective clothing. Nearly half of the respondents indicated that gloves would facilitate their collecting activities, and 58% requested assistance with transportation or storage. However, none of the participants reported violence, although a small number experienced theft of their recyclables.

Table 5.2 Items that would facilitate collection: Recycle Swop Shop and TrashBack

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>gloves</th>
<th>bins</th>
<th>cart</th>
<th>trolley</th>
<th>storage</th>
<th>transport</th>
<th>bags</th>
<th>nothing needed</th>
<th>no answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle Swop Shop (8)</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TrashBack (9)</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Participants of the two recycling initiatives employed a variety of transportation methods for their recyclables, both in collection and transportation to drop-off locations, as reflected in table 5.3. The majority of TB participants used bags, whereas six out of eight RSS participants used a bin or trolley. This may be explained by the fact that during the time of this field research RSS only accepted plastic, which is light and more easily transported in a trolley or bin. Also, RSS is only open twice a week: Tuesdays for

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40 Recyclables are generally stored in between informal dwellings/houses, on roofs, or in backyards.
children and Thursdays for adults. TB participants, on the other hand, can drop off their recyclables at any
time during operating hours of the Hout Bay Recycling Depot.

Table 5.3 Transportation of Recyclables: Recycle Swop Shop and TrashBack

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>bag</th>
<th>bin</th>
<th>trolley</th>
<th>by hand</th>
<th>on back</th>
<th>no answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle Swop Shop (8)</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TrashBack (9)</td>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A third theme that emerged is perception and barriers to recycling. Previous research confirms that
nonparticipants of recycling initiatives perceived greater barriers to recycling (Godfrey, Scott, Difford, &
Trois, 2012) and emphasizes perceived behavioural control (PBC)\(^{41}\). There is a range of services to
facilitate recycling in Cape Town including the sector organizations, online directories and information
sources, that seek to remove barriers of a lack of knowledge, time or resources. The in-depth case studies
showed varying PBC. In interviews with participants of RSS and TB, a number were motivated and had
no plans to discontinue\(^{42}\). They did not perceive their recycling activities as too strenuous or time-
consuming. In Imizamo Yethu, however, the interviewer and translator encountered more individuals that
had either discontinued or reduced their participation\(^{43}\). Three participants expressed disillusionment with
incentives, stating that the incentives were too small, and did not accurately reflect the amount of work
that went into collecting. Thus, some participants perceived barriers to recycling that the incentive
structure was unable to overcome. Interviews with those involved in zero waste initiatives revealed similar
challenges in procuring individual, community and institutional buy-in, as their products or approaches,

\(^{41}\) Perceived Behavioural Control (PBC) is described as “the ease with which the behaviour can be performed, a
person’s perception of the difficulty of performing a behaviour (self-efficacy), or the presence and extent of factors
that either facilitate or hinder performance (controllability)”. PBC is a person’s beliefs about available resources,
opportunities, and specific knowledge” (Godfrey, et al., 2012, p. 2165)

\(^{42}\) Out of 8 participants, 4 indicated they would continue collecting recyclables ‘forever’ or ‘until RSS closes’. An
additional 2 indicated they would continue collecting until they secured employment.

\(^{43}\) The location of interviews may account for this difference in findings. Whereas RSS participants were interviewed
on-site, TB participants were interviewed in the community. As a result, all of the citizens approached on the former
site were avid participants, whereas the latter included all members of the community.
while more environmentally friendly, were more expensive than cheap, disposable goods. Additionally, individuals may not be aware of the range of services or products available, or of the environmental impact of their consumption behaviour.

Two final related themes are financial constraints and scale, as recycling is profitable with large volumes. Financial capital is increasingly difficult to obtain, as not-for-profits face a decreasing pool of funding from traditional, philanthropic and government sources, while also facing an increase of competition from for-profits and social enterprises. Not-for-profits are increasingly turning to social entrepreneurial approaches in order to diversify revenue streams and to increase competitiveness and independence (Alter, 2006). Social enterprises, on the other hand, face challenges in obtaining financing as most are short-term, thus increasing the amount of time spent on grant writing, and decreasing the amount of time allocated to venture development. A number of organizations noted limited financial capital as a challenge. For example, Solid Waste Network’s “meagre budget (limits) its capacity to reach more pickers” (“SDI South African Alliance: Solid Waste Network”, 2012). In an interview with TrashBack, management noted the current need of financial capital to drive the business further 44, which was also reiterated by management of Ilima Cleaning and Recycling 45. A related factor is the end value of recyclables, as it constitutes a major source of revenue. Recycle Swop Shop, for example, noted that the revenue from plastics provided between 50-60% of operating costs 46. While profit margins of recycling companies are unknown, there is a general belief among waste pickers that companies make a large profit at their expense (Benson & Vanqa-Mgijima, 2010). In interviews with TrashBack, Recycle Swop Shop and Ilima Cleaning and Recycling, they all stated that they chose recycling companies based on reliability and the highest quotes. Given the fluctuation of the price of recyclables, revenue from recyclables could be identified as one threat to an organization’s ability to provide incentives or to fulfill a service.

44 Interviews with management, August 8, 2012.
46 Interviews with management, October 30, 2012.
Social enterprises often scale quickly due to customer demands, pressures from funders, or their social missions (Austin, et al., 2006). This was reflected in the operational mandates of the sector organizations, as scale was envisioned as a tool to achieve organizational objectives. Solid Waste Network saw scaling up as “essential to realize the goal of affecting policy change at city level” (“SDI South African Alliance: Solid Waste Network”, 2012). Recycle Swop Shop wanted to partner with individuals to start up more Swop Shops, as well as starting their own sorting yard and recycling plant (“Projects: Recycle Swop Shop”). To achieve financial viability, TrashBack suggested the need of having between 20 and 40 operational sites.

5.2.2.2 Conceptualization

The following sub-section explores the ways in which sector organizations are framed and conceptualized. This serves to clarify the ways in which the various organizations see themselves and their participants. Assumptions and roles are created through discourses surrounding empowerment and (un)paid labour. Such assumptions are reinforced through a lack of integration of race/class, the informal economy, and gender. Lastly, organizations are framed within a discourse of sustainable development.

A common theme for two thirds of the case studies is the concept of ‘empowering’ marginalized or low-income communities. The discourse around empowerment is often linked to community-based waste management. TrashBack’s incentivized recycling program results in “cleaner communities… instilling pride and dignity and a greater sense of place”, providing “informal and formal employment, contributing towards social upliftment” (“TrashBack: Projects: uphinda-phindo!”). The pro-poor community-based solid waste system advocated by Solid Waste Network provides an income “for the urban poor living on the margins of society” and creates a space for the poor’s involvement in policy making and management strategies (“CORC: Solid Waste Network”). All Women Recycling “highlight(s) the plight of women in need in South Africa” and “create(s) a safe space to nurture women through skills, education and

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47 Interviews with management, August 8, 2012.
empowering project through upcycling and product development” (“About us: All Women Recycling”). Recycle Swop Shop is described as “an empowerment initiative”, where communities are “given the opportunity to help themselves” (“Projects: Recycle Swop Shop”).

The language surrounding compensation also varies by organization. TrashBack alludes to both formal and informal employment. The formal employment refers to the local cooperative that won the tender to run the Hout Bay recycling depot. TrashBack helps increase the turnover of recyclable materials, which in turn increases cooperative employee wages. The participants of TrashBack are provided with ‘points’, which are redeemable for rewards at select local businesses and informal shops (“TrashBack: Projects: uphinda-phindo!”). Recycle Swop Shop participants earn ‘tokens’ for recyclables, which are redeemable in the Swop Shop, located on-site, for necessities, “such as clothes, food, toiletries and school essentials” (“Projects: Recycle Swop Shop”). Out of the eight RSS participants interviewed, one was self-employed and the others were unemployed48. Of the nine TB participants interviewed, seven had at least one income earner in the household. Out of the 17 participants, only one thought of their activities as ‘work’, while the others self-identified as ‘volunteering’ for the initiative. Solid Waste Network employs language more suited to employment, noting that community mobilization is needed “to create a proper livelihood” and to provide “the authority and capacity to negotiate profitable contracts that are advantageous to the poor” (“CORC: Solid Waste Network”). Collectors are provided with cash for their recyclables. All Women Recycling seeks to employ women who have been unemployed for longer than two years, and are taught “business management, life and sales skills” (“About us: All Women Recycling”).

