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LOCALISING INTERNATIONAL LAW: THE IMPLICATIONS OF SUSTAINABLE DEVELOPMENT IN THE LIVES OF WASTE PICKERS IN SOUTH AFRICA

Abstract

This thesis explores the dynamics that occur in a localised setting when sustainable development, an international legal concept, is translated into national laws through an empirical case study involving waste pickers in Johannesburg, South Africa. South Africa is the centre of the empirical examination given that sustainable development is both enshrined as a right in the highly-regarded and progressive South African Constitution, and is the prime objective of many local laws which comprise the waste management regime. The thesis uses an Economic Sociology of Law (ESL) approach, which considers legal life and economic life as part of wider social life; and conceptualises social life in terms of human rationalities, regimes, actions and interactions. This approach both prompts and facilitates a systematic interrogation of the interplay of the economic, legal and social dimensions of ‘sustainable development’; and of how these dimensions are manifested in the life at local level. Empirical research reveals how stakeholders interact in their experience of the waste management regime aimed at achieving sustainable development. Waste pickers in Johannesburg do not benefit from improved social, economic or environmental conditions because sustainable development is ill-equipped to respond the social dynamics that complicate its operation in South Africa. Symptomatic of this is a lack of recognition of the value of waste pickers’ work, resulting in policies that do not facilitate waste pickers’ full access to waste, and a national recycling rate which is currently 38.6 per cent of all recyclable materials. Policy strategies aimed at achieving sustainable development in the South African waste management economy should address these issues in order to achieve success. This study is important for policy makers and waste pickers, and joins a handful of studies focused on the relationship between international law and the informal waste management economy.

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ALLISON LINDNER

**A thesis submitted to Kent Law School in partial fulfilment of the requirements of the
University of Kent for the degree of Doctor of Philosophy in Law**

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This thesis explores the dynamics that occur in a localised setting when sustainable development, an international legal concept, is translated into national laws through an empirical case study involving waste pickers in Johannesburg, South Africa. South Africa is the centre of the empirical examination given that sustainable development is both enshrined as a right in the highly-regarded and progressive South African Constitution, and is the prime objective of many local laws which comprise the waste management regime. The thesis uses an Economic Sociology of Law (ESL) approach, which considers legal life and economic life as part of wider social life; and conceptualises social life in terms of human rationalities, regimes, actions and interactions. This approach both prompts and facilitates a systematic interrogation of the interplay of the economic, legal and social dimensions of ‘sustainable development’; and of how these dimensions are manifested in the life at local level. Empirical research reveals how stakeholders interact in their experience of the waste management regime aimed at achieving sustainable development. Waste pickers in Johannesburg do not benefit from improved social, economic or environmental conditions because sustainable development is ill-equipped to respond to the social dynamics that complicate its operation in South Africa. Symptomatic of this is a lack of recognition of the value of waste pickers’ work, resulting in policies that do not facilitate waste pickers’ full access to waste, and a national recycling rate which is currently 38.6 per cent of all recyclable materials. Policy strategies aimed at achieving sustainable development in the South African waste management economy should address these issues in order to achieve success. This study is important for policy makers and waste pickers, and joins a handful of studies focused on the relationship between international law and the informal waste management economy.

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List of Abbreviations

ACP	Organisation of African, Caribbean and Pacific States
AOSIS	Association of Small Island States
ASM	Artisanal and Small-Scale Mining
BBBEE	Broad-Based Black Economic Empowerment
BBC	Buy Back Centre
BCSD	Business Council for Sustainable Development
CBD	Central Business District
CBDR	Common But Differentiated Responsibility
CEO	Chief Executive Officer
CODESA	Convention for a Democratic South Africa
CSIR	Council for Scientific and Industrial Research
DEA	Department for Environmental Affairs (now the Department for
DST	Department for Science and Technology
EBRD	European Bank for Reconstruction and Development
ECA	Environmental Conservation Act 1989
ESL	Economic Sociology of Law
FAO	Food and Agriculture Organisation
GATT	General Agreement on Tariffs and Trade 1947
GDP	Gross Domestic Product
GN	Government Notice
HM	Her Majesty's
ICC	International Chamber of Commerce
ICESCR 1966	International Covenant on Economic, Social and Cultural Rights 1966
ICJ	International Court of Justice
IIED	International Institute for Environment and Development
ILA	International Law Association
ILO	International Labour Office
IndWMP	Industry Waste Management Plan
IWMSA	Institute of Waste Management of Southern Africa
IUCN	International Union for Conservation of Nature
NEMA 1998	National Environmental Management Act 1998
Waste Act 2008	National Environmental Management Act: Waste Act 2008
NGO	Non-Governmental Organisation
NPC	Non-Profit Company
NPO	Non-Profit Organisation
NRF	National Recycling Forum
NWMS	National Waste Management Strategy
MDG	Millennium Development Goal(s)
MEC	Member(s) of the Executive Council
MMC	Member(s) of the Mayoral Committee
MRF	Material Recovery Facility
PTY	Private Company
R	South African Rand
REDISA	Recycling and Economic Development Initiative of South Africa
RDI	Research, Development and Innovation
SA	South Africa

SAHO	South Africa History Online
SCA	Supreme Court of Appeal of South Africa
SDG	Sustainable Development Goal(s)
SEP	Stanford Encyclopaedia of Philosophy
SME	Small and Medium Enterprises
SMME	Small, Medium and Micro Enterprises
U.N.	United Nations
UNCCUR	United Nations Convention on the Conservation and Utilization of
UNCHR	United Nations Commission on Human Rights
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
U.S.	United States of America
UDHR 1948	Universal Declaration of Human Rights 1948
WCED	World Commission on Environment and Development
WCS	World Conservation Strategy
WIEGO	Women in Informal Employment: Globalising and Organising
WTO	World Trade Organisation
WWF	World Wide Fund for Nature
ZAGPHC	Gauteng Province High Court of South Africa
ZASCA	Supreme Court of Appeal of South Africa

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VIGNETTE 1: ORIGINS

Circa 1980s

My earliest memory of recycling in action was as a four or five year old child growing up in the English speaking Guyana, South America. Once a week or thereabouts, men would come by our home and ask if we had any glass bottles that we could give them to recycle to earn a 'small piece'. My mother, who was usually the arbiter of such conversations, would often ask myself, and my cousin to collect the bottles from the flats in our yard, and have them ready in a cardboard box for when the men would return an hour or so later to collect. Guyana has had, as far back as my family can remember, a thriving glass bottle recycling industry.

My cousin and I saw this as a bit of a game of, who could find the most bottles and who could find the most expensive bottles, as the bigger bottles were more valuable than the smaller bottles. I did not know then that these men would be called 'waste pickers'. And I also could not foresee then that I would spend a considerable amount of time researching and writing a PhD on the topic, but what I do recall, is that I developed an affinity for people who collected things that others had used and resold them for a living.

So it is no wonder that as an undergraduate student, with the encouragement of a professor, to develop my research skills, I set out to amass an 'encyclopaedic knowledge' on waste pickers by examining their activities in Vietnam and Nigeria over the course of four years, and for the past four in South Africa.

This thesis builds on this genesis by transforming what was once a mere affinity, into the focus of my academic endeavours.

CHAPTER 1 INTRODUCTION

This thesis explores the operation of the international legal concept of ‘sustainable development’ at the local scale through a case study of South Africa. Specifically, it explores the operation of sustainable development in the lives of the informal economic actors known as waste pickers in the context of the urban solid waste management economy (hereinafter ‘waste management economy’). The empirical data for this project was collected mainly in Johannesburg, South Africa, and the waste in focus is recyclable forms of general¹ or non-hazardous waste. This thesis is the result of the synthesis of four years of research into the economic, social, legal and environmental dimensions of the relationship between the international law of sustainable development and the every day economic lives of the informal waste workers known as waste pickers. The study uses an Economic Sociology of Law (ESL) approach which enables a systematic and integrated consideration of economic and legal dimensions of social life, both at and between local and international levels.

1.1 Background

The international definition of sustainable development relied on in this thesis is, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (WCED 1987, para 1, 41). The definition, debated and analysed in Chapters 3 and 4, originates with the 1987 U.N Report, Our Common Future, widely referred to as the Brundtland report (1987). Since the 1980s, numerous international initiatives aimed

¹ General waste is defined as “waste that does not pose an immediate hazard or threat to health or to the environment, and includes- (a) domestic waste; (b) building and demolition waste; (c) business waste; (d) inert waste; or (e) any waste classified as non-hazardous waste in terms of the regulations made under s.69, and includes non-hazardous substances, materials or objects within business, domestic, inert, building and demolition wastes” (Schedule 3, Category B: General Waste of the National Environmental Management: Waste Amendment Act, 2014, Act 26 of 2014, 34).

at coordinating state, non-state efforts towards achieving sustainable development have clarified the form that development ‘should’ take. The most recent incarnation of sustainable development initiatives at the global level, the 2030 Agenda for Sustainable Development, or the Sustainable Development Goals (SDGs), covers waste in both urban and rural settings (U.N. 2015). SDG 6.3 is concerned with waste water; SDG 11.6 is concerned with municipal waste management; SDG 12.3 is concerned with food waste; SDG 12.4 is concerned with chemical waste; SDG 12.5 is concerned with the the waste minimisation and recycling (U.N. 2015). In this context, waste is seen as an ‘entry point’ to sustainable development because of its connections with climate change, poverty reduction, health, food security, production and consumption (Wilson et al 2015, 7). This thesis is cognisant of the linkages with poverty, production and consumption in its narrow focus on the intersections between waste and sustainable development through the everyday economic interactions of waste pickers.

The World Bank estimated that 2.01 billion tonnes of waste were generated in 2016, of which 19 per cent was recycled (Kaza et al 2018, 17-18). Industry news have reported that the global management economy was worth \$330.6 billion in 2017 (PR Newswire 2019). Each person globally is reported to generate 0.74 kg of waste per day (Kaza 2018, 17). The amount of waste generated in Sub-Saharan Africa is expected to triple by the year 2050, and currently accounts 9 per cent of waste recycled globally (Kaza et al 2018, 17, 19). Half of all waste collected in sub-Saharan Africa is done so formally (Kaza et al 2018, 79). In South Africa, this is estimated to be 60.2 per cent (Stats SA 2018c, 23).

In 2017, the year that fieldwork was undertaken, the whole of the South African waste management economy was estimated to be worth R15.3 billion (just under £1billion) or 0.51 per cent of GDP in 2012, the last year a waste sector survey was undertaken (DST 2013, i). In 2017, the nominal Gross Domestic Product (GDP) of South Africa was R4.7 trillion or £212.4 billion (Stats SA 2018a, 8). An estimated 54.2 million tonnes of general waste was generated

in 2017 by South Africa's 56.52 million strong population (DEA, 2018, v; Stats SA 2018b, 1). In contrast with global figures of 0.74 kg per day, each person in South Africa produces 0.95 kg of waste per day (Kaza et al 2018, 17; Stats SA 2018b). Only 38.6 per cent of general waste in South Africa is recycled, and the country is regarded by the United Nations Environment Programme (UNEP) as a significant exporter of waste (DEA 2018, 20; Modak et al 2015, 82). Waste pickers are informal workers who collect 80 per cent – 90 per cent of all materials recycled in South Africa (Godfrey et al 2016, 2). It is estimated that 90,000 people in South Africa work under harsh environmental conditions to make a living from waste picking, and reduce reliance on South Africa's benefits system (Godfrey et al 2016, 2). In contrast, employment figures in the formal waste management economy are estimated at 36,000 people (GreenCape 2019, 8). Waste pickers generally work on landfills, where their work contributes to environmental preservation through the reduction of landfill space (Godfrey et al 2016, 5); and on the street, where waste pickers gather end-use material from households, businesses and street-located rubbish bins (Blaauw et al 2016, 534). Less than 10 per cent of waste pickers in South Africa are organised into cooperatives that provide waste management services to waste generators (Godfrey et al 2016, 3).

Against this backdrop, this introductory chapter provides a roadmap for the thesis. It gives insight into the research trajectory, the original contribution of the thesis, the research questions, and each chapter's discussions and findings. An ESL approach is apt because I am interested in how an econolegal framework aimed at achieving sustainable development has affected the economic and social lives of waste pickers. By 'econolegal' I mean pertaining to the economic and the legal ideas and technologies that are mutually constitutive of regimes (Perry-Kessaris 2015, 63). The chapter prefaces the thesis arguments on the various aspects of how sustainable development shapes the economic, legal and social (inter)actions of waste pickers in South Africa.

1.2 Research trajectory

My initial research for this thesis focused on environmental justice in a waste management economy increasingly privatised by foreign (in)direct investors. Environmental justice calls for the distribution of environmental burdens and benefits, the participation in environmental decision making and the recognition of environmental rights and responsibilities for all (Schlosberg 2009, 5). I conceptualised the privatised section of the waste management sector as comprised of formal, private companies which were encroaching on the economic space occupied by the informal sector. However, both desktop research and empirical evidence that I collected during fieldwork revealed that the private sector is made up of both informal small-scale, and formal large-scale actors. These informal and formal actors are regarded by public sector actors as being on a continuum, and are therefore collectively judged against the same criteria (s.1, Schedule 1, Category A of the Waste Act 2008). The key feature determining differences in their treatment is size.

As my research progressed, I conducted a literature review of the use of the word ‘environment’ in the sector. This review was done on the basis that the concept of the environment is used widely to characterise the economic, legal, policy, social, scientific and other features of the waste management economy. The review revealed that existing literature on ‘environmental justice’ partially addresses questions of the law that I would like to ask. These questions include ones on how the ideas that drive the waste management economy have contributed to the current position of waste pickers within it. However, to focus solely on the rationalities, rhetoric and strategies of environmental justice – a political tool used to realise certain rights – would leave the dominant concept used within South African waste management law unexamined in my thesis (Holder and McGillivray 2017, 186). My analysis of the word ‘environment’ exposed sustainable development as the international legal principle that guides the laws and policies governing the South African waste management economy. This principle,

sustainable development, is defined as development that is concerned with social development, economic growth and environmental protection for all in society (Sands et al 2012, 215).

The thesis ultimately followed an ESL approach. ESL is an emergent field of socio-legal inquiry that is based on Weber's ideas on rationalities as a mode of understanding the world, and motivations for actions. The foundation provided by Weber allows for an inquiry into the types of rationalities that govern the waste management economy, and how the dominant rationality connects with other levels of society being analysed, namely the regimes, and (inter)actions. The central argument of the thesis is that sustainable development has been adopted from international law by the South African government to legitimise its place in the international community of state and non-state actors. This ambition has resulted in a commitment to enshrine sustainable development as a guarantee in the South African Constitution of 1996 (Act 108 of 1996 (hereinafter 'The Constitution'), and as the goal of national waste management laws and policies. Sustainable development as a rationality promotes the formalisation of informal waste management actors (SDG 8.3). Sustainable development also promotes the use of traditional market failure ideas that are better suited to static conditions. The result is that existing social inequalities among waste management actors within a dynamic economy are maintained. This leaves waste pickers with little or no real prospect of transcending the barriers that prevent them from enjoying the social and economic promises of sustainable development.

I used findings from my initial literature review to guide an ethics application for risk-assessed fieldwork. The fieldwork received approval from the University of Kent Faculty of Social Sciences Research Ethics Advisory Group for Human Participants, and underwent risk assessment by Kent Law School (see Appendix A). I undertook two periods of fieldwork – a scoping visit from October – November 2016 in urban centres in the Gauteng, Kwa-Zulu Natal and Western Cape provinces of South Africa; and a substantive period of fieldwork in Gauteng

and Western Cape from January – April 2017. The one-month-long pilot study facilitated an understanding of the feasibility of further research into waste management in each province.

I chose Johannesburg as the substantive site of data collection and interrogation for three main reasons. The Johannesburg metropolitan population of 4,434,827 is the largest of any city in South Africa, and contributes 16 per cent, more than any other city, to the country's economy (Stats SA 2013, 5; Stats SA 2012, 36). This gives it the potential to contribute more than any other city to the country's waste generation conforming to World Bank findings about general links between economic activity and the generation of waste (Kaza et al 2018, 17). These factors has led to the greatest concentration of waste management and recycling companies in its surrounds (Private waste management industry association official 1, Interview 1 of 2016; Waste campaigner 1, Interview 5 of 2016). Data for the project was collected using in-depth interviews with a range of private sector, national, and local government actors; and participant observation of the working lives of private sector actors.

Because my chosen approach (ESL) is sociologically-informed I have been well-positioned to incorporate elements of ancillary social science methodologies such as ethnography's grounded theory. Furthermore, ESL goes beyond a Law and Development approach, which focuses on improving the lives of the poor and vulnerable, to provide a more holistic analysis. For example, it incorporates not only actors and their interactions, but also regimes and rationalities; it integrates insights and influences from the local to the international levels; and it crosses between the legal, the economic and the wider social domains.

1.3 Research Questions

The project seeks to answer the following main question and five sub-questions. The main question is:

How does the international legal concept of sustainable development operate within the waste management economy in South Africa?

The sub-questions are:

1. How can the operation of sustainable development at a local level be conceptualised using ESL methods and concepts; and what are the potential benefits and risks?
2. What is the nexus between the historical and contemporary economic and legal context within which the concept of sustainable development and the reality of waste management in South Africa meet and operate?
3. How does the concept of sustainable development operate within and shape the regime governing the waste management economy in South Africa at national, provincial and local government levels? How did it become the dominant rationality to shape the waste management economy?
4. How do waste management actors co-construct the shape of the waste management economy in South Africa?
5. How does sustainable development as a concept manifest in the (inter)actions of waste pickers in Johannesburg?
6. What do waste management economy (inter)actions reveal about the relationship between state and non-state actors and international concepts?

1.4 Thesis Structure

In response to the questions above, the thesis comprises three parts. Each chapter begins with a vignette that connects the empirical findings with the conceptual discussion which follows. First, the role of each part of the thesis is explained followed by a summary of each chapter. The first part of the thesis (Chapters 1-3), presents the background and conceptual framework that helps situate this project within the canon of academic literature to which it contributes. The second part of the thesis (Chapters 4-7) analyses the empirical and normative aspects of the South African waste economy with regard to the four levels at which society operates as understood by the ESL framework. These are the rationalities, regimes, actions and interactions

present in society. The third and concluding part of this thesis (Chapters 8) draws conclusions about the relationship between sustainable development as an internationally-conceived idea and the lives of some of the most vulnerable waste management actors in South Africa. This involves a discussion of state, non-state and international actors' relationships and their relationship to internationally-conceived legal concepts such as sustainable development. This is followed by suggestions for future areas of research.

Chapter 2 explains the reasons for choosing an ESL approach to answering the research questions. The traditional legal approach would be concerned solely with the rules, principles, and concepts related to legal doctrine (Cotterrell 1992, 3). A Law and Economics approach, which takes its analytical paradigm from economic theory, is focused on economic phenomena independent of its relationship to society (Frerichs 2011, 79; Swedberg 2003, 25). The ESL approach regards the legal and the economic as social phenomena. ESL allows for the integration of several stand-alone theoretical approaches that combine to examine the intertwined legal, economic and social aspects of the South African waste management economy (Kotiswaran 2013, 117; Perry-Kessaris 2015; Swedberg 2003). The ESL approach applies empirical, analytical and normative approaches to a sociological investigation of the relationship between the law and the economy (Ashiagbor 2014, 266). ESL regards society as operating at four levels – rationalities, or ways of apprehending the world; regimes – or ways of governing; interactions – between different actors within a regime, influenced by one or more rationalities; and actions – influenced by the rationalities and regimes within which they take place (Dryzek 2013, 9; Frerichs 2011, 68; Perry-Kessaris 2015, 60). What emerges is a framework for understanding how internationally-conceived rationalities, such as sustainable development, can influence the shape of a regime, such as that governing the waste management economy, through an empirical examination of the (inter)actions of actors within the regime.

After a discussion of the work of Frerichs and others in the field of ESL, I harmonise the work of several scholars across the social sciences to complement the base of the ESL framework as constituted for this project. The work of economic sociologist Bourdieu, in the context of his work on how the state constructs markets, provides concepts such as habitus, capital, practice and field, that are useful descriptors of some features South African waste management economy features (2005). The work of political scientist Dryzek, on policy approaches to environmental problems, helped to identify sustainable development as the rationality that influenced the waste management regime (2013). I then use the work of socio-legal scholars Halliday and Carruthers (2009), and anthropologist Rottenburg (2009), to analyse the process of translating legal ideas, such as sustainable development, from the international field to the local field. The work of the economist Mazzucato helps to contextualise the economic ideas used to shape waste management as a complex societal idea requiring innovative solutions in relation to market-failure and market-shaping theoretical approaches to policy making (2016, 2020). The work of socio-legal scholars Ewick and Silbey on legal consciousness helps to analyse to what extent waste management actors are aware of the law, and the relationship between their (inter)actions, and the laws that govern their presence in the waste management economy (1998). The discussion of my theoretical apparatus allows me to preface my approach to answering the main thesis question: How does the international legal concept sustainable development construct the waste management economy in South Africa?

Chapter 3 uses an ESL lens to demonstrate how this thesis will fill a gap within the wider sustainable development literature and is divided into two parts. In the first part, the chapter argues that the sustainable development literature encapsulates many environmental policy areas but does not pay particular attention to waste (see Tan and Faundez 2015 for a discussion). Chapter 3 provides a short review of the relevant literature, and focuses on how sustainable development as a rationality has influenced the actions and interactions of those

involved in mining as a form of resource extraction (Hilson 2016). As part of this analysis, the chapter discusses how informality and formality present themselves within the regime that regulates mining activities, on the basis that many features of the mining economy are similar to those of the waste management economy (Blackmore et al 2013; Buxton 2012; Echavarría 2013; Hilson 2016).

The second part of the chapter provides an analysis of the interface between formality and informality within the South African waste management economy. The analysis argues that formality and informality co-exist within the regime shaped by sustainable development that governs waste management in South Africa (Godfrey et al 2016; Samson 2017; Schenck et al 2019). Sustainable development is concerned with formalising informal activities as far as possible (SDG 8.3.1). However, in this process, the notion of sustainable development ignores that informality is the primary pathway through which waste pickers connect with waste and with others through economic interactions within the waste management economy. This creates possibilities for policies aimed at reconciling this dilemma, a topic discussed in detail in Chapter 8.