In South Africa, waste management and social entrepreneurship are organized along class and racial lines and are heavily influenced by informal economies. These themes are largely absent or downplayed by the sector organizations. Only one makes an explicit reference to race. Ilima Cleaning and Recycling,

48 Two participants noted their husbands are employed: one casually, the other with full-time employment.
operating in the township of Khayelitsha, is a “100% black owned business” (“About us: Protea Cleaning & Recycling”). Overall, there is a lack of analysis into the ways in which apartheid racial inequalities are maintained and how the sector organizations are positioned in relation to such inequalities. Furthermore, there is a lack of class-based analysis, which results in a homogenization of citizens. Target communities are described as ‘women in need’ (All Women Recycling), ‘poor’ (“SDI South African Alliance: Solid Waste Network”), and ‘disadvantaged’ (TrashBack), without recognizing the programs’ impacts on redistribution or concentration of wealth. This is especially problematic given that the recycling sector is characterized by large monopolies. Participants are also assumed to be able-bodied, as collecting activities require some level of mobility and strength. Finally, only one organization makes an explicit integration of informal economies into their mandate. Solid Waste Network seeks to improve the livelihoods of informal waste pickers through community mobilization. More common, however, is the assumption that recycling is not occurring already. TrashBack’s program, for example, allows participants to translate “rubbish into rewards, simply by bringing us items (that) were previously considered to be worthless” (“TrashBack: Rewards for rubbish”). Interviews of participants of recycling initiatives demonstrated that most were new to the sector. Out of the 17 interviewed participants of RSS and TB, all but two had no prior engagement with the recycling or waste management sectors. Those interviewed in Imizamo Yethu who were involved in recycling solid waste such as copper, steel and iron, were not interested in participating in TB, viewing their recycling as primarily an economic activity and thus looking for remuneration in monies and not goods. This supports the claim that waste pickers “are disillusioned work seekers, who perform reclaiming as an alternative means of survival” (Benson & Vanqa-Mgijima, 2010, p. 9).

Among the 14 organizations surveyed, very few undertake an analysis or integration of gender. If any, there was a tendency to use gender as a variable, that is, focusing on psychological or structural differences between the sexes (Ahl, 2004). Only two organizations have an explicit mention of gender in

49 One participant previously collected paper; another participant was previously employed as a street cleaner.
online documents or project design. By offering employment opportunities, All Women Recycling seeks to empower women through job creation and skills development (“About us: All Women Recycling”). Solid Waste Network has set up 25 savings groups, consisting of 130 women, who engage with businesses to manage their recycling stream (“CORC: Solid Waste Network”; “SDI South African Alliance: Solid Waste Network”, 2012). Although Recycle Swop Shop and TrashBack do not have an explicit gender thematic focus in programme design or marketing, interviews with management suggested a bias towards participation of children and female adults, which was supported by participant interviews. In Du Noon, eight participants of Recycle Swop Shop were approached for interviews, all of whom were female. Given that interviews were conducted on the day reserved for adults, all of the interviewees were over the age of 18, with an average of 51 years. Female-heads of households represented four of the participants, with an additional three being male-heads of households. In Imizamo Yethu, nine participants of TrashBack were interviewed, all of whom were female. The average age was 19 years; however, ages ranged from 9 to over 40. Close to half of the interviewees were children and youth. The websites for both organizations did not make any specific reference to gender, except for the following screenshot from TrashBack’s website, which depicts the rate of participant registration with the exclusive use of male icons (figure 5.2) (“TrashBack: Projects: uphinda-phindo!”). It has been suggested that the lack of feminist theory in female entrepreneurship research has led to a lack of analysis of gendered processes that impact entrepreneurial activity (Mirchandani, 1999). In the case of Cape Town, this includes gender dynamics within the family, government grants and pensions, and informal economies. For example, one interviewee noted she has spoken to other collectors about how their husbands do not approve of their recycling.
Finally, the sector organizations define and deploy the construct of sustainability in various ways. Sustainability was often correlated with financial viability of a venture. Environmental sustainability was associated with activities of reusing and recycling. Diversion of waste from landfill, both from recycling and the creation of second-hand clothing markets, was frequently noted.

5.2.3 Opportunities of Social Entrepreneurial Approaches

A number of opportunities of social entrepreneurial approaches can be identified within this holistic analysis and through a comparison of a variety of social entrepreneurial approaches.

5.2.3.1 Non-Monetary Benefits

There are a number of non-monetary benefits that were observed with selected sector organizations. Although not unique to social entrepreneurial approaches, these are rarely noted in literature, and thus a short explanation is warranted. Firstly, it could be suggested that such approaches can harness solidarity, collaboration and community building. Half of RSS participants reported collecting with others. On shop days, illustrated in figure 5.3 (“Beyond Education: Recycle Swop Shop”), participants were often observed talking to each other while waiting for their collections to be tallied, or while waiting for entry into the shop. Six of eight interviewees noted they speak of their collecting activities, for example, where to collect and hide recyclables. Three interviewees noted that while they wait, they talk about ‘life’, share...
advice, or expand their social capital. Participants also reported satisfaction with the sense of duty and purpose that came with their recycling activities. Participants were also provided with complimentary soup and/or bread while they waited in line. Interviews with management of Solid Waste Network also suggest similar non-monetary benefits, as women worked in savings groups to negotiate contracts with local businesses to manage their waste streams. The interviews also highlighted the significance of the relationships between the women and the management of SWN, who regularly collected and transported the recyclables. The vehicles did not have any mechanized loading features, which could be interpreted as negatively impacting efficiency. However, the prolonged visits allowed for the development of personal relationships and increased understanding of challenges facing the participants. Although collection routes and schedules were set, they were at times modified to accommodate urgent requests from women, even if they only had a small volume of recyclables to sell\(^50\). Secondly, recycling initiatives appeared to be a beneficial addition to education curricula, offering students a tangible activity and improved knowledge of waste streams. Thirdly, participation may aid in securing a permanent position. For example, a local employee of one of the initiatives was brought to external meetings, thus increasing networking opportunities and skills development. The young man in question has now secured permanent employment.

\(^{50}\) Interviews with management, December 7, 2012.
5.2.3.2 Self-Identification as a Social Enterprise: services and opportunities

The social entrepreneurship community in Cape Town provides access to a range of support organizations, networking opportunities, and innovative practices such as crowdfunding\(^{51}\) and crowdsourcing\(^{52}\). There has not been an exhaustive compilation of support organizations; however, a sample is listed in table 5.4. A wide range of services is available, including venture capital, and non-financial support such as education and mentorship. Generally, these organizations provide services designed to assist enterprises through the “seed and venture phases”, preparing them “for commercially-oriented investment in capital phase” (“Acceleration”). Additionally, there are multiple Development Finance Institutions, government entrepreneurship programmes and government support organizations that provide support and funding. Generally, there is a lack of monitoring and evaluation of services; however, government support organizations have been criticized for ineffective marketing, management and implementation, and subsequent negligible impact on entrepreneurs (Friedrich & Isaacs, 2010; Herrington, et al., 2012).

\(^{51}\) Crowdfunding is defined as “the practice of funding a project or venture by raising many small amounts of money from a large number of people, typically via the Internet” (“Crowdfunding”)

\(^{52}\) Crowdsourcing is defined as obtaining “(information or input into a particular task or project) by enlisting the services of a number of people, either paid or unpaid, typically via the Internet” (“Crowdsourcing”)
The implications of self-identifying as a social enterprise and embedding oneself in the social entrepreneurship scene are illustrated through the comparison of three community-based enterprises. Solid Waste Network operates to improve waste pickers’ profit margins and access to markets. From interviews with management of SWN, it was discovered that although they self-identify as a social enterprise, they are not firmly embedded in the social entrepreneurship community in Cape Town. Reasons included a lack of awareness of events, or lack of capacity to attend, either because of human or financial capital. SWN maintains a ‘working relationship’ with the City of Cape Town’s Solid Waste Department (“SDI South African Alliance: Solid Waste Network”, 2012). Recycle Swop Shop Du Noon identifies as a not-for-profit organization that encourages recycling through the provision of incentives including toiletries, food, and second-hand clothing. Although RSS engages in social entrepreneurial approaches, they do not self-identify as a social enterprise and are not active within the social entrepreneurship community. Their partnerships include Cape Town International Airport, Elkanah House, Pick n Pay de Goede, Fruit & Veg Tableview, Wesbank No.1 Primary School, Recycle 1st, Save All, and Transforming Minds & Futures (“Projects: Recycle Swop Shop”). RSS is active on social media, including Facebook (http://www.facebook.com/recycleswopshop?fref=ts) and the Beyond Education blog (“Blog | Beyond

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Education”). TrashBack, also a recycling initiative, self-identifies as a social enterprise. Similarly to RSS, TB is active on social media, including Facebook (http://www.facebook.com/TrashBackSA?fref=ts), and blog (“Blog: TrashBack”, 2013). TB has also been active in both crowd funding\(^{54}\) and crowdsourcing\(^{55}\). Additionally, TrashBack has been in attendance at several festivals and events, helping to raise awareness of recycling and their enterprise, including the Cape Town We ARE ONE Colour Festival and Rocking the Daisies music festival (“Blog: TrashBack”, 2013). Therefore, it could be suggested that self-identifying as a social enterprise unlocks additional resources and opportunities, including support organizations, innovative practices and networking opportunities. However, further research is needed to assess the practicality and benefits of such resources.