Chapter 4, the first chapter in the second part of the thesis, locates sustainable development in the field of international law and discusses how and why the concept has been deployed by South Africa to shape its waste management regime (Dryzek 2013; Frerichs 2011; Halliday and Carruthers 2009; Kalberg 1980; Perry-Kessaris 2015). Firstly, the chapter discusses the definition of sustainable development, and explains how the concept is a rationality capable of influencing the regime that governs waste management in South Africa. Secondly, the chapter offers three reasons why sustainable development has become the rationality that influences the waste management regime by relying primarily on the work of Halliday and Carruthers on global law-making (2009). South Africa adopted many international standards into its laws and policies during the period of its reintegration into the international field after apartheid was

abolished in the mid-late 1990s to gain legitimacy within the international field (Brand 2005, 7; Liebenberg 1995, 359, 371). Apartheid here refers to the system of institutionalised black disenfranchisement and white dominance and privilege which characterised South African society from 1948-1994 under Afrikaaner-led National Party rule (Liebenberg 2010, 2). South Africa also did this because it lacked the political and economic capital needed to resist ideas coming from the international field (Halliday and Carruthers 2009; Leibenberg 2010, 19; Tan 2012, 26). This lack of capital pre-disposed South Africa to a reliance on internationally-conceived ideas, such as sustainable development insisted on by powerful state and non-state actors (Tan 2012, 31). South Africa also adopted sustainable development for the promise that the concept holds to improve the lives of its citizens (Brand 2005, 2). I conclude that South Africa uses sustainable development as a rationality in its national law to gain legitimacy in the international field, and to undertake a programme of societal transformation. This discussion foregrounds the analysis in subsequent chapters on how sustainable development appears within the legal regime that governs the waste management economy (Chapter 5); the process of policy co-creation aimed at achieving sustainable development in the waste management economy (Chapter 6); and the impact of the laws and policies aimed at achieving sustainable development in the waste management economy on the economic lives of waste pickers in South Africa (Chapter 7).

Chapter 5 scrutinises the South African tradition of using law to regulate social norms by mapping out how sustainable development has been integrated into the fabric of its waste management regime. The chapter contextualises the place of the waste management regime and sustainable development within the governance structure of South Africa. The chapter analyses the position of sustainable development as a guaranteed right in South African constitutional law through a consideration of its formulation in the integration element of sustainable development in s.24 of the Constitution. It discusses the creation of the progressive

South African Constitution, and the stature of sustainable development as an individual and collective right with both vertical and horizontal application. This is followed by an examination of the incorporation of sustainable development in national, provincial and local government waste management law. Finally, chapter evaluates how South African legal culture has responded to the incorporation of sustainable development in the law. South Africans have a faith in the law to regulate social norms, and its judiciary has had to adapt its response to the introduction of legal norms such as sustainable development. The chapter concludes that the design of the country's econolegal regime enables the deployment of sustainable development at all levels of law and society.

Chapter 6 relies heavily on empirical data to excavate the policy making approach that contributes to the failure of sustainable development in the waste management economy through an analysis of the industry waste management plan (IndWMP) for tyre recycling. Empirical data for this chapter was gathered from research participants in Gauteng, Western Cape and Kwa-Zulu Natal provinces. The analysis is informed by the idea that the shape of a market results from the (inter)actions of policymakers within society (Polanyi 2001 [1944], 70). The analysis draws on the work of innovation economist Mazzucato in relation to 'market-fixing' and 'market-shaping' economic policy making approaches to discuss the form of policy making applied to waste management in South Africa. Market-fixing approaches are driven by market-failure theory, and focus government interventions on taxation and cost-benefit analysis efforts to correct market failure (Kattel et al 2018, 4-5). The alternative approach, informed by Schumpeterian, innovation-driven economics, involves a plethora of strategies that the government can adopt to achieve a broad public policy goal such as sustainable development (Mazzucato 2016, 145-149). The chapter relies on stakeholder views gleaned from the fieldwork period to uncover a divergence in the motivations for government and private sector (inter)actions in the sector, to highlight the views of those who both make and

comply with promulgated policies. The chapter finds that South African waste management policy making contains elements of market-shaping strategies, however, it is ultimately driven by market-failure theory, which has resulted in the failure of key policies.

Chapter 7, also heavily informed by empirical data, uses the analytical tools of ESL introduced in Chapter 2 to explore how an entanglement of legal, economic and societal factors prevent waste pickers from accessing the conditions that would enable them to enjoy sustainable development. The analysis draws on interview and observational data of the (inter)actions of waste pickers and other waste management actors connected to a buy-back centre, a company that purchases recyclable materials from waste pickers and the public, in the central business district (CBD) of Johannesburg called WasteBuy.²

First, Chapter 7 examines how waste management laws aimed at achieving sustainable development are complied with and translated by waste management actors in Johannesburg. The examination finds that the municipality has adopted a permissive attitude towards waste picker non-compliance with waste management regulations, which has resulted in this being widespread practice. Waste picker non-compliance with waste management law is intertwined with a lack of awareness of their legal obligations, which arises out of a failure of other actors to translate these rules for them for practical purposes. Taken together, these two factors demonstrate that formal actors prioritise their own aims over the welfare and inclusion of waste pickers. Secondly, the chapter investigates WasteBuy as an economic field in which waste pickers conduct economic transactions by drawing on Bourdieu's field of struggles concept.

² 'Buy-back centre' is the South African term for scrapyards, or a 'scrap', according to some waste pickers. A buy-back centre will usually bale the purchased material and sell it on to a resin producer or material converter. A resin producer takes recyclable materials and turns it into raw materials used in the manufacturing process. A converter uses the recycled resin to make product parts and whole products to certain specifications that are then sold to manufacturers. Some converters are also resin producers.

The analysis reveals that WasteBuy managerial staff express the company's desire to develop waste pickers economically and socially while making a profit from their activities (Private sector waste manager 3, Interview 20 of 2017; Private sector waste manager 5, Interview 46 of 2017). Next, the chapter analyses the motivations behind waste picker (inter)actions, with a view to understanding the driving legal consciousness behind these relationships. Waste pickers are motivated, not by the formal rationality of sustainable development, as is the case of WasteBuy, but by the need to ensure their basic, personal survival. Waste pickers act manifestly against the law because they do not comply with waste management laws. The chapter concludes that the example of WasteBuy in the South African waste management economy disrupts the narrative of sustainable development as the international legal concept capable of creating change in the lives of the most vulnerable. Sustainable development fails to alter existing social inequalities or alter the public governance framework that complicates its operation.

Chapter 8, which comprises the third part of the thesis, aims to achieve three objectives. Firstly, the chapter draws together the conclusions of all previous chapters in a discussion of each chapter and of the research questions. More specifically, I make conclusions about the relationship between sustainable development as an internationally-conceived idea and its significance to the economic lives of the most vulnerable in the waste management sector in South Africa. I then relate these conclusions to the scholarship and the practice of sustainable development. The scholarly contributions relate to the conceptual framework of ESL, which is apt for this project because of its systematic and holistic approach. The practical contributions of the thesis relate to the general findings that are useful for international practitioners of law and policy; and findings pertinent to local policymakers. For international policymakers, in particular, sustainable development has been used to legitimise South Africa in international law and among international non-state and state actors. This has not created conditions in which

waste pickers can experience or enjoy the intended aims of sustainable development because it arrives with a preference for formalisation and the use of market failure theory. Secondly, the problems that emerge in the operation of international concepts in the local setting are structural. Countries can use sustainable development to legitimise themselves in international law with great social and economic cost to its most vulnerable citizens. Thirdly, the imposition of formalisation without the inclusion of waste picker perspectives can lead to failures of waste picker cooperatives as has happened in South Africa. The inclusion of all stakeholders, particularly the most vulnerable, in the policy making process, can ensure that key policies such as formalisation are more likely to be successful when all views are considered seriously.

Secondly, the chapter then discusses the value of the study to South African waste management and other policymakers by addressing two main policy issues: formalisation and IndWMPs. The chapter outlines the benefits, challenges and barriers to formalisation. Then the chapter proposes the redrawing of the boundaries of 'informal' to include longstanding norms of waste picker modes of working. With regard to IndWMPs, it sets out the market-shaping policy approach developed by Mazzucato that is apt for complex societal challenges such as waste management. The chapter makes three suggestions underpinned by Mazzucato's innovation-driven economics ideas about effective policy making that can create positive outcomes in the waste management economy. The first suggestion is the use of the more appropriate market-shaping economic approaches in the design of IndWMPs. The second suggestion is the inclusion of waste pickers in policy making to ensure their concerns are represented. The third suggestion is the introduction of robust policy evaluation mechanisms can provide for policy redirection when warranted. The findings in this chapter could be extended to other economies such as farming and mining in other developing countries with similar societal dynamics. Finally, the chapter offers a reflection on possibilities for future areas of research before providing closing remarks.

1.5 Original contribution

The original contribution of this thesis is three-fold. The first is conceptual, the second is empirical, and the third is policy-related. An ESL approach has been chosen because it permits a systematic and integrated study into the economic, social and legal aspects of how the internationally-conceived idea of sustainable development operates in a localised setting. The original conceptual contribution of this thesis relates to my ESL approach and in particular the harmonisation of ideas from Weber, Bourdieu, Dryzek, Mazzucato, Ewick and Silbey, Halliday and Carruthers to create a bespoke framework for the study of waste management in South Africa. This framework was developed through a methodology inspired by ethnography and grounded theory. The conceptual framework integrates ideas from the political theorist Dryzek at the level of rationalities; innovation economist Mazzucato, and economic sociologist Bourdieu at the level of regimes; and social theorist Weber, Bourdieu and sociologists Ewick and Silbey at the level of (inter)actions. In terms of empirical contribution, this thesis represents the first study that applies an ESL framework to questions about sustainable development, waste pickers and the law in South Africa. It joins the canon of a handful of studies applying a legal lens to the informal actors within the waste management economy (see Blackett and Khan 2018; Dias and Eslava 2013; Gill 2019; Routh 2014; Routh and Fassi 2016). The study also constitutes the first known empirical investigation into the operation of the international legal concept of ‘sustainable development’ in the local context of the waste management economy in South Africa. Specifically it contributes new insights into the (inter)actions that characterise the relationship between sustainable development, an internationally-conceived concept, and the economic activities of waste pickers in a specific research site, in my case the WasteBuy buy-back centre in Johannesburg. It provides valuable observations into the outcome of the strategies that policy co-creators have used to devise a regime aimed at achieving sustainable development for informal economic actors within the waste management economy.

Finally, this chapter gave an overview of the project from start to finish. It outlined the research trajectory and lines of enquiry explored before resting on a focus of the relationship between sustainable development and waste pickers in South Africa. It introduced the main research question and research sub-questions to foreground the shape of the analysis that the thesis takes to address this relationship at international, national and local levels. This was followed by a summary of each chapter to give a sense of how the thesis organises its analysis, and some indication of the conclusions to be reached in Chapter 8. Finally, it offered that the thesis is original for both its empirical and conceptual contribution to the fields of international sustainable development law, ESL and environmental law. The introduction sets the scene for the conclusion that sustainable development promises more than it can deliver in the lives of waste pickers because the conditions required for it to be realised do not exist in South Africa.

VIGNETTE 2: A SCENE TO BE ANALYSED

1st November 2016

I interviewed a senior local government official in a metropolitan city in South Africa. I found him to be suspicious of me. It was hard to get him to answer questions about illegal waste pickers. He was forthcoming on difficulties with cooperatives of waste pickers or waste collection cooperatives as well as problems with companies.