5.2.3.3 Collaboration and Coordination among Stakeholders

There is increasing acknowledgement of the significance of contextual variables and distributed agency in social entrepreneurship literature (Mair, et al., 2012; Zahra, et al., 2009). However, this research illustrates a lack of coordination among stakeholders in Cape Town’s recycling sector. Although there is a National Recycling Forum, which is described as a “not-for-profit organization created to promote the recovery and recycling of recyclable material in South Africa” (“About the NRF: National Recycling Forum”), sector organizations did not appear to be aware or active in the forum. A number of interviews with management of initiatives uncovered that there are silos of collaboration\(^{56}\), and while initiatives may know about each other and their activities, there is a lack of coordination at a level that would provide a coherent framework for addressing recycling challenges. This could lead to duplication of efforts. For example, one initiative noted a request from their funding partner to expand into another part of the municipality; however, the initiative lacked contacts in that particular community. Through this research, it was uncovered that both a social enterprise and community-based organization were operating in the area, and

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\(^{54}\) TrashBack had a crowdfunding campaign on Green Hero, with a target of $1000 USD (“TrashBack”, 2013).

\(^{55}\) TrashBack took part in a MakeSense Hold Up (“TrashBack Holdup @ Cape Town Hotspot”, 2013). MakeSense connects regular citizens and social entrepreneurs both on and offline, in an attempt to help solve challenges facing social enterprises and advance the concept of social entrepreneurship (“The Blog: About”).

\(^{56}\) For example, there are a number of industry-led recycling initiatives, such as POLYCO (dealing with Polyolefin plastics), and PETCO (dealing with Polyethylene Terephthalate plastics).
were involved in the recycling or waste management sector in some capacity. Consequently, I introduced the relevant parties.

Weak coordination within the sector was also confirmed by the overwhelming participation at the Recycling Forum that was organized in October 2012 to provide a space for stakeholders to share experiences. All sector organizations expressed interest or saw value in increasing coordination or collaboration within the sector; however a number of challenges in coordinating efforts across a wide range of individuals and organizations were revealed. Several participants, for example, noted differences in ideology in hindering discussions. These were often presented as rigid dichotomies, such as services provided by the government versus the private sector, and market-based solutions versus public sector solutions. Further exploration into the structure and extent of such collaboration is suggested. One potential outcome for such collaboration could be a coordinated negotiation of compensation, based on greater volumes and subsequent increased bargaining position. One strategy could target the monopolies in the recycling industry that “keep much of the profits” (Do Carmo & de Oliveira, 2010, p. 1261). Several studies have noted the reach of powerful South African monopolies that extend to the informal economy through the management of buy-back centers or the provision of carts to waste pickers (Samson, 2010). Although company profit margins are unknown, the prices collectors receive is known to fluctuate considerably (Langenhoven & Dyssel, 2007), with the male-dominated scrap industry being the most consistent and providing the highest incomes. On the other hand, plastics collections is the lowest paying (Benson & Vanqa-Mgijima, 2010). In 2007, the Institute for Zero Waste assessed the recycling economy of the Western Cape, finding that on average waste pickers received 13% of the value of the recyclables they provided to the converter57. A coordinated effort by initiatives could potentially result in higher and more consistent returns for recyclables. An alternative or complementary strategy could target the government for appropriate compensation, given that the initiatives are helping to fulfill a mandate

57 Interviews with management, October 12, 2012.
traditionally reserved for the municipality. Informal recycling reduces the cost of formal waste management as it decreases volume of recyclables, time and transport (Wilson, Velis, & Cheeseman, 2006). The current municipal cost of landfilling in Cape Town is R237/tonne (equivalent to $25.90 CAD) (Fieuw, 2012), and four sector organizations (Recycle Swop Shop, TrashBack, Solid Waste Network and Oasis Association) divert an estimated 3900 tonnes per year from landfill. A collective effort to secure higher prices or compensation from the municipality could afford some insurance against price fluctuations. Other benefits of increased collaboration include the prevention of duplicating efforts, sharing or outsourcing of tasks, increased social capital, and the sharing of experiences and lessons.

5.3 Challenging the Rhetoric of Social Entrepreneurship

Building on the previous assessment of the sector organizations, the following section presents challenges to the rhetoric of social entrepreneurship by situating and discussing the research findings within larger discourses. The initial research questions, first presented in the introductory chapter, are revisited. The first question is concerned with the creation of discourses around (social) entrepreneurship in South Africa and introduces gender, social justice and informal economies. The second research question explores the extent to which the sector organizations recognize contextual variables. An assessment of the sector organizations is provided in the final two research questions, which explore power dynamics and inequalities, and the opportunities and limitations of social entrepreneurial approaches.

Q #1: What discourses are created around (social) entrepreneurship in South Africa?

Entrepreneurship can be interpreted as a social construction, with a set of laws, truths and assumptions about an entrepreneur and entrepreneurship (Lindgren & Packendorff, 2009). The following section explores the various discourses around (social) entrepreneurship and waste management in South Africa that are created and reinforced by the sector organizations. The focus here is “more on what the text
creates” and how constructs and assumptions are built and reinforced (Ahl, 2004, p. 203), with a focus on gender and social justice.

In low- and middle-income countries, domestic waste management is generally relegated to women in the private sphere of the home and devalued (Minguez, 2012; Samson, 2003). Within the sector, gendered occupations are enforced; for example, women are generally employed as street cleaners, whereas men are seen as more suited for refuse collection. Privatization tends to increase women’s domestic duties, and diminishes wages and job security outside the home (Samson, 2003). Previous research has suggested that community-based waste management that relies on female participation can result in the extension of women’s social reproductive duties into the communal sphere with little to no compensation (Fredericks, 2012). Research findings suggest a similar pattern for the sector organizations. References to gender, if made at all, are as a variable, and not as a construct. The majority or entirety of participants of Recycle Swop Shop, TrashBack, Solid Waste Network, and All Women Recycling were women. The latter two organizations explicitly mentioned gender in their mandates, with SWN focusing on women’s savings groups and AWR employing only women. The majority of participants of RSS and TB were women and children. This may reinforce the gendered nature of participation as men may become uninterested, uncomfortable or intimidated. There is no evidence to support that organizations deliberately positioned women as innately more environmentally oriented and suited to recycling activities, but it could be suggested that the structures construct particular realities and opportunities for the participants. Firstly, participation in initiatives can reinforce gendered caring work (Scheinberg, et al., 1999). The majority of the nine interviewed TrashBack participants were motivated by environmental or community duties, as demonstrated in figure 5.4. The eight interviewed Recycle Swop Shop participants, the majority of whom were unemployed, were motivated largely by incentives, as illustrated in figure 5.5. Considering that these initiatives provide incentives, and not monetary compensation, it could be argued that the entrepreneurial spaces created by these structures and biases (Ogbor, 2000) remain largely in the informal sector with
limited compensation. The structures of these programmes also raise concerns, as previous research suggests that while South African men prefer drop-off centres for waste removal, women opted for door-to-door service (Poswa, 2004). Given that the household encompasses gender and age-based inequalities (Folbre, 1986), further research is suggested to examine the impact of (social) entrepreneurial approaches at the micro-level of the household.

Figure 5.4 Participants' Initial Motivations: TrashBack

![Pie chart showing participants' initial motivations for TrashBack](image1)

Figure 5.5 Participants' Initial Motivations: Recycle Swop Shop

![Pie chart showing participants' initial motivations for Recycle Swop Shop](image2)

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58 Sector organizations did indicate they undertook market research to assess the interest and viability of their initiatives.
Notably absent from the majority of the sector organizations are social justice discourses, that is, the upholding of principles of equality and the dignity of individuals. Assumptions and characteristics of targeted populations in marginalized and low-income communities, most often black or coloured women and/or children, are constructed and reinforced. Targeted populations are portrayed as homogenous, which excludes the multitude of experiences within a township setting. Language creates dichotomies and unequal power dynamics, with sector organizations highlighting the “plight of women in need” (“About us: All Women Recycling”), “getting young people to do things for themselves” and decreasing their dependency on the government⁵⁹, and “igniting a belief that this people are able to add value to their community and themselves, thus breaking a mentality of hopelessness” (“Projects: Recycle Swop Shop”). This is problematic as an individual’s agency is stripped, casting them as waiting to be saved, and also epitomizes the typical township dweller of lacking personal responsibility or ownership. This was also evidenced in management interviews, with township residents accused of being wasteful of public water sources, ignorant or unaware. For example, while one interviewee noted that individuals do not know what to do with their waste, another recounted that some individuals perceive littering positively, as it enables the employment of street cleaners.