I asked him to put me in touch with buy-back centres and with material recovery facilities (MRFs) in the city. His answer was to have a colleague drive me to a location with both a buy-back-centre and an MRF, which was generous. The distance to the MRF and buy-back centre was 18 kilometres, a distance about which the subordinate colleague remarked was one she had already done twice for the day in an earlier trip from the office. The long drive also made me wonder if there was only one MRF in the whole city. How can waste pickers at the other end of the city get their materials there? Automatically, I see the potential for huge transport costs to be incurred as a result of this on the part of the MRF recycling collection truck and the informal workers. These costs could also be measured in terms of time.

We arrived at Somerville buy-back centre where we were greeted by a lady named Lerato, the site manager. She explained that they sell about R6000 worth of material per week but that it fluctuates. The buy-back centre accepts and pays for recycled materials on a tariff that is posted on their wall next to the front door. They train individual waste pickers and cooperatives to sort different materials, and the business side of things. The buy-back centre is run by a company called Old Oak which is Black-owned. Old Oak was recently invested into by iPact, which at a generating revenue over R11.1 billion, is the largest packaging and recycling business in Southern Africa. Their operations in Namibia, Mozambique and South Africa

consist over 5000 employees. Old Oak work with iPact to train the informal workers on how to distinguish between grades of plastic, paper and other material streams.



Figure 1: Somerville Buy-Back Centre. Source: Author.

The informal workers tend to visit when they have full trolleys of materials to sell but if they need money they come more frequently. Today there was one such man. The buy-back centre manager addressed him as ‘Papa’ which is a sign of respect in African culture. He had a very sparsely populated bag. The workers there were dressed in blue boilersuits. A female Old Oak worker helped ‘Papa’ to weigh and sell his materials. After this, we drove towards Somerville, the nearest suburb. On the way I saw an informal worker area on the roadside that was about one mile away from the buy-back centre, where informal workers sort through materials before bringing them to the buy-back centre. Somerville had its garbage collection day on Tuesday, the day that we went, so I was able to see the trolleys out, the recycling truck out, and many garbage bins. Some houses had one or two bins outside. Some had bags next to the bin for the recyclables. Some had piles of material outside, presumably for pick up by private companies or waste-picker cooperatives. My guide, Mamonare, said that the municipality has no contact with waste pickers because they are not stable. They start and stop waste-picking based on whether they get a good job.

At the MRF, we were stopped at the gate and both asked to take a breathalyser test by two armed and bullet-proof vested guards. That was a bit scary and felt unnecessary. We gained entrance and then went to the office to speak to the site manager, Jason, who directed me to the same person at the gate who initially seemed reluctant to let us in. He was very chatty, and explained where the materials go in and how they are sorted on a conveyor belt with cardboard, newspaper, paper, plastic, and metal, a process I was then able to observe. He showed me where the sorted material goes – through a chute into a bin which, when full goes to another conveyor belt and is baled. If the material is detected as incorrectly sorted, they try to rectify this before baling.

There were loads of various bales of different materials as well as bags ready to be sorted in different locations within the MRF. They have not started selling as yet because the site is not officially open. They had a skip that was filled with non-recyclables at the end of the process which then goes to landfill. The baled materials were sitting around because they do not have a forklift to move them as yet. One is on order, or they will borrow one from the buy-back centre if not delivered soon. In the buy-back centre, the forklift is used to put the bales on a container which is then sold at once. The bales on the large container took more than one week but less than two weeks to be filled. The rate at which they are filled depends on the volumes of waste and recyclables collected.

Gabriel, the MRF site supervisor, who showed me around, told me that they have numerous clients who want to buy their materials and that they will get their staff trained by their clients on the standard of materials required for purchase by companies further up the recycling chain. Gabriel showed me the staff parking area, the machinery truck parking area, and the soon to be staff eating, shower and changing area and canteen. He explained the existence of those areas after I saw that the staff were sitting and eating outside in the hot sun. He said he prepared a room for them in the management office area but that they preferred to be outdoors. Then he

showed me the new bale storage area. After that, Mamonare called because she needed to go, and so we drove back to the municipality offices.

2 AN ESL APPROACH TO WASTE MANAGEMENT

2.1 Introduction

Chapter 1 gave a glimpse into the original contributions of the thesis. Firstly, it demonstrated the value of ESL as a conceptually and empirically holistic approach to the study of a waste management economy. Secondly, it gave insight into the use of empirical methods to investigate the relationship between sustainable development-oriented waste management policy and the economic lives of waste pickers in South Africa.

This chapter aims to show that ESL has been chosen to analyse the waste management economy because it facilitates a holistic analysis that goes beyond other disciplines. The conceptual combinations permitted within the framework shows its suitability to analyse this empirical study which addresses how sustainable development has not led to an improvement in the material conditions of South African waste pickers. Specifically, this chapter establishes how the integrated approach of ESL fills the conceptual and analytical gaps left by other, related approaches when applied to how sustainable development constructs the waste management economy of South Africa. An ESL analysis is primarily concerned with the role of law in economic life – with both the legal and the economic regarded as social phenomena (Swedberg 2003, 1). This systematic approach is most appropriate to interrogate the interlocking, national and local facets of the South African waste management economy dynamics, and how these dynamics shape the lives of waste pickers. The approach facilitates an ethnography-inspired methodology to investigate how the economic, the legal and the social of the lived experience of waste management actors because it is conducive to participant observation, interviewing, field note-keeping, the collection of artefacts and desktop based qualitative research.

The chapter assumes the following structure. First, it discusses the normative aspect of the ESL approach through a discussion of the value of ESL in comparison with the doctrinal, the Law and Economics and the Law and Development approaches. Secondly, the chapter discusses the

concepts from across different disciplines that inform the ESL analysis of the rationality, the regime and the (inter)actions within the waste management economy. The discussion rests on concepts drawn from economics, political science, social science, and sociolegal studies used to analyse the four pillars of the ESL approach. Thirdly, the chapter delves into the methodological influences and process of gathering the data that is analysed using the concepts set out in section 2.3, and how my positionality as a researcher affected the choices I made and how I was received in the field.

The chapter concludes that ESL is the most appropriate framework for this project because its analysis goes beyond those of other legal approaches, which is required to consider South African waste management complexities. ESL systematically shows how rationalities, regimes and (inter)actions present within the waste management economy are connected to and affected by the law, the economy and society. Further, it encourages the use of empirical methods, which makes it suitable for this project. Finally, the chapter is flexible to contain various analytical concepts which enrich the analysis of how sustainable development policy fails the most vulnerable in the South African waste management economy.

2.2 Why take an ESL Approach?

2.2.1 What is Economic Sociology of Law?

The key idea of Economic Sociology of Law is that both economic and legal aspects of life are social phenomena and therefore embedded in social life (Perry-Kessaris 2015, 58; Swedberg 2003, 1, 6). I rely on the Polanyian understanding in which the economic and the legal are mutually constitutive of the structure of the society in which they occur (Polanyi 2001 [1944], 60). According to Polanyi:

“Ultimately that is why the control of the economic system by the market is of overwhelming consequence to the whole organization of society: it means no less than the running of society as an adjunct to the market. Instead of economy being embedded in social relations, social

relations are embedded in the economic system. The vital importance of the economic factor to the existence of society precludes any other result. For once the economic system is organized in separate institutions, based on specific motives and conferring a special status, society must be shaped in such a manner as to allow that system to function according to its own laws. This is the meaning of the familiar assertion that a market economy can function only in a market society.”

To this understanding of the interlinkages between the economic, the legal and the social as proposed by Polanyi, Bourdieu adds that, “the social world is present in its entirety in every ‘economic’ action” (2005, 3). Such a grasp of the relationship between the legal, the economic and the social, thereby allows for a focus beyond that of traditional legal, and economic analyses.

2.2.2 Why not take a doctrinal approach?

Traditional, jurisprudential (otherwise referred to as doctrinal or black letter law) approaches, posit law as a set of rules to be followed (Cotterrell, 1998, 171; Swedberg 2006, 65). Jurisprudence “sees the law as an autonomous and closed system whose development can be understood solely in terms of its ‘internal dynamic’” and endeavours to predict what will happen based upon the rules that govern this closed system (Bourdieu 1987, 814; Cotterrell 1992, 2; Swedberg 2003, 8). Jurisprudence stops at rationalising “norms, rules, principles, concepts and legal values” associated with legal doctrine, even when the rules are influenced by policy, and the analysis is “grounded in an array of philosophical assumptions which often necessarily remain unexamined” (Cotterrell 1992, 2; Cotterrell 1998, 171). Such traditional approaches focuses primarily on the substance (the what) of the law, and lacks perspective on the scattered and varied methodical and empirical tools (the how), and the values and interests (the why) which drive the law (Cotterrell 1998, 189; Perry-Kessaris 2012, 4). They are not concerned to look beyond a description of how the law works (Cotterrell 1992, 4; Perry-Kessaris 2012, 4).

2.2.3 Why not take a Law and Economics approach?

Just as traditional legal approaches draw their conceptual, normative and empirical tools from within legal doctrine, Law and Economic approaches draw their analytical, normative and empirical tools from economic theory (Swedberg 2003, 25). Economic ideas have come to influence the substantive (the what) and the procedural (the how) shape of legal institutions, which, seen as part of the economic system, results in an “economisation of the law” (Frerichs 2011, 79; Frerichs 2012, 51-2; Perry-Kessaris 2012, 5). Prominent Law and Economics scholars, Cooter and Ulen, would agree that “economics has changed the nature of legal scholarship, the common understanding of legal rules and institutions, and even the practice of law” (2014, 2). Today, the field of Law and Economics has become part of “a general approach in jurisprudence” in which economic ideas inform legislation and legal decision making (Swedberg 2003, 25). Though it claims to provide a “scientific theory to predict the effect of legal sanctions on behaviour”, and a “behavioural theory to predict how people respond to laws”, economics is steeped in what Bourdieu calls its own “logic of calculation, of profit, etc.” which may not reflect “social and cognitive structures, practical patterns of thinking, perception and action” that exist within an economy (2005, 4-5; Cooter and Ulen 2014, 3). Moreover, whereas Law and Economics draws on other social sciences such as psychology and sociology to analyse individual actions, it tends to ignore the broader social structures in which it is embedded (Bourdieu 2005, 5; Swedberg 2003, 25).

2.2.4 Why not take the Law and Development approach?

ESL and Law and Development are fields of study that sit side by side. Law and Development is concerned with analysing the broad and the specialised aspects of the intersections between legal and development processes (Lee 2019, 1). Law and Development is specifically focused on problematising the difficulties which arise through the economic and social development process vis-à-vis the legal institutions that support or impede this process (Tan 2019, 1). It comprises three perspectives. In the first perspective, law is the means by which development

policy is implemented to achieve a policy goal (Lee 2019, 1). In the second perspective, the rule of law is regarded as a component of the development process, as opposed to a means through which development is achieved (Lee 2019, 2). In the third view, a Law and Development analysis is focused on the impact of development policy instituted by the law; and the economic, social and institutional conditions that affect the ability of the law to achieve its purported goal (Lee 2019, 2). In its analysis of the economic aspects of development, Law and Development restricts its enquiry mainly to macroeconomic concerns (Lee 2019, 6). The Law and Development field has been around for many decades, and has withstood many ‘movements’ (see Lee 2019, 20-37 for a discussion). It is only recently that a systematic analytical framework, or general theory of Law and Development has been developed to focus on the design, compliance with, and the implementation of regulatory mechanisms (see Lee 2019, 38-61 for a discussion). The focus of ESL, which can address the concerns of Law and Development, is on producing a systematic analysis of the interrelations among economy, law and society at the meta- (rationalities), macro- (regimes), meso- (interactions) and micro- (actions) levels of society (Frerichs 2011, 68; Perry-Kessaris 2015, 60-61). Both ESL and Law and Development are compatible with the collection of empirical data. The systematic, analytical blueprint of ESL means that it can be applied in a broader set of circumstances as evidenced by its application to feminist, labour law, Law and Development, and in the case of this thesis, environmental law projects (Ashiagbor 2014; Dukes 2019; Kotiswaran 2013; Perry-Kessaris 2014).

2.2.5 Relevance of the ESL approach

The above arguments demonstrate the need for a more pertinent technique than the doctrinal approach that dislocates law from its social context (Cotterrell 1998, 180); and law and economics that distils social relations through the prisms of economic efficiency, and economic equilibrium (Ulen and Cooter 2014, 13). These approaches fail to treat the legal and the economic as social phenomena, which are permanently interrelated. The “transdisciplinary

enterprise” of ESL is suitable because it transcends reasoning focused on “the social forces operation on legislation” towards intricate questions that address its key preoccupation: the embeddedness of legal and economic institutions, and ideas in society (Cotterrell 1998, 172; Frerichs 2011, 70). The view of legal and economic institutions as embedded in society helps establish the investigation into how the state has influenced the shape of the South African waste management economy in Chapters 5 and 6. Law, legal orders and institutions are seen as part of a societal structure which influences or inspires individuals to conform to its economic priorities and rules (Swedberg 2003, 1; Swedberg 2006, 66).

Some proponents of ESL advocate approaching this societal superstructure through a Weberian framework. They see social life as operating at four mutually constitutive levels – rationalities at the meta-level, regimes at the macro-level, interactions at the meso-level, and actions at the micro-level (Frerichs 2011, 68; Perry-Kessaris 2015, 60). Rationalities are, as Dryzek puts it, “shared ways of apprehending the world,” (2013, 9). Regimes are those rules and structures that facilitate certain actions within institutions and other entities in society, what Weber might refer to as a “legitimate order”, or types of organisations, structures and doctrines (Frerichs 2011, 68; Kalberg 1980, 1161; Perry-Kessaris 2015, 61). Interactions are actions that involve two or more people, and can either be individual or communal (Perry-Kessaris 2015, 60). Actions constitute something done in a social setting by an individual such as an act, a feat, or a statement; and which Weber further classifies into four types – affective, traditional, instrumental and belief – and links to the rationalities that inspire them (Kalberg 1980, 1148; Perry-Kessaris 2015, 60).

2.3 ESL Conceptual Framework

The discussion in this section draws on the concepts from economics, political science, social science, and sociolegal studies used to analyse the four pillars of the ESL approach – the rationalities, regimes, and (inter)actions within the waste management economy. This section

does two things. First, the section discusses contemporary interpretations of Weber's ideas as the conceptual foundation on which ESL rests with regard to analysis and language from Frerichs and Perry-Kessaris on how rationalities at the meta-level; regimes at the macro-level; interactions at the meso-level; and actions at the micro-level are organised.

Secondly, the section introduces substantive concepts that are used to analyse the rationality, regime and (inter)actions under investigation in this project. The section discusses the process of identifying sustainable development as the rationality within the Weberian framework that is most influential in shaping the waste management economy by drawing on the work of political scientist Dryzek on environmental discourses. Subsequently, the section reviews the work of Halliday and Carruthers on global scripts to show how sustainable development has moved from international law to national and local law in South Africa, which is the main subject of Chapter 4. Next, it delves into the innovation economics literature from Mazzucato which will be used in Chapter 6 to analyse the shape of the national policy making regime for waste management aimed at achieving sustainable development. The section goes on to introduce ideas from Bourdieu on the social and economic factors which shape the French housing economy. Bourdieu's ideas prove useful for thinking about competition within markets, in reference to competition between waste pickers and waste management companies in Johannesburg in Chapter 7. Ideas from Weber on motivations for actions, combined with Bourdieu's ideas on the qualities that an actor possesses assists in understanding how a waste management economic actor holds a particular position within the market. Ewick and Silbey's work on legal consciousness helps to understand how waste pickers and other economic actors view their activities in relation to the law. Concepts from Bourdieu provides language useful for thinking about the qualities that a market and an actor possess and how this influences their ability to navigate and negotiate a position within the market. The concepts - capital, field, habitus, and practice – are used throughout the thesis to add nuance to the analysis of the

relationship between sustainable development and the economic interactions of waste pickers as seen through an ESL/Weberian framework. Such an approach helps to advance the argument that sustainable development is an ideal that is not easy to achieve because of the structural inequalities within society prevent this from happening.

Given that Weber's work is considered "what comes closest to an already existing program for an economic sociology of law", I use contemporary interpretations of his ESL ideas as a resting place for the analytical framework developed in this thesis (Swedberg 2003, 6). The framework has been developed specifically to argue that sustainable development is difficult to achieve because the structural inequalities within society do not permit those who are most vulnerable economically to benefit. Sustainable development is only achievable with a certain level of economic success as the point of entry (Lee 2019, 90). Frerichs and Perry-Kessaris both use concepts from the epistemology of economic sociology and anthropology to systematically ask questions about the nature and functioning of social phenomena.

The taxonomies of ESL also serve a further purpose. They are useful to understand the place of sustainable development as a concept capable of being a rationality that shapes the waste management economy (Dryzek 2013,147-164). This has implications for the actors who facilitate the construction of the economy, and the actors who experience the economy as created (Behrends et al 2014; Bourdieu 1986; Ewick and Silbey 1998; Halliday and Carruthers 2009). Empirical observations from Bourdieu have been useful in making sense of how the South African state constructs the waste management economy in Chapters 6 and 7 (2005).

2.3.1 Rationality

Weber, many authors note, does not give a precise definition for what he means by the term "rationality" (see Kalberg 1980; Perry-Kessaris 2015; Swedberg 2006). He proposes four types of rationalities that Kalberg asserts "must be sifted out" of his many publications (Kalberg 1980, 1147-1148). The first, practical rationalities, are concerned with the pragmatic and

egoistical concerns that arise out of everyday reality, the ways of thinking about instrumental actions, those actions that are a means to an end (Kalberg 1980, 1151; Perry-Kessaris 2015, 60). The second, theoretical rationalities, relate to intellectual ways of consciously mastering reality, not through action but through the refinement of abstract concepts, such as those associated with religious or academic doctrine (Kalberg 1980, 1152-1153). The third type, substantive rationalities, create tendencies towards a certain order of action, such as those related to specific institutions, political entities or cultures (Kalberg 1980, 1155). The fourth and final type, formal rationalities, pertain to those spheres of life that became more rigid with industrialisation: the economic, the legal and the scientific, which prescribe adherence to codified and universally applicable rules (Kalberg 1980, 1156). Actions in these spheres are prescribed by abstract concepts allied to the phenomena that enable the legal, the economic and the scientific work (Kalberg 1980 1158-9). The concept of “rationalities” will be deployed to addressing how sustainable development as a rationality has moved from the international field to become the dominant rationality in the South African waste management regime in Chapters 3 and 4; and in Chapters 6 and 7 to thinking about how waste management actors understand rationalities; and how their actions reveal the constitutive power of sustainable development (Dryzek 2013; 158; Frerichs 2011, 68; Perry-Kessaris 2015, 60-1).

Dryzek's Rationalities

Rationalities are one of the legal phenomena that have influenced the shape of the South African waste management economy. The effect of rationalities on the econolegal regime has been pervasive, and would point to the idea of a formal rationality because of its association with the “economic, legal and scientific spheres” of social life (Kalberg 1980, 1158; Perry-Kessaris 2015, 61).

The formal rationality in focus in this thesis falls within the scope of environmental policy because of the problematisation of South African waste management as an environmental

issue, and the acknowledgment of the waste management economy as an environmental economy (Dryzek 2013, 181, 212-213; Perman 2011, 113-123). The seminal work by political scientist, Dryzek, “Politics of the Earth”, is relied on to understand and classify the rationalities that frame waste management because it offers a comprehensive nomenclature of ways to apprehend environmental problems (2013, 9).

Dryzek sets out four major ways of speaking about environmental problems – global limits; problem solving, sustainability and green radicalism (2013, 15-16). In terms of global limits, he divides those concerned with economic and population challenges into Survivalists and Prometheans (Dryzek 2013, 15-16). Survivalists believe in top-down, authoritarian style management of Earth’s finite resources (Dryzek 2013, 42). Prometheans, on the other hand, prefer the self-regulating market over public sector mechanisms as a management solution to environmental problems (Dryzek 2013, 58).

Dryzek dedicates a whole section of his book to three approaches used by governments, which he calls “problem solving”. In the first approach, administrative rationalist policy makers rely on hierarchical technocratic approaches to solving environmental problems (Dryzek 2013, 76). Economic rationalists, like Prometheans, view the environment as a commodity which can be bought and sold like any other, except that rationalists do so in the pursuit of state-sanctioned policy goals (Dryzek 2013, 122-123). The last approach, democratic pragmatism, sits somewhere between administrative and economic rationalism – its focus is to involve non-state actors in the formation of policy (Dryzek 2013, 100-108). The two forms of green radicalism Dryzek discusses – green consciousness and green politics – are based around the actions of a plethora of social movements concerned with environmental issues (2013, 185). Green consciousness is centred around building capacity through education and other tools whereas green politics provides action-oriented ideas for resistance, such as environmental justice (Dryzek 2005, 185). He subdivides his discussion of sustainability into ecological

modernisation, concentrated on building economic progress through private-sector-led greening of industrial technology; and sustainable development, which seeks to achieve environmental protection and social development while bolstering economic growth (Dryzek 2013, 16, 147-164, 170).

Several substantial findings have flowed from the application of Dryzek's framework to shape the contours of this research project, including a reinforcement of the problematisation of waste management as an environmental issue. Secondly, it has enabled the identification of sustainable development as the dominant rationality used when speaking and legislating on waste management in South Africa through an examination of the South African legislation governing waste, discussed in Chapter 5 (Dryzek 2013, 16; s.24(b)(iii) of the Constitution; The National Waste Management Strategy 2011 (hereinafter NWMS 2011), p 10; Preamble and s.2(a)(vi) of the Waste Act 2008). This application led to the decision to write Chapter 4, which focuses on how sustainable development has moved from the international regime to the South African one (Halliday and Carruthers 2009; Rottenburg 2009). Chapter 3 discusses the importance of researching waste management within the context of sustainable development to enhance the literature.

Travelling rationalities

The next tool in the conceptual kit pertains to how rationalities travel from the international to the national regime by way of (inter)actions that produce legal translation and legal transplantation (Bourdieu 2005, 223; Halliday and Carruthers 2009, 26-27). Legal translation and legal transplantation has been well-studied, in the fields of legal anthropology, environmental law, international human rights law, international humanitarian law, and law and development (see Charlesworth 2002; Darian-Smith 2010; Engle Merry 2011; Eslava 2015; Eslava 2014; Eslava 2020; Orford 1997; Rajagopal 2003; Riles 2011).