The entrepreneurial spaces created in these communities revolve around a sector that remains highly stigmatized, with compensation more often than not non-monetary and insufficient to provide a decent livelihood or to provide participants with skills or networks towards paid employment. This pattern has been noted in previous research. Long-term volunteer initiatives or poverty alleviation programmes, which are located predominantly in township areas, rely on the poor and desperate to subsidize formal waste management. In Sol Plaatje⁶⁰, promises of future employment enticed volunteers to work 6 hours a day, 5 days a week. However, no permanent employment was created (Samson, 2003). The Zivuseni poverty alleviation programme in Johannesburg employed township people to address shortcomings in municipal

⁵⁹ Interviews with management, August 7, 2012.
⁶⁰ In 2000, the Kimberley municipality merged with small towns and rural areas (Samson, 2003).
or private contractor performance. Yet, these individuals, mostly women, received much lower pay, less protective clothing, and less job security than those formally employed (Samson, 2003). Although some researchers have noted a shift to positive semantics of informal recycling\textsuperscript{61}, observations and interviews indicate this is not the case in South Africa. Although all the participants of the in-depth case studies noted pride in their recycling activities, approximately half admit their community perceives them negatively. Reasons for this include: the participants may be seen as beggars, poor, sellers to scrap yards, looked down upon, or crazy. A vast body of literature documenting the negative semantics and stigma associated with waste management and recycling confirms these findings. Moreover, the structures of initiatives are problematic in their neglect of health and safety, and lack of accountability mechanisms. Employees of private companies in waste management are reported as having lower incomes, job security and inferior health and safety conditions than their counterparts in the public sector, who still suffer from poor working conditions, even with the support of unions (McDonald, 2008, p. 215). Community-based waste management projects, such as those in the sector organizations, have no regulations to ensure safe working conditions for their participants, as demonstrated by the lack of safety equipment for TrashBack and Recycle Swop Shop. Participants also differ in working conditions, with some collecting pre-sorted and pre-bagged recyclables from nearby factories before formal municipal pickup, while others sort through discarded rubbish in the street, or gather bottles from informal bars (locally known as ‘shebeens’). Some participants reported having to walk further distances in order to find recyclables. Furthermore, recycling is presented as a neutral activity, silencing class and racial dimensions of access to services and recycling activities. This is especially problematic when considering the lack of local management within a number of initiatives. Furthermore, there is largely a lack of negotiating opportunity, leading to a reinforcement of the dichotomy and unequal power dynamics of buyer and seller.

\textsuperscript{61} Do Carmo & de Oliveira (2010) explore a shift in semantics of informal recycling from negative to positive of informal recyclers in Brazil.
Q #2: To what extent do social entrepreneurial approaches acknowledge contextual variables?

There is a recent trend in the social entrepreneurship literature highlighting the importance of contextual variables, signifying a shift from an exclusive examination of an enterprise, to the recognition of the influences of social networks and wider processes (Lindgren & Packendorff, 2009; Mair, et al., 2012; Manolova, Manev, & Gyoshev, 2010; Zahra, et al., 2009). The significant contextual variables examined in this case study include racial inequalities and apartheid legacies, South Africa’s neoliberal policies, the recyclable value chain, and relevant legislation.

Since the establishment of the first colonial settlement by the Dutch East India Company in 1651 at the Cape of Good Hope, racial inequalities and segregation have characterized the region (Berger, 2009). It has been less than a decade of democracy in South Africa and the demise of racial segregation enforced by legislation. The legacies of 46 years of apartheid still linger, from two-tiered service delivery, spatial segregation of elite white enclaves and black or coloured townships, and poor infrastructure and education systems. Indeed, a low level of black entrepreneurship is frequently attributed to the “historical burden” of apartheid (Preisendörfer, et al., 2012, p. 7). Within the sector organizations, there is a lack of critical analysis of how current structures and biases maintain and reinforce apartheid inequalities, which silences race relations and inequalities.

Any discussion of entrepreneurship or waste management must be situated within an understanding of its relationship with South Africa’s neoliberal policies. For many academics, the replacement of the Reconstruction and Development Programme (RDP) with the Growth, Employment and Redistribution policy (GEAR) in 1996 was a significant turning point in the ANC’s shift toward neoliberal orthodoxy. Whereas RDP aimed to provide access to all citizens, GEAR promoted full recovery of costs from all users (Theron & Visser, 2010). Macroeconomic policies, in endorsing private sector actors and logics and lessening the role of government (Magubane, 2004; Oldfield & Stokke, 2007), are criticized of being “too
market-oriented, stingy, insensitive to poverty, incapable of integrating gender and environmental concerns, unsympathetic to problems associated with public health and worsening geographical segregation” (Bond, 2000, p. 19). Legislation has enabled the entrance of the private sector in the provision of service delivery, which has maintained poor records of service in disadvantaged communities (Narsiah, 2002). There has been a lack of inquiry into the relationship of entrepreneurship and the ANC’s neoliberal dogma. However, it is suggested that the promotion of entrepreneurship, as a form of systemic privatization, further promotes the shrinking of state responsibilities, and shifts citizens’ relationship to, and expectations of, the state (Narsiah, 2002; Oldfield & Stokke, 2007). Entrepreneurship rhetoric in South Africa encourages citizens to assume individual responsibility for addressing shortcomings, whether in the provision of services or lack of opportunities such as employment.

This study raises concerns related to governance, responsibility, and the changing citizen/state relationship within a neoliberal context. As discussed in chapter 2, South African municipalities are responsible for refuse collection and street cleaning, at times carried out through partnerships with private sector actors, yet access to these services varies greatly along geographical, class and racial lines. In townships and informal areas, private contractors are generally responsible for waste management services (Theron & Visser, 2010). Local participants of the Design Storming event recounted the lack of transparency and accountability surrounding refuse removal in the townships. Within the recycling sector, government inaction is demonstrated by the failure to intervene to increase the amount of recycling or to regulate powerful monopolies (Langenhoven & Dyssel, 2007). Instead, some government actions have further entrenched unequal power dynamics, shutting down or fining informal buy-back centers set up by

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63 Systemic privatizations, that aims to “fundamentally alter economic and political institutions and interests”, differ from pragmatic privatizations, which are characterized as “technical solutions to immediate problems”, and tactical privatizations, that are “introduced solely for the purpose of achieving short-term political goals of a constituency” (Narsiah, 2002, p. 6).

64 Participants frequently reported that citizens were not aware or could not gain access to the tender agreements. This was evidenced during a walk-about of the area, in which the name and telephone number of the tender responsible for a selected skip were scraped off. One participant reported the turnaround they experienced with government bureaucracy, noting that upon calling to report a lack of service, the agent could not do anything without the name of the tender; however, the participant did not know how to access that information.
informal waste pickers because they lacked registration papers (Fieuw, 2012). The outsourcing and privatization of service delivery that was traditionally carried out by municipalities has been argued to entrench apartheid-era inequalities. With few exceptions, the sector organizations do not appear to acknowledge the implications of neoliberalism on the recycling sector.

The multitude of stakeholders, approaches and theoretical underpinnings is observed in the complexity of the recyclable value chain. For this research, it is of particular interest the extent to which the sector organizations recognize and engage with the informal recycling economy. Previous research has stressed the significance of the informal economy in waste management in low- and middle-income countries (Benson & Vanqa-Mgijima, 2010; Samson, 2008; Scheinberg, et al., 2011), advising that it can be “highly counterproductive” to establish new formal structures without integrating existing informal systems” (Wilson, Velis, & Cheeseman, 2006, p. 797). Research has shown the vulnerability and marginalization of informal waste pickers, who are consistently not recognized by government or policies, face competition from formalizing waste streams (“CORC: Solid Waste Network”) and poor living and working conditions (Benson & Vanqa-Mgijima, 2010). Across varying definitions of social entrepreneurship, there is a common thread of the creation of social value. Thus, it should be expected that the sector organizations engage with informal economies. With few exceptions, however, the sector organizations, although cognizant of their presence in Cape Town, do not integrate informal waste pickers into their programmes. There is also a lack of acknowledgement of the impacts of organizations on informal economies. Therefore, it is suggested that initiatives risk further disadvantaging the poor and vulnerable that rely on waste picking as a means of survival through the creation of competition and addition of new players and the reinforcement of inequalities in the market. This pattern has been seen elsewhere; for example, the shift to positive semantics of waste in Brazil resulted in an increase of competition of waste pickers by both private firms and non-governmental organizations, leading to a decrease of waste pickers’ incomes (Do Carmo & de Oliveira, 2010).
Although governmental policies did not form a significant part of this research, selected legislative pieces serve to promote the structures and biases that create particular entrepreneurial spaces (Ogbor, 2000). Firstly, the City of Cape Town Integrated Waste Management Policy promotes private sector involvement and responsibility in the recycling sector. Adopted in 2006, the policy aligns waste management services with national policies, and contributes to the “implementation of the national and concurrent provincial strategies to minimize waste at the local level” (City of Cape Town, 2006, p. 8). It also articulates the city’s responsibilities with regards to recycling, stating that “recycling and the creation of a demand for products with post-consumer recycled contents is per se not part of the Council’s Constitutional mandate”. Instead, business and industry initiatives are expected to “develop and drive… the creation of industries and markets that either process or treat waste for recycling and reuse materials through dedicated infrastructure”. The city pledges to “encourage and support development initiatives that will enable and encourage economic and job-creation opportunities” (City of Cape Town, 2006, p. 31). Secondly, the ANC’s policy of black economic empowerment (BEE) must be acknowledged, which seeks to facilitate the integration of blacks into the mainstream economy. It is currently referred to as Broad-Based Black Economic Empowerment (B-BBEE). The Act of 2004 aims to “promote economic transformation in order to enable meaningful participation of black people in the economy”, and achieve a change in the “racial (and gender) composition of ownership and management structures” (Broad-based black economic empowerment, 2004, p.4). Within this research, B-BBEE did not emerge as a significant theme. Reasoning could include limited black ownership and/or management of businesses, some are still in the pilot or start-up phase, or have a small number of employees. While not addressed directly by this research, the variety of institutions and structures that seek to influence entrepreneurship should be acknowledged, and indicates opportunities for further research.
Q #3: To what extents do the social entrepreneurial approaches adopted by the sector organizations display the ‘emancipatory potential’ of entrepreneurship? To what extent are existing inequalities or power dynamics challenged or further entrenched?