I examine both legal transplantation and legal translation in the sub-sections below to situate sustainable development, the legal phenomenon and formal rationality that shapes the South African waste management economy, as what Rottenburg calls a “travelling model” (Behrends et al 2014, 1). Rottenburg, defines model as

“an analytical representation of particular aspects of reality created as an apparatus or protocol for interventions in order to shape this reality for certain purposes. Models – and the ideas about reality inscribed into them – always come objectified and combined with material technologies to put them into practice and to transfer them as blueprints to new sites” (Behrends et al 2014, 1-2).

Here, one immediately recognises in Rottenburg’s model, a product of a regime, that is expected to travel between regimes (Behrends et al 2014, 2; Bourdieu 2005, 229-230).

In the context of this thesis, sustainable development as a travelling model originates within the international regime that governs sustainable development, and which, in Rottenburg’s parlance, travels as a ‘blueprint’ to the new site of the South African waste management economy (Behrends et al 2014, 1-2; Bourdieu 2005, 230). Rottenburg recognises that his travelling models share similar features with Weber’s “concept of rationalisation” or ‘rationality’, calling it his “travelling models” “main theoretical rival” which goes further than travelling models by ordering social relations (Behrends et al 2014, 2; Kalberg 1980, 1145; Perry-Kessaris 2015, 60-61). The role of (inter)actions between actors in the movement of travelling models or rationalities from the international to the national regime is recognised. This movement necessitates the aid of an international organisation capable of imposing the interests of dominant regimes, on those countries with less economic and political capital (Behrends et al 2014, 3; Bourdieu 2005, 229-230; Halliday and Carruthers 2009, 28).

Legal Transplantation

The first way in which ideas move, legal transplantation, involves the transfer of legal ideas (like rationalities), and legal technologies (like legal procedures and regulations pertaining to a specific domain), from one juridical regime (jurisdiction), to another (Halliday and Carruthers 2009, 26). The legal ideas and legal technologies are then grafted onto an already existing legal framework, with its own capacity to receive those ideas (Halliday and Carruthers 2009, 26). The success of the transplantation is dependent on the relationship between the originating and adopting jurisdictions, such as whether they are both common law or civil, or have a previous colonial relationship, and the nature of that relationship (Halliday and Carruthers 2009, 26).

The success of the transplant is also dependent on the amount of economic and political capital held by the ‘intermediaries’ (Halliday and Carruthers 2009, 28) involved in the transplantation of the idea, who might be dominant or subordinate (Bourdieu 2005, 228). For example, Tan has outlined how economic power influences the ways in which transplants are reproduced in a new setting (Tan 2012, 20). Intermediaries bring their own habitus, which if aligned with those present in the originating regime, boosts the capital required for them to be successful actors in the transplantation process (Bourdieu 1977, 164; Bourdieu 2005, 224-5; Halliday and Carruthers 2009, 31). However, Halliday and Carruthers reveal that the transplantation of an idea into an enacted law does not guarantee that the law will be implemented (2009, 34). Implementing intermediaries must be competent to transplant travelling models and rationalities in a way that would be received successfully in the local setting to avoid this risk (Halliday and Carruthers 2009, 26, 31-34).

Legal Translation

Legal translation differs from legal transplantation as it involves an idea being “transferred from one frame of reference to another without that representation losing its validity” (Rottenburg 2009, xxxi). These frames of reference are united through the mediation of multiple elements that are made comparable and compatible (Rottenburg 2009, xxxi). Bourdieu

would understand these frames of reference as fields (1977, 164). He would also recognise the process of the removal of barriers between economic fields such as the national and the international in the unification of Rottenburg's multiple elements (Bourdieu 2005, 223; Rottenburg 2009, xxxi).

Rottenburg emphasises that travelling models or "ideas about reality..." need to be acted upon by "mediators", or in Halliday and Carruthers' phraseology "intermediaries", for them to move from one field to another (Behrends et al 2014, 2; Bourdieu 2005, 223; Halliday and Carruthers 2009, 28). Weber would recognise in the movement of Rottenburg's "ideas about reality" from one site to another, the movement of rationalities from one regime to another by way of (inter)actions (Behrends et al 2014, 2; Kalberg 1980, 1162). Weber would, according to Kalberg, be more concrete by also offering an analysis of the type of action that would appear within a specific legitimate order, or regime, i.e. the national or international (Kalberg 1980, 1162-1163). Rottenburg asserts however, that rationalities cannot travel because they are "immaterial and abstract and lack the robust form to be transportable" (Behrends et al 2014, 2). He qualifies this by explaining that rationalities are attached to certain regimes, which, when detached from them, are forced to adapt to the new setting, which will have its own rationalities and habitus (ways of doing things) that conflict with the original rationality (Behrends et al 2014, 5).

This is not too dissimilar from Rottenburg's concept of legal translation in which the "embodied knowledge" present in the originating site does not travel with the idea, and needs to be "re-invented at the new sites through experimental practice and experience" (Behrends et al 2014, 2). Halliday and Carruthers would differ by saying that in the process of translation – which happens in the movement of ideas from the field of the international to the national – the rules of global actors are retained in the local setting (2009, 28). Legal transplantation facilitates transgovernmental networks and international institutions to influence a country to

adopt legal ideas into national law outside of the traditional process of treaty negotiation (Tan 2012, 24). Legal translators in Halliday and Carruthers' view do not have the same freedom to experiment that Rottenburg's legal translators do because they are bound to operate within the confines of the languages present in the international and the national field (Behrends et al 2014, 2; Halliday and Carruthers 2009, 28). Legal translators have less room to manoeuvre than those involved in the process of legal transplantation (Halliday and Carruthers 2009, 28). The similarities in Rottenburg's, and Halliday and Carruthers' ideas on legal translation are countered by the differences between them. They agree that legal translation occurs whenever ideas move across juridical fields. They, however, differ in the parameters of what constitutes legal translation and in what is capable of being translated. Rottenburg's limitations to translation are also different – rationalities in the receiving field can render the translated idea less effective than in the originating field (Behrends et al 2014, 4). Halliday and Carruthers articulates the limitations of translation by focusing on the habitus and capital of the actors who facilitate the translation (2009, 31). This variance in conceptualisations allows for creativity to be used when applying the concepts of legal transplantation and translation to the movement of sustainable development as a dynamic and versatile rationality that has been able to travel from the international to national fields, to be explored in Chapter 4.

2.3.2 Regime: Law and Policy Framework

Weber's Regimes

Operating between rationalities and (inter)actions on the social scale at the macro-level are regimes (Perry-Kessaris 2015, 61). They are primarily associated with the rules that govern spheres of society, through a top-down approach coming from state institutions, or because of a bottom-up approach from non-state actors (Perry-Kessaris 2015, 61). Regimes crystallise established types of rationalities and encouraging marked types of (inter)actions (Frerichs 2011, 68). The work of innovation economist Mazzucato on approaches to economic policy is

used to think about the ways in which the South African waste management economy could be designed optimally to achieve sustainable development (2016; 2020). The application of Mazzucato's ideas on economic policy for sustainable development is indispensable in revealing the non-legal and non-economic factors that complicate the drive towards sustainable development. The analysis in Chapter 6 shows that Mazzucato's ideas for achieving sustainable development require a sophisticated level of economic resources, stakeholder inclusion and flexibility in governance practices to be present, unlike in the current configuration of the South African waste management economy (2016; 2020).

Policy making ideas for sustainable development

Mazzucato provides a framework for understanding how sustainable development can be applied to policy making for waste management. Part of this is built on the understanding that a reconceptualization of the role of the state in creating markets would enable the design of policies that facilitate risk and benefit sharing among stakeholders (Mazzucato 2016, 148-149). In direct relevance to industrial policies tied to sustainable development, Mazzucato points to the need to complement market failure theory with market-shaping theories in order to devise optimal policies (2016, 140). As the architect of policies which regulate markets, this approach reinforces the role of the state to address market failures, such as those which result in what are traditionally viewed as 'public goods' such as good waste management (Kattel et al 2018, 4). A public good is understood as a good that needs to be provided by the government because one person consuming it does not prevent others in society from consuming it; they are non-excludable and non-rival (Kattel et al, 2018, 4; Perman 2011, 126). The market-fixing view sees government as only intervening to fix markets which arise from externalities (Mazzucato 2016, 143). Waste is commonly understood to be an economic externality, which arises out of activity in other economic markets unable to absorb the issues created by the externality without government intervention (Mazzucato 2016, 143; Perman 2011, 126). Effective waste management is a public good that responds to the societal issues created by the externality. The

challenges brought today by what are traditionally considered ‘public goods’ “require radical innovations” beyond market-fixing techniques traditionally employed by government (Kattel et al 2018, 6).

Market-fixing and market-shaping theories differ in the ways they approach the use of resources to construct markets. Policies driven by market failure theory are based on the idea that efficiency in markets arises out of individuals acting in their own self-interest (Kattel et al 2018, 4). Any intervention by government into markets should be limited to allocative efficiency measures, or ‘fixing’ the failure of the market to allocate resources for welfare-maximisation and efficiency (Kattel et al, 2018, 4; Mazzucato 2016, 143). One form of government intervention can arise out of the failure of the market to account for externalities, like climate change arising out of industrial activity, in order to bring the market back into equilibrium (Mazzucato 2016, 143-144). Government intervention would involve social cost-benefit analysis, also known as social cost-efficient analysis, that generates “meaningful estimates of costs and benefits”, which seek to make “the best use of (fixed) resources at a fixed point in time (Kattel et al 2018, 13-14). This approach can be usefully applied to fixing disequilibrium in an already existing market, however, it is less suitable when policy makers endeavour to transform existing ones, or shape new markets (Mazzucato 2016, 144).

A market-shaping strategy has several features which together, represent a distinct approach to policy making. It seeks to achieve dynamic market efficiency – long term changes including the use of resources that advance innovation and investment in new technologies that create new market conditions (Kattel et al 2018, 14). This requires an approach to spending based on meeting a public policy objective, as opposed to a budgetary constraints (Kattel et al 2018, 14, 17). Another key feature is encouraging greater active involvement of the private sector and civil society to create new capabilities in the setting of policy making direction (Kattel et al 2018, 7). Periodic evaluation of the policies by all stakeholders would evaluate the suitability

of the created policies to ensure that they remain relevant and produce the desirable outcomes (Kattel et al 2018, 8, 18; Mazzucato 2020, 429). The criterion of evaluation is whether the policy tools are producing change in the direction of the policy objective, including indicators that recognise “transformative action” (Kattel et al 2018, 17; Mazzucato 2016, 152). The two forms of policy making approaches are divergent in their scope and ability to promote innovations that address complex societal challenges (Kattel et al 2018, 3; Mazzucato, 2016, 140).

Mazzucato proposes four forms of policy making which lead to market transformation, which all include the involvement of a range of institutions with different functions and capabilities (2016, 144-145). The first form is mission-oriented innovation policy, which is focused on achieving clearly defined technical goals (Mazzucato 2016, 145). The second form is the developmental state, characterised by a network of different levels of state institutions working together to create policies that stimulate new markets focused on innovative products and services (Mazzucato 2016, 147). In the third form, which comes from evolutionary economics, the state builds and supports new institutions which can accommodate a paradigm shift in a particular market which results from new technologies such as green innovations (Mazzucato 2016, 148). The fourth type, which sees the state as the “lead risk-taker and investor in the economy”, advances the idea that the state is best placed to invest in new technologies, and should receive dividends from commercial entities that successfully harness those technologies (Mazzucato 2016, 148). How the market failure and market-shaping approaches to policy making apply to South African waste management is examined in Chapter 6.