Scott, et al. (2012) assert that the ‘emancipatory potential’ of entrepreneurship is demonstrated through their case study, Avon’s micro-entrepreneur program in South Africa. Their survey of 300 black Avon representatives indicated increased incomes\(^{65}\), increased self-confidence and decreased feelings of social inferiority through the expansion of their networks across different races and classes. A similar assertion of ‘emancipatory potential’ could be made for selected sector organizations, as participants receive incentives or payment for recyclables and report a sense of pride and purpose in their collection activities. Monthly incomes for Solid Waste Network entrepreneurs, for example, range from R800-R2000 (equivalent to $87-218 CAD) and the savings groups negotiate contracts with businesses to manage their waste streams. This remuneration can be compared with monthly wages for general waste management workers and truck assistants employed by commercial contractors of R1292 to 2536 a month (equivalent to $141-277 CAD); and by the municipality, of R3784 (equivalent to $413 CAD) (Theron & Visser, 2010). This research found great variances in hours allocated to recycling, from a few hours a week to full-time status. The informal nature of this work contributes to haziness around total hours worked and average hourly wage. The sector organizations also represent both active and passive recycling, the latter including the collection of recyclables from various sources, for example, Solid Waste Network, Recycle Swop Shop, or TrashBack. The former includes outsourcing the transportation of one’s recyclables to a private contractor, or transporting to a drop-off location, such as Clearer Conscience, Ilima Cleaning and Recycling, or Oasis Association. It is unknown the extent to which active participation alters ones consumption behaviour or the performance of a venture. This research, however, urges a more critical set

\[^{65}\text{The mean income was R900 a month (equivalent to$98.37$ CAD), which is in the top half of wage-earning black women and almost on par with a black man’s. More experienced representatives, and those who relied on Avon as their primary source of income, reported incomes upwards of R1,409 a month (equivalent to$154$ CAD), which would provide subsistence for 2-3 individuals.}\]

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of parameters, examining the role of organizations and their impact on the existing recyclable value chain. Data suggest a lack of consideration to social justice issues, informal economies, and unequal power dynamics, with monopolies controlling the market, leaving collectors with poor compensation and little influence. To a large extent, the sector organizations do not seek to challenge the existing inequalities or power dynamics, and thus it is argued that although there is potential to social entrepreneurial approaches, ‘emancipatory’ is a stretch.

**Q #4: What are the opportunities and limitations of social entrepreneurial approaches within the recycling sector in Cape Town?**

The ambiguity of (social) entrepreneurship and impact assessment allows a range of responses, depending on the significance one allocates to a particular objective. Poor service delivery in South Africa is due to inadequate institutional capacity, fiscal constraints, and poor management of equipment (Council for Scientific and Industrial Research, 2011; Godfrey & Scott, 2010; Karani & Jewasikiewitz, 2007; Koelble & LiPuma, 2010). The social entrepreneurial approaches in this research would prove insufficient in this case, as their activities do not address any of the root causes of service delivery failures. However, if the objective were to increase awareness of recycling and environmental issues and to engage local citizenry, community-based initiatives would be an appropriate means. A number of sector organizations, including Institute for Zero Waste in Africa, Recycle Swop Shop, TrashBack, Ilima Cleaning and Recycling, Mothers Unite, and educational initiatives at schools, all reported working with local communities to increase awareness and to promote behaviour change. Aims of creating a more ‘sustainable’ recycling sector could include strategies from product design processes, to altering consumption patterns, to policy initiatives introducing bottle deposits. The social entrepreneurial approaches adopted by the sector

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66 Note: municipalities have engaged in public-private partnerships (PPP), which are distinct from the (social) entrepreneurial approaches in this study. PPPs are contracts between a private company and a government institution. The sector organizations do not hold contracts from the city and do not receive compensation.
organizations prove necessary but insufficient to achieve this aim, given the emphasis on recycling activities and lack of collaboration.

Through the placement of parameters, however, clarity on this research question can be achieved. Previous literature reveals that gender, social justice and informal economies are relevant to entrepreneurship and waste management. The previous section presented opportunities of entrepreneurial approaches, including non-monetary benefits and an increased range of services. However, weaknesses of entrepreneurial approaches, including the neglect of gender analysis, informal economies and social justice, severely limit their potential. Moreover, entrepreneurial approaches can be assessed in terms of their target audiences, potential for systemic change, and environmental sustainability. Firstly, the sector organizations tended to adopt the niche approach, focusing their efforts on a small group of individuals who already shared a common vision or who were easily engaged. Recycle Swop Shop has approximately 50 regular participants, although Du Noon has a population of 9,000. School-aged children proved the most interested in TrashBack. It could be argued that the individuals or businesses targeted by the sector organizations are not the most appropriate to influence systemic or maximum changes, but are the most feasible or accessible targets. The choice of what is both collected by the participants and accepted by the initiative is often based on what material yields the highest return, is easiest to collect, store or transport. An abundance of material of one recyclable, however, does not necessarily equate into environmental significance. Lack of in-depth analysis of the sector or monetary pressures could motivate the pursuance of such targets, and also to limit the extent of collaboration. As one interviewee stated: the more people involved, the more people getting a piece of the pie. One can assume that this pie represents monetary value.

This research also highlights a number of issues related to environmental sustainability. The organizations, and the recycling sector more generally, are severely limited in their approach due to a lack of
understanding or examination of environmental sustainability and lack of integration of physical parameters and limitations (Daly, 1996). There is demonstrated by contradictions between mandate and activities. All Women Recycling, for example, seeks to be a “sustainable and profitable business while supporting the environment”, by creating “sustainable channels of employment” and “eco-friendly products”. However, 60% of its products are exported internationally (“About Us: All Women Recycling”). Hence, this notion of ‘sustainability’ appears to assume a consistent demand of their craft products, and ignores the environmental footprint of their products, as they do not take into account emissions from transportation. Although management frequently note the importance of environmental issues, there is an overwhelming emphasis on recycling and a tendency to conceptualize sustainability in strictly financial terms, or superficial environmental actions. Solid Waste Management is the sole organization that makes an explicit acknowledgement that recycling alone is not a solution, and seeks to influence city-level management strategies (“CORC: Solid Waste Network”). The focus on recycling initiatives fails to take into account that high-income areas produce five to ten times more waste than low-income areas, and encourage a flow of unwanted and discarded goods from the privileged elite to low-income communities. Moreover, the amount of waste the sector organizations actual divert from landfill is unknown. Although volumes are calculated, these may not take into account material that would have entered the recycling stream anyways. On average, until 2006, Capetonians produced more solid waste than their counterparts in Europe (Crane, Thompson-Smeddle, de Wit, & Swilling, 2010). This deflects attention from the more difficult task of confronting consumerism and consumption behaviours and attitudes, especially among the more affluent groups, and the lack of closed-loop systems in product designs, as well as environmental impacts of waste from commerce, industry or mining. Domestic waste could be interpreted as negligible in comparison to other types of waste that merit immediate attention.

Environmental issues are described as the ‘core’ of TrashBack (Interviews with management, August 8, 2012). There is a “huge green part” in Ilima Cleaning and Recycling’s business model (Interviews with management, August 7, 2012). Recycle Swop Shop teaches the “value of recycling and the environment” (“About us: Recycle Swop Shop”).

Some participants reported traveling to white neighbourhoods or factories to collect recyclables, with the latter already pre-sorted and packaged. This suggests potential existing interactions with recycling, and thus initiatives could be seen as a superfluous addition to the value chain, with potentially negative ramifications on efficiency.
Mining waste, for example, comprises 80% of the waste stream, yet is excluded from the definition of waste within the new Waste Act. Health care disposal is also framed as a crisis, ignored by the government (“groundwork South Africa: Waste Campaigns”). Environmental rhetoric and a romanticizing of local, high labour, low technology methods of refuse collection (Fredericks, 2012) serve to reinforce and legitimize spatial segregation in Cape Town with the existence of two service delivery models based on race and class. Community-based waste management projects can also impede opportunities to extend mechanized models that characterize white neighbourhoods (Qotole, et al., 2001).

5.4 Implications and Recommendations for the Recycling Sector in Cape Town and (Social) Entrepreneurship Literature

As with most societal or environmental challenges, the complexity and subsequent multi-faceted solutions to waste management in Cape Town cannot be overstated. The sector organizations engage in limited interactions with other stakeholders, often not crossing over various phases of the recycling value chain. It is suggested that strategic partnerships and increased collaboration across a multitude of stakeholders and levels of the value chain is needed in order to address systemic environmental challenges and social inequalities. Although the municipal government has acknowledged its limited role in the recycling sector, it should be an integral part of discussions and programs. However, municipalities are likely to fail at addressing problems in service delivery and backlogs without a well-planned national strategy (Koelble & LiPuma, 2010). Discussions must acknowledge the gaps and weaknesses of an overreliance on the private sector to promote economic and social development, and continuously demand accountability and citizen engagement. Moreover, a focus on recycling, albeit necessary but not sufficient to solve challenge waste management challenges, can serve to deflect attention away from immediate and harmful threats. For example, there is inadequate legislation and enforcement of proper disposal of toxic and medical waste, which is often dumped illegally in residential areas (Bond, 2002, p. 39).
The sector organizations should be commended for their contributions in creating a more environmentally conscious Cape Town. However, limited interaction with other stakeholders in the waste stream has a number of significant implications. Firstly, it restricts efforts and discussions to single materials or communities, for example, 2-litre plastic bottles or recycling opportunities around one geographical location. This is problematic given the international nature of waste streams and the holistic approach that should be undertaken. Fluctuations in the market are not addressed, which impedes the potential of recycling initiatives (Council for Scientific and Industrial Research, 2011; Karani & Jewasikiewitz, 2007).

Secondly, there is a preoccupation with products once they are discarded, taking the existence of waste as inevitable. South Africa prescribes to integrated waste management, with waste minimization a cornerstone of municipal programs. Therefore, more efforts should be relegated to improving design processes to create closed-loop systems. There is tremendous potential for experimentation afforded by Cape Town’s designation of the 2014 World Design Capital. Thirdly, there is a general lack of acknowledgement of an initiative’s impact on the pre-existing waste stream, especially the informal economies. This applies not only to the sector organizations, but also businesses and institutions that seek to formalize their waste streams, for example, as part of their corporate social responsibility, which results in the exclusion and further marginalization of informal economies. Previous literature abounds with recommendations, including the inclusion of waste pickers or the community in the design and implementation of projects, the provision of education and training, government regulation of the sector, and strategies to improve bargaining positions (Do Carmo & de Oliveira, 2010; Samson, 2008; Wilson, Velis, & Cheeseman, 2006). Moreover, there is a lack of analysis of one’s impact on existing formalized waste management and municipal workers. Further areas of research in this sector include private sector initiatives, and the relationship of initiatives with municipal or private contractor employees.

This research raises a number of concerns related to the proliferation of (social) entrepreneurial approaches. Firstly, recycling initiatives often operate informally, and thus reinforce entrepreneurial spaces of particular subsets of the population into an economy that does not guarantee minimum salaries.
or provide any benefits. This research warns, however, against rigid dichotomies of informal economies, or opportunity versus necessity entrepreneurship, as they emerge from Western discourses and may not reflect permeable borders. Secondly, the lack of government intervention or reliance on external stakeholders for governance has been shown to be problematic, given the lack of accountability and short-term agendas of non-governmental organizations (Fredericks, 2012). The (social) entrepreneurial approaches adopted within the recycling sector also illustrate a lack of accountability and vulnerability to financial viability. Previous research has illuminated poor working conditions of public sector workers in waste management, and has suggested a deterioration of both service quality and working conditions when service delivery becomes privatized. This research confirms that there is a lack of health and safety regulations for participants of recycling initiatives. A regulatory body is suggested that would ensure minimum safety standards are met and to address health and safety concerns.

Critical research on entrepreneurship maintains that it is a social construct, “discriminatory, gender-biased, ethnocentrically determined and ideologically controlled” (Ogbor, 2000, p. 629), and has called for an expansion of research boundaries, including how structures and biases inhibit or promote entrepreneurship. This research affirms that entrepreneurship is not a neutral concept, and suggests that there is a lack of critical interaction with contextual variables, including one’s placement within and influence on existing value chains. Classifications and typologies that explore finance and mission relationship and the type of capital leveraged are unable to integrate nuances, including power dynamics, social justice, and contextual variables. Cape Town and the recycling sector present a unique context; however, this argument is applicable across sector and geographical locations. It is argued that a (social) enterprise must engage in a reflective dialogue that integrates discourses such as social justice, gender analysis, power dynamics, race and class. This discussion is crucial within the South African context, given the overreliance on the private sector to promote social and economic development, and low entrepreneurial rates linked to infrastructural constraints, security concerns, gender violence, weak business climate, education and judiciary systems (Herrington, et al., 2012; Scott, et al., 2012). Discourses
in entrepreneurship research tend to project an archetype of a North American or European white male archetype. As a result, research on varying entrepreneurial activity across different ethnicities is often reduced to essentialism about assumed racial characteristics. Further research is needed to assess the impact of support organizations and to explore their role in shaping entrepreneurial activity, and how education creates or inhibits an entrepreneurial environment. Further investigation into the potential of entrepreneurial approaches as poverty reduction strategies is also warranted, as research suggests that improvements in poverty levels since 1994 can be largely attributed to social assistance grants. The labour market, on the other hand, has failed to absorb the working-age population, resulting in increases in unemployment even among the educated (Leibbrandt, Woolard, Finn, & Argent, 2010).

Across various definitions of social entrepreneurship is a common thread of the creation of social value. Previous research has identified ethical concerns and contradictions in social entrepreneurship, particularly the generation of revenue while achieving social or environmental impact (Zahra, et al, 2009). Critics maintain that the impact of service provision and job creation is vastly overstated, and enterprises rarely integrate what does drive social transformation: social relations, politics and power (Edwards, 2010). There is evidence to suggest that the mandate of the sector organizations may be vulnerable to economic constraints. For example, a large number reported economic viability as significant, thus suggesting a correlation between longevity of a venture and economic success. Selected organizations are relatively young or still in the pilot phase, and the ability to prove the business model, in particular revenue generation, is suspected to outweigh any proven social or environmental impact. Moreover, the sector organizations have been shown to approach societal challenges in a somewhat limited paradigm, neglecting power dynamics, politics, or social justice, thus impeding their potential to influence systemic social transformation or address environmental issues.
5.5 Conclusion

This chapter has provided research findings, analysis and discussions in response to the research questions. Although entrepreneurship could be interpreted as further entrenching neoliberal orthodoxy, it is suggested that more pragmatic analyses, not theoretically bound, offers valuable insights. This study has explored opportunities of (social) entrepreneurial approaches, but suggests that limitations and weaknesses hinder potential to achieve systemic change. However, as one can be cautious of the ANC’s overreliance on the private sector to promote social and economic development, so too must one’s expectations of entrepreneurial approaches be tempered. The sector organizations analyzed in this research are largely limited in their scope and impact because of a lack of integration of variables including informal economies, gender, race and social justice. Entrepreneurship should be investigated as one method to address societal or environmental challenges, but not as a replacement for a strong civil society and good governance (Bonsu & Polsa, 2011; Edwards, 2010). A reflective and iterative process is suggested with (social) entrepreneurship undertakings, with a critical integration of contextual variables.
Chapter 6
Conclusion

To begin to comprehend the popularity and reach of social entrepreneurship, one needs to look no further than a simple Google search. Among the 301 million results for ‘social enterprise’ are theoretical debates on its essence, articles from popular newspapers to academic journals, localized and global support organizations and how-to manuals. A network of support organizations, politicians and celebrities popularized the concept in the 1980s (Dacin, et al., 2011); however research remains largely atheoretical and descriptive, based on anecdotal evidence or case studies (Benavides-Espinosa & Mohedano-Suanes, 2012; Dacin, et al., 2011; Mair & Marti, 2006). Literature is often preoccupied with the ambiguity surrounding social entrepreneurship. Common among definitions, however, is the creation of social value.