2.3.3 Actions and Interactions between economic actors

The analysis of economic actor interactions in this thesis necessitates a layered analysis to understand the multiple components of the factors that affect and influence actions and interactions. The starting point is an explanation of the concept of interactions. Bourdieu’s

concept of capital provides context for the non-interaction factors that influence an economic actor's position within society vis-a-vis- other economic actors (1986, 241). An actor's capital then influences their tendencies towards a particular type of action, what Bourdieu calls habitus (1977, 18). When these tendencies crystallise, Bourdieu would describe them as practice (1995, 52). The economic interactions analysed within this thesis that provide the foundation for the conclusions reached on the elusiveness of sustainable development are those between waste pickers and buyers in Chapter 7. Finally, Bourdieu's 'field', which is akin to a market in which economic actions take place becomes relevant in the analysis in Chapter 7.

2.3.4 Interactions

Interactions involve two or more actors and operate at the societal meso-level in contrast with actions, which, undertaken by an individual actor, operate at the micro-level (Frerichs 2011, 68). The interest of ESL is with the external and internal motivations that drive (inter)actions (Swedberg 2003, 8). (Inter)actions do not operate in a vacuum and are affected by the rationalities and regimes which 'contain' them. According to Frerichs, interactions – which occur at the meso-level, and actions – which occur at the micro-level, are constitutive of relations in society (2011, 68). Kalberg describes them as normalised regularities which are institutionalised by regimes (Kalberg 1980, 1160). (Inter)actions are informed by cultural, relational and institutional factors (Frerichs 2011, 68; Perry-Kessaris 2015, 60). For Weber, (inter)actions are informed by the four types of rationality, in turn these can be influenced by motivations based on belief, tradition, affection, or instrumentality (Perry-Kessaris 2015, 60; Kalberg 1980). (Inter)actions may be motivated by a belief in established values, such as the 'Protestant work ethic'; or to demonstrate a feeling, such as joy (Kalberg 1980, 1162; Perry-Kessaris 2015, 60). (Inter)actions may be organised in line with new and old traditions; or they may be instrumental – what Kalberg calls a "means-end rational" inter(action) (Perry-Kessaris 2015, 60; Kalberg 1980, 1161).

Bourdieu's Capital

In his essay, “The Forms of Capital”, Bourdieu defines capital as “accumulated labour” that “takes time to accumulate, and which, as a potential capacity to produce profits and to reproduce itself in identical or expanded form contains a tendency to persist in its being” (1986, 241). The accumulated labour or resources that take the form of cultural capital, economic capital or social capital must be understood to “account for the structure and functioning of the social world” (Bourdieu 1986, 242). Cultural capital relates to the embodied state: the dispositions, or habitus of the mind and body; the objectified state: cultural good such as books, machines, etc.; and finally, the institutionalised state: capital accumulated via formal institutions (Bourdieu 1986, 243). Social capital is defined as

“the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – in other words, to membership in a group” (Bourdieu 1986, 248).

Bourdieu posits that all types of capital can be derived from economic capital, “which is immediately and directly convertible into money and may be institutionalised in the form of property rights” (1986, 243).

The capital possessed by an actor can influence his/her rationality (the way in which she/he apprehends the world), and the combination of rationalities that she/he uses when deciding to proceed with a specific action or interaction (Dryzek 2013, 9; Kalberg 1980, 1148). Capital can also influence the motivations behind those actions, whether by emotion, belief, tradition or as a means to an end (Kalberg 1980, 1160-62; Perry-Kessaris 2015, 60). Ultimately, capital is a set of resources that actors possess and can determine the habitus or disposition towards certain (inter)actions in the field, thereby drawing a link between an actor’s position in society and her/his performance within it (Bourdieu 1986, 248; Bourdieu 2005, 194; Kalberg 1980, 1160-1162).

Bourdieu's Habitus

Habitus is one of Bourdieu's core concepts and has been understood in multiple ways. It is the *modus operandi* of an action, the method or way of doing something, or an organising principle that guides the direction of practice, or (inter)action, at the levels of both the individual and the collective (1977, 18; 1995, 54; Swedberg 2006, 68). Bourdieu also calls the habitus "a system of schemes of perception" which, he later goes on to say must not be made "the exclusive principle of all practice", acknowledging that the habitus is not the sole motivator of action (1977, 18, 20).

In relation to Weber's classifications, Bourdieu's habitus drives an actor towards a specific (inter)action (Kalberg 1980, 1171). Whereas Bourdieu describes the habitus as a kind of inclination, the Weberian typology is more definite in its categorisation of the motivation (Perry-Kessaris 2015, 59). A change in the classification of the motivation for a (habitual) action, may be accompanied by a change in the action, with the understanding that different motivations, or dispositions may produce the same action (Perry-Kessaris 2015, 59-60; Kalberg 1980, 1164, 1169).

Bourdieu's Practice

In relation to Bourdieu's terminology, (inter)actions, which he would call practice, are not done consciously in the sense of being orchestrated, but rely instead on a sense of practical logic coupled with purpose (Jenkins 1992, 70). Bourdieu sees practice as a system of "structuring dispositions, the habitus, which is [constituted in practice] and is always oriented towards practical functions" (1995, 52). Outside of Bourdieu's empirical observations, which are fixed to his ethnographic works, Weber's terminology is more precise in what the logic of that practice might be: instrumental, belief, traditional, affective (Kalberg 1980 1161-1162; Perry-Kessaris 2015, 59). For Bourdieu on the other hand, habitus is an essential feature of how practice is constituted.

Bourdieu's Economic Field of Struggles

According to Bourdieu, the field is the social setting in which actors engage with each other through practice (2005, 193; Jenkins 1992, 85). The field is not simply constitutive of the (inter)actions of actors within the field. It may be made up of other mini-fields, such that several firms comprise a field in which they are actors, and within that, firm is a field on its own in which the actors are senior and middle management, technical, administrative and other ancillary staff (Bourdieu 2005, 205-207). For Bourdieu, the economic field is a field of struggles, and whether the field constitutes large actors, or exists within another field, the outcome of tensions that exist in the field is reflective of actors' resources (capital) and disposition (habitus) towards certain actions (2005, 199-205).

The concept of a "field within a field" can also be extended upwards to think of the relationship between the national and international fields in which the juridical confines of the nation state are superseded by the unification of national and international fields through the process of globalisation (Bourdieu 2005, 224). The "liberalisation and deregulation" of markets is what leads to the formation of the "global economic field" which acts to unify the whole world through a set of "juridical-political measures" that remove limits to unification (Bourdieu 2005, 224).

2.3.5 Actions: Legal consciousness of rationalities

The next analytical concept to be discussed in this chapter is legal consciousness, of which multiple definitions abound. Most who ascribe to its disparate meanings would agree that legal consciousness is interested in the relationship between law and those who live in proximity to its power (Halliday and Morgan 2013, 2; Sarat 1990, 346; Silbey 2005, 323). As a field of study, it is interested in understanding the reasons for the gap between law in action and law on the books (Silbey 2005, 323). In the context of this thesis, it helps to make sense of how waste management actors support, resist and otherwise engage with sustainable development

as the legal rationality that shapes their objective world (Ewick and Silbey 1998, 247; Silbey 2005, 326).

Legal consciousness could be defined as “a process...participation – through words and deeds – in the construction of legal meanings, actions, practices and institutions” (Ewick and Silbey 1998, 247). It is conceptualised in three ways in Ewick and Silbey’s empirical work on how disadvantaged people in New Jersey, USA encounter the law. The first idea, ‘Before the Law’, sees the law as impartial, fixed and “impervious to individual action” (Ewick and Silbey 1998, 47). The second, ‘With the Law’, sees the law as “an arena of competitive tactical manoeuvring” in which actors use the law to realise personal aims (Ewick and Silbey 1998, 48). The third view of legal consciousness, ‘Against the Law’, posits that some actors defy legal norms through “foot-dragging, omissions, ploys, small deceits, humour and making scenes” in order to resist the law (Ewick and Silbey 1998, 48-49). Other scholars would agree with these conceptions, and add that dissenting collectives, as opposed to individuals carrying out acts of subversion, are also capable of legal consciousness (Halliday and Morgan 2013, 6). Dissenters are willing to disregard the legitimacy of formal state law in favour of other conceptions of law that uphold justice and ethics, choosing to engage in protest and rebellion against state law if this will help them to achieve their often-political aims (Halliday and Morgan 2013, 15-16). The concept of dissention would be recognised by Silbey, although she regards this response to the law as an anomaly (Silbey 2005, 333).

An empirical observation of legal consciousness studies has been that those who have more capital are likely to be more successful in interactions involving the law (Silbey 2005, 324-325). By capital, I mean in the Bourdieusian sense, as defined above, as the accumulated resources which an actor possesses, and which influences their disposition towards certain (inter)actions in the field of struggles (1986, 248; 2005, 121, 194; Kalberg 1980, 1160-1162). In the New Jersey study, Ewick and Silbey give the example of a housekeeper whose

interactions with the law yields a less punitive outcome only after enlisting the help of her wealthy employers (1998, 11). The housekeeper's strategy before the involvement of her employer's lawyer, was to "acquiesce to a legal system that, despite its promises of equal treatment, systematically reproduces inequality" (Silbey 2005, 323). Her lack of economic and cultural capital prevented her from having the necessary tools to challenge the legal processes around her in a way that fundamentally transformed her relation to it, beyond minor tactical resistance (Bourdieu 1986, 248; Ewick and Silbey 1998, 13). The assistance of her employers transformed her response to one where the law was a game that could be won by simply knowing the rationalities that drive the law, and how to play by those rules (Ewick and Silbey 1998, 10). Her employers, by virtue of their wealth, had the accumulated economic capital necessary to put them in a position to facilitate such a response to the law (Ewick and Silbey 1998, 11). Without their input, the housekeeper's fate at the hands of legal court system is likely to mirror those of others who are disadvantaged in their dealings with legal processes (Sarat 1990, 344,346; Silbey 2005, 353).

This understanding of how legal consciousness manifests itself in various responses to the law informs the analysis of how waste management actors, especially waste pickers, engage with the law. The logic applied by Silbey and other legal consciousness scholars dictates the potentiality that waste management actors' capital influences their disposition towards certain reactions when the law becomes visible in their day to day lives. The rationale of Silbey and other legal consciousness scholars prescribes that (inter)actions involving the law could be sites of compliance or resistance. Some actors may not be fully aware of the effect of law – its rationalities, processes and technologies – in structuring their lives. The concepts discussed in this section help make sense of how waste management actors view sustainable development, in Chapters 6 and 7.

2.4 Methodology

The methodology and methods used to gather data for this project comprises two elements. The first is the theoretical approach taken towards data gathering, the second is the process of data collection. Both trips to South Africa were risk assessed by Kent Law School and received ethical approval from the University of Kent Faculty of Social Science Research Advisory Group (see Appendix A for more information on ethical approval). This ensured that the research complied with ethical research guidelines and academic research standards held by the University of Kent and the Economic and Social Research Council (ESRC), the research funder.