The allure of simultaneous economic growth and creation of social impact has captured South Africa since its first democratic elections nearly two decades ago. The pursuance of neoliberal policies have lessened the role of government and shifted responsibility for economic and social development to the private sector. This research, based in Cape Town, has sought to challenge the rhetoric of social entrepreneurship by critically examining its potential and limitations in addressing systemic and persistent challenges of poverty, unemployment and staggering racial and class-based inequalities. This was facilitated by a holistic analysis of a sector, which reflects a conscious effort to move beyond the traditional methodological approaches of individual case studies. The recycling sector was chosen as a unit of analysis, and was shaped by neoliberal policies and discourses of gender, social justice and environmental sustainability. Semi-structured and structured interviews of sector organizations and participants of recycling initiatives formed the basis of this research. Additionally, document analyses and the facilitation of a Recycling Forum were undertaken. This research has pragmatic implications, as it suggests (social) entrepreneurship as a reflective and iterative process, noting where one is situated within existing value chains, and one’s impact on existing power dynamics. Theoretical implications of this research include the
need to expand disciplinary boundaries, and integrate contextual variables. It affirms previous literature in their appeals to examine entrepreneurship as a social construct with gender, class and racial biases.

6.1 Empirical Findings

The research findings suggest that a number of opportunities are afforded by the adoption of (social) entrepreneurial approaches. Non-monetary benefits are often excluded from discussions, however it is suggested that (social) entrepreneurial approaches can harness solidarity and collaboration among participants. Self-identified social entrepreneurs in Cape Town also have access to a range of support organizations and innovative practices that can support and build both financial and social capital.

However, a number of limitations impeded the (social) entrepreneurial approaches in this study from achieving systemic change. Although social entrepreneurs and researchers often revel in the collaborative nature of social entrepreneurship, this study revealed that there was a lack of self-awareness and awareness of others, and neglect of social justice. Sector organizations often worked in isolation within the recyclable value chain, with little attempt to address unequal power relationships. Particularly, there was a tendency for the majority of sector organizations to overlook informal economies. This risks further disadvantaging the most vulnerable and poor through the creation of additional competition. Furthermore, the bias in female participation served to entrench gender inequalities, by extending women’s social reproductive duties to the communal sphere with little to no compensation. There was an overwhelming emphasis on recycling, at the expense of addressing more challenging or immediate challenges, including illegal and/or unsafe disposal of toxic or medical waste, high consumption levels in affluent areas, and redesigning of a product’s lifecycle. Previous research suggests that low-technology community-based waste management projects can serve to entrench apartheid-era inequalities by creating two tiers of service delivery, and impeding any future option of mechanized services (Qotole, et al., 2001). This study supports such findings.
This research has a number of implications for the municipality of Cape Town and (social) entrepreneurship. The government has distanced itself from the recycling sector, instead relying on business and industry initiatives to develop and drive the industries and markets. This is peculiar, given that municipalities are responsible for waste management services, and landfills are largely mismanaged or are reaching capacity. Previous research has indicated that institutional shortcomings, including fiscal challenges and inadequate capacity and infrastructure, are behind service delivery failures. However, the (social) entrepreneurial approaches failed to address or interact with these shortcomings. There was a lack of coordination at a level that would provide a coherent framework for addressing recycling or waste management challenges.

Theorizing entrepreneurship as a social construct and recognizing its foundation in a North American or European white male archetype could address significant gaps in research in South Africa. A recent publication by Preisendörfer, et al. (2012), however, is reduced to racial essentialism, arguing that blacks have psychological attributes or traits that inhibit entrepreneurial activity. Ogbor (2000), on the other hand, suggests investigating the structures and biases that create particular entrepreneurial spaces. This research suggests that more holistic analyses that better integrate and acknowledge contextual variables are necessary in this investigation. Selected sector organizations constructed and reinforced entrepreneurial spaces for black and coloured women and/or children in a sector that remains highly stigmatized, lacking in minimum health and safety standards, and that continue the dichotomous power dynamics that characterize recycling.

6.2 Conclusion

Social entrepreneurship, in addressing social or environmental problems through market-based solutions, represents a collision of good intentions and a pursuit of profitability. This research has moved beyond the rhetoric of the emergent concept through a critical and holistic analysis of the recycling sector. While the research findings suggest some opportunities of (social) entrepreneurial approaches, its potential is
severely limited by a lack of integration of contextual variables. This risks further entrenching unequal
gender dynamics and two tiers of service delivery based on race and class, while also further
disadvantaging the most vulnerable through the creation of additional competition.
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Appendix A: Interview Questions: Participants

Demographic Information
Sex: Male Female
Age: ______
Highest grade obtained: ______
# of children in household: _____ Ages: ________________
# of adults in household: ______ Employed: __________________________

Collecting Behaviour and Practices
1. How long have you been collecting for (X)? ______
2. Why did you start collecting?

3. Prior to (X), did you collect recycling? If yes, where did you sell? What has changed since becoming involved in (X)? If no, what did you do?

4. Do you follow a set routine when you collect? Y/N
   When do you normally collect during the week? How many total hours per day, per week?

5. What months do you collect?

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tr>
<td>hrs/week</td>
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<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

6. Who do you collect with?
   alone w/spouse or partner w/friend w/child other: ________

7. Where do you collect?

<table>
<thead>
<tr>
<th>Household</th>
<th>Neighbouring area</th>
<th>Trash on the street</th>
<th>Work</th>
<th>School</th>
<th>I travel</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
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</table>

8. How do you collect, store, transport recyclables?

________________________________________________________________________

9. How long do you think you will be involved in (X)? Why?

________________________________________________________________________

10. What would make it easier for you to collect recyclables?

<table>
<thead>
<tr>
<th>Bins, containers, bags in your household</th>
<th>Assistance with transport</th>
<th>More central drop-off point</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

11. How do you decide where you can collect?

________________________________________________________________________
12. Are there (or have there been) any conflicts with other collectors over where to collect?

________________________________________________________________________

Social Enterprise/Organization
13. How did you hear of (X)?

________________________________________________________________________

14. How would you describe your relationship with (X)?

________________________________________________________________________

15. How does (X) currently communicate with you?

<table>
<thead>
<tr>
<th>SMS</th>
<th>Word-of-mouth</th>
<th>They don’t.</th>
<th>Other:</th>
</tr>
</thead>
</table>

16. How do you currently give feedback to (X)?

________________________________________________________________________

17. How would you like to give feedback to (X)?

<table>
<thead>
<tr>
<th>Helpline number</th>
<th>Suggestions box</th>
<th>Regular satisfaction surveys</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>At centre</td>
<td>On site</td>
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</table>

18. What type of rewards would you prefer?

________________________________________________________________________

19. How would you like the rewards to be distributed?

<table>
<thead>
<tr>
<th>At drop-off centre</th>
<th>SMS vouchers</th>
<th>Electronic wallet</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x/wk</td>
<td>On demand</td>
<td>1x/wk</td>
<td>On demand</td>
</tr>
</tbody>
</table>

20. What do you think of the current rewards system?

________________________________________________________________________

21. What is your experience when you bring in your recycling?

________________________________________________________________________

22. Do you speak to other collectors? Where? What do you speak about?

________________________________________________________________________

23. What impact has (X) had in your community?

________________________________________________________________________

Waste collection
24. Do you recycle in your household? Y/N

If yes, how long have you been recycling for? ________________

If no, why do you not recycle?

________________________________________________________________________

25. Do you know which company has the tender for waste management in your area? Y/N

26. What are the responsibilities of the company?

________________________________________________________________________
### Motivations and Values

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<td>27.</td>
<td>I work for (x).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I volunteer for (x).</td>
<td></td>
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<tr>
<td>29.</td>
<td>(X) is a non governmental organization.</td>
<td></td>
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<tr>
<td>30.</td>
<td>(X) is a company.</td>
<td></td>
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<tr>
<td>31.</td>
<td>I am proud that I recycle.</td>
<td></td>
<td></td>
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<tr>
<td>32.</td>
<td>People who collect recyclables have a good reputation in my community.</td>
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</tbody>
</table>
| 33. | Waste management is a problem in my community.  
Rate the seriousness of the problem (5 - very serious, 1 - not serious) |   |   |
| 34. | Lower-income areas produce more waste than rich areas. |   |   |
| 35. | The government is doing enough in my community with waste management/recycling. |   |   |
| 36. | Rubbish in my community can make us sick. |   |   |
| 37. | Rubbish in my community is an eyesore. |   |   |
| 38. | After I throw something in the rubbish or recycle it, I do not think about it. |   |   |
| 39. | The rubbish containers or recycling centres are accessible. |   |   |
Appendix B: Interview Questions: Organization

History of Organization
1. When and under what circumstances was the organization founded?
________________________________________________________________________
________________________________________________________________________

2. Who are the founders and/or current mgmt.? What is their background?
________________________________________________________________________
________________________________________________________________________

3. What inspired the founders?

4. Describe the waste management/recycling industry at time of founding.
________________________________________________________________________
________________________________________________________________________

5. Since the organization’s conception, have there been any changes in the waste mgmt. or recycling industries?
________________________________________________________________________
________________________________________________________________________

6. Were community members in your area involved in recycling prior to your arrival? Describe.
________________________________________________________________________
________________________________________________________________________

Profile of Organization
7. How would you describe your organization?
 a) social enterprise      b) community-based organization      c) non-profit      d) green enterprise
    Why? What is your definition?
________________________________________________________________________

8. What is the mission of your organization?
________________________________________________________________________

9. Which geographical location does your organization operate in? Describe the population.
________________________________________________________________________

10. Where do you see your organization in 5 years? 10 years? (scaling up, ownership, value-added services, etc.)
________________________________________________________________________
________________________________________________________________________

11. Who is your organization accountable to?
________________________________________________________________________

12. What are some of the challenges your organization faces? (price fluctuations?)
________________________________________________________________________
Business Model

**Value Proposition.** Which one of your customers’ problems are you trying to solve? Which customer needs are you satisfying? What value do you deliver to the customer? What behavioural change are you trying to initiate?

**Customer Segments.** For whom are you creating value? Who are your most important customers? Who is your target customer? How do you describe your customers or target audience?

Have you encountered waste pickers?

__________________________

**Customer Relationships.** What type of relationship does each of your customer segments expect you to establish and maintain with them? Which ones have you established? How costly are they?

**Channels.** Making aware of the service, offering way for customers to evaluate value proposition, purchase/delivery, post-customer support. Through which channels do your customer segments want to be reached? How are you reaching them now? Which ones are most cost-efficient?

**Key Partners.** Who are your key partners/suppliers? Which key resources are you acquiring from partners? Which key activities do partners perform? How important is cooperation with other stakeholders? (Civil society groups, gov’t, trade unions, private companies, etc).

**Key Activities.** What key activities do your value propositions require? Distribution channels? Customer relationships? Revenue streams?

**Key Resources.** Physical, intellectual, human, financial. What key resources does your value proposition require? Distribution channels? Customer relationships? Revenue streams?

**Cost Structure.** What are the most important costs inherent in your business model? Which key resources are most expensive? Which key activities are most expensive? Is your business more cost driven or value driven?

**Revenue Streams.** For what value are your customers (collectors) willing to pay? What other revenue streams exist? How much does each stream contribute to overall revenues?

What role does ‘efficiency’ play in your organization?

__________________________

What is the rationale behind your organization’s reward system (e.g. tokens, money)? Why one and not the other?

__________________________

How do you assess the social impact of your organization?

__________________________
**Regulatory Environment**

13. What kind of environment (policy, regulations, behaviour change, etc.) do you see as necessary for your organization to survive and thrive? In which area(s) is your organization involved?

________________________________________________________________________

________________________________________________________________________

14. What incentives (either from private sector or government) currently exist for people in your area to reduce/reuse/recycle?

________________________________________________________________________

15. What, in your opinion, is the government’s response to waste management in South Africa?

________________________________________________________________________

16. Describe the ideal waste management or recycling scenario in your area.

________________________________________________________________________

________________________________________________________________________

**Support and Collaboration**

17. What organizations do you currently receive support from? Rate their level of support.

<table>
<thead>
<tr>
<th>Name of Org</th>
<th>Services Provided</th>
<th>1 (poor)</th>
<th>2</th>
<th>3 (good)</th>
<th>4</th>
<th>5 (excellent)</th>
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18. What type of support does your organization need at this stage?

________________________________________________________________________

19. Have you had problems accessing support? Explain.

________________________________________________________________________

20. How have you heard of support services available to social enterprises or organizations?

________________________________________________________________________

21. What kind of social media does your organization use? Rate the perceived impact.

<table>
<thead>
<tr>
<th>Type of impact:</th>
<th>Level of impact:</th>
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22. What types of support is available from the South African government? Have you been able to access such support? Experiences?

________________________________________________________________________
Appendix C: Invitation to Western Cape Recycling Forum

Western Cape Recycling Forum

Monday 29th October 2012, 14.00 - 16.00

Boardroom 1, Graduate School of Business, V & A Waterfront, Breakwater Campus, Portwood Road, Cape Town

Landfills in Cape Town are nearing capacity and facing closure. There is a subsequent shift to more proactive management of waste minimization and recycling. Meanwhile, informal settlements often lack basic access to services of refuse removal.

A number of initiatives have arisen in the Cape Town area, ranging from incentivising recycling, job creation, environmental education, and community upliftment.

We are holding a 'Recycling Forum' on 29th October from 14h00 to 16h00 and as someone who is a key player in the sector we wanted to invite you to join with the other
key stakeholders to share experiences and challenges, and explore new collaborations and partnerships.

Invited attendees will include City of Cape Town officials, social enterprises and non-profits involved in recycling initiatives, private sector companies interested in partnerships with non-profits, and various academia and students.

Please RSVP by Monday October 22, 2012 to sabreen@asenetwork.org

Programme
13:30-14:00: Arrival and networking
14:00-14:30: Introduction to the forum, introduction of participants
14:30-15:25: Group discussion of major challenges and opportunities
15:25-15:45: Recap to larger group
15:45-16:00: Refreshments and networking

The forum is being hosted by the African Social Entrepreneurs Network and will be facilitated by the ASEN team and Joanne Linney, a current Master student in Environmental Studies at Queen's University in Kingston, Canada. Joanne is completing 7-months of research in Cape Town for her thesis, which centres around social entrepreneurial approaches to urban service delivery in Cape Town, in particular, looking at recycling and waste management initiatives.

After initial research, it became apparent that although there are a number of great initiatives, they may run the risk of operating in isolation. This forum seeks to facilitate greater interactions among different stakeholders.

For more information please contact Sabreen Parkar at sabreen@asenetwork.org or on 021 422 5811.

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W. WWW.ASENETWORK.ORG

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Appendix D: Ethics Letter of Approval

April 30, 2012

Miss Joanne Linnay  
Master’s Student  
Department of Environmental Studies  
Queen's University  
Kingston, ON K7L 3N6

GREB Ref #: GENSC-050-12; Romeo # 6006822  
Title: "GENSC-050-12 Analysis of a social entrepreneurial approach to addressing environmental and social issues among the bottom of the pyramid population in the Cape Town area"

Dear Miss Linnay:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled "GENSC-050-12 Analysis of a social entrepreneurial approach to addressing environmental and social issues among the bottom of the pyramid population in the Cape Town area" for ethical compliance with the Tri-Council Guidelines (TCPS) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (article D.1.6) and Senate Terms of Reference (article G), your project has been cleared for one year. At the end of each year, the GREB will ask if your project has been completed and if not, what changes have occurred or will occur in the next year.

You are reminded of your obligation to advise the GREB, with a copy to your unit REB, of any adverse event(s) that occur during this one year period (access this form at https://eservices.queensu.ca/romeo_researcher/ and click Events - GREB Adverse Event Report). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example you must report changes to the level of risk, applicant characteristics, and implementations of new procedures. To make an amendment, access the application at https://eservices.queensu.ca/romeo_researcher/ and click Events - GREB Amendment to Approved Study Form. These changes will automatically be sent to the Ethics Coordinator, Gail Irving, at the Office of Research Services or irvingg@queensu.ca for further review and clearance by the GREB or GREB Chair.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

Joan Stevenson, Ph.D.  
Professor and Chair  
General Research Ethics Board

cc: Dr. Allison Goebel, Faculty Supervisor
Appendix E: Ethics Letter of Approval - Renewal

April 01, 2013

Miss Joanne Linnay  
Master’s Student  
School of Environmental Studies  
Queen's University  
Kingston, ON K7L 3N6

GREB Romeo #: 6006822  
Title: “GENSC-050-12 Analysis of a social entrepreneurial approach to addressing environmental and social issues among the bottom of the pyramid population in the Cape Town area”

Dear Miss Linnay:

The General Research Ethics Board (GREB) has reviewed and approved your request for renewal of ethics clearance for the above-named study. This renewal is valid for one year from April 30, 2013. Prior to the next renewal date you will be sent a reminder memo and the link to ROMEO to renew for another year.

You are reminded of your obligation to advise the GREB of any adverse event(s) that occur during this one year period. An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours. Report to GREB through either ROMEO Event Report or Adverse Event Report Form at http://www.queensu.ca/ors/researchethics/GeneralREB/forms.html.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example you must report changes in study procedures or implementation of new aspects into the study procedures. Your request for protocol changes will be forwarded to the appropriate GREB reviewers and/or the GREB Chair. Please report changes to GREB through either ROMEO Event Reports or the Ethics Change Form at http://www.queensu.ca/ors/researchethics/GeneralREB/forms.html.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

John Freeman, Ph.D.  
Professor and Acting Chair  
General Research Ethics Board

c.c.: Dr. Allison Goebel, Faculty Supervisor