2.4.1 Methodological approach

The methodology used by ESL rests on empirically-informed analysis of legal phenomena (Swedberg 2003, 2). Empiricism, which grew out of the modern scientific method, is grounded in the idea that “human knowledge is limited to what can be observed and tested” (Calhoun 2002). Empiricism’s asset comes from its recognition of the value of analysing observable data as opposed to abstract concepts (Calhoun 2002).

Empirical enquiry involves quantitative methodology, which relies on the use of numerical and statistical tools of analysis; and / or qualitative methodology, which allows for a nuanced commentary on factors that affect human behaviour (Hammersley and Atkinson 2007, 3, 8). Quantitative methods, while well suited to the physical sciences for their positivist approach to data, and used by Bourdieu in much of his ethnographic work in the form of rudimentary statistics, do not produce the data required for the forthcoming analysis (Jenkins 1992, 59; Scheyvens 2014, 40). Qualitative methodology is the branch of empirical enquiry that permits investigation into the connection between ideas and people that involve the legal, the social and the economic spheres of life.

The methodology used in this thesis falls within the ambit of qualitative methodology. More categorically, the specific research approach is rooted in ‘grounded theory’ and is deemed apt for this purpose as it allows for an analysis of empirical data using the theoretical structure provided by ESL and vice versa (Glaser and Strauss 2006, 3). Grounded theory eschews the positivist approach which seeks to answer a pre-formulated question through data analysis, and instead treats all data – the literature and the empirical data – as equally worthy of being analysed (Glaser and Strauss 2006, 3-4). This necessarily involves analysing empirical data and concepts from the literature simultaneously to evaluate what they reveal about the original research question (Glaser and Strauss 2006, 3-4).

Ultimately, grounded theory permits through observation, an investigation into the connection between ideas and people’s economic activities. This approach is congruent with Swedberg’s assertion that ESL

“should produce careful empirical studies on the role that law and regulations play in the economic sphere – drawing primarily (I myself would add) on an analysis that not only highlights social relations but also interests” (2003, 2).

The phenomena being analysed is regarded as dependent on, not independent of, society (Swedberg 2003, 2). ESL studies provide clarity by revealing the complexity of the relationship between law, economics and society (Swedberg 2003, 2). More specifically, the use of tools common to what anthropologists regard as “ethnography”, and sociologists call “case-study” has facilitated the data collection necessary to analyse the lived experiences of waste management actors (Hammersley and Atkinson 2007, 2-3).

The ethnographic observations made throughout the fieldwork, combined with interview material provided some of the sources for the vignettes seen at the beginning of each chapter. The vignettes are not “dissociated” from the analysis in the thesis but add “textures along the

way” (Law 2004, 12). Each vignette is linked in some way to the analysis which follows in the chapter. The vignettes “imagine representation in a different way” to ‘normal’ academic writing style and provide a sensory connection to some of my experiences in the field (Law 2004,12). They are written in a prosaic style with the aim to inject some pleasure into this piece of academic writing (Law 2004, 11-12).

2.4.2 Data collection process

The research methods of this thesis consists of two practical components. The first is ethnographic fieldwork, involving ethnographic observation and interviewing of research participants, and the keeping of a field note diary (Hammersley and Atkinson 2007; Scheyvens 2014, 60). The second is the collection and analysis of relevant, primary sources such as laws; policies; regulations; reports and brochures from government, international organisations, private and NGO sector organisations; academic articles, newspaper stories and blogs. These methods were chosen because the dearth of an established body of legal literature focused on South African waste management actors precludes accurate research data being extracted from secondary sources. Fieldwork facilitated the formation of relationships with key figures within the waste management economy (Hammersley and Atkinson 2007, 30). This proved a necessary pre-condition to being granted interviews and opportunities for ethnographic observation of day to day operations across a range of waste management economic actors.

The study comprised of two trips. The first was a scoping visit from October – November 2016 in urban centres in the Gauteng, Kwa-Zulu Natal, and Western Cape provinces of South Africa. This trip facilitated an understanding of the feasibility of further research into waste management in each province (Hammersley and Atkinson 2007, 29). The second visit was a substantive period of fieldwork in Gauteng and Western Cape from January – April 2017.

I commenced the first fieldwork period by attending WasteCon 2016, a biannual South African waste management conference, organised by the Institute of Waste Management of Southern

Africa (IWMSA) from 17-21st October 2016. Attendance at this conference was instrumental in the success of the empirical component of my research because representatives from all levels of government, from all major waste management companies and industry associations, and academics were in attendance. The conference networking sessions were useful because they provided a space to initiate contact with key stakeholders I identified through the course of the conference panel and plenary sessions, and desktop research. The only categories of waste management economic actor that I did not encounter at the conference were waste pickers and civil society actors. I made initial contact with waste picker representatives through contacts made at the conference, and with civil society representatives via cold-email contact. The four weeks following the conference were used to set up and conduct interviews and site visits throughout the first period of fieldwork and the beginning of the second fieldwork visit.

On the second trip, Johannesburg was the substantive site of interrogation for three main reasons. It is the largest city in South Africa in terms of population, it generates the most economic activity, and therefore waste of any other city (City of Johannesburg 2018; Kaza et al 2018, 17; Statistics South Africa 2013, 5). This has led to a great concentration of waste management and recycling companies in their surrounds (Private waste management industry association official 1, Interview 1 of 2016; Waste campaigner 1, Interview 5 of 2016). During the second visit, I also travelled to interview government waste management officials, private sector waste management officials and waste picker leaders based in Pretoria and Cape Town.

Data for the project was collected using in-depth interviews with a range of private sector, national, and local government actors; and participant observation of the working lives of private sector actors. These sources of information have contributed to the finding that sustainable development is a goal of economic policy making that is difficult to achieve in South Africa because the necessary conditions for its realisation are precluded by the structural inequalities within its society.

During fieldwork, I observed, in numerous instances, the activities of private sector actors during the course of the working day. I conducted semi-structured interviews and informal interviews with a range of actors. These actors included twenty waste pickers in one buy-back centre in Johannesburg, four waste picker leaders, one national waste campaigner, six municipal waste officials, seven private waste management company officials, eight industry body officials, and two central government officials. I recruited research participants through the process of snowball sampling. Snowball sampling is the process of recruiting research participants by asking for introductions and referrals from existing participants (Scheyvens 2014, 45). This necessitated me to initiate and develop good relationships with gatekeepers, key people in the sector who facilitated my access to research participants. Though gatekeepers helped with introductions to research participants, access to individuals being interviewed had to be “negotiated and renegotiated” (Hammersley and Atkinson 2007, 4).

I asked respondents about their views on the economic, social, environmental and legal aspects of the waste management regime in which they act and interact. I adapted research questions in order to communicate effectively with respondents depending on their level of English and their interest in and knowledge of the subject matter. Details of the research information sheet, consent form and interview questions can be found in Appendix C (information sheet), Appendix D (consent form), and Appendix E (interview questions) of the thesis. There were two instances in which a busy private waste management official did, upon receiving a phone call from me requesting an interview, ask that I do so on the spot, which resulted in me having to take notes. There was also one non-native English speaker who declined to have their voice recorded because they were concerned that they may not express themselves well on audio, which also led me to take notes during that particular interview. These instances proved a challenge and required that I remain adaptable in order to garner valuable information from these respondents. Keeping a fieldwork diary helped me to reflect daily on how my own

interactions with research respondents and engagements with the field fit into the aims of and shaped my research. The collection of material artefacts such as photographs, brochures, newspapers, products provided a tactile and visual reminder of the places visited and the respondents interviewed in the post-fieldwork phase of the project.

Throughout the research process, I had very long discussions with educated people within the waste management economy. The waste pickers I interviewed had varying levels of fluency in English, which meant that I did not interview any respondents who spoke only a native South African language. As a result, I remain unaware of any specific perspectives they may hold on their experiences as informal waste management actors. Of the twenty-four waste pickers interviewed, only one of them was a woman, which meant that I was disavowed of understanding the gender dynamics of waste picking in South Africa in my empirical data collection process from more than one woman. Most of the waste pickers I interviewed were street-based and homeless, or living in precarious housing conditions. This meant that I did not gather enough data which enabled me to form a nuanced view of the socio-economic conditions of waste pickers who work on landfills. To my knowledge, I also only interviewed waste pickers who had legal status in South Africa. The immediate consequence of this is that I did not gain first-hand knowledge of how an unfavourable immigration status affects waste pickers' economic relationships with other waste management actors. The conclusions I reached in my thesis are limited by these factors to the sample I interviewed. They cannot be generalised to the situation of every waste picker in South Africa.

In the process of analysing my fieldwork data, I have changed the names of companies, and interviewees including identifying characteristics to maintain the anonymity of my research respondents. I was able to anonymise the identity of respondents from the Recycling and Economic Development Initiative of South Africa (REDISA), the non-profit company (NPC) at the centre of the case study in Chapter 6. However, it would have been difficult to anonymise

the company itself because the formation of the company was gazetted by government,³ and it was a named party to a court case directly relevant to my analysis in the thesis.⁴

2.4.3 Researcher positionality

I entered the field as a foreigner, with a third world upbringing and western tertiary education.

This helped me to understand with some sensitivity, and recognition, many of the legacies of colonialism present in South Africa with regard to wealth distribution, race, and surprisingly, language. Understanding, I learned is a quality that is important to cultivate in the field (Scheyvens 2014, 129). Guyana, South America where I grew up, was a Dutch colony before it became an English one. Although Dutch has ceased to be the official language since the first decade of the 1800s, many Dutch place names remain. I learned in South Africa that more Dutch words are retained in Guyanese Creole English than I had ever considered. This ability to connect over language was important for me in South Africa, a country that has 11 official languages, of which I only spoke one fluently. Regarding race and racism, I was often asked if I was Black or Coloured by my appearance. My German last name, also a common thing for Black people in Guyana, firmly placed me in the ‘Coloured camp’ because as I discovered many Coloureds who look like me also had German or Dutch names. Many with this heritage spoke Afrikaans as a first language, so my understanding of Dutch went a long way. I made great efforts to learn some Zulu and Sepedi (Northern Sotho) language in order to overcome the hurdle of being Black without an ‘African’ language spoken at home in professional settings. Learning local vernacular also helped me to connect with key respondents such as

³ Department of Environmental Affairs, Notice No. 988 of 30 November 2012. Approval of An Integrated IndWMP of the Recycling and Economic Development Initiative of South Africa (REDISA).

⁴ *Recycling and Economic Development Initiative of South Africa v Minister of Environmental Affairs* (1260/2017 and 188/2018 and *Kusaga Taka Consulting (Pty) Ltd v The Minister of Environmental Affairs* (1279/2017 and 187/2018 [2018] ZASCA 01 (24 January 2019) (*REDISA V DEA*)).

waste pickers (Scheyvens 2014, 127).. One remarked in appreciation on a visit to a buy-back centre, “I hear that you are speaking Zulu sista”.

This combination of language mutability and cultural ambiguity permitted me entry through many doors that I think would not have been possible had I been less foreign yet familiar at the same time (Scheyvens 2014, 128). Being Black also prevented me from entering or being accepted in some spaces. There were times when being a foreigner compensated for my Blackness, and others when being a foreigner was a liability.

I remain content with my methodological choices but in future I would do some things differently. While it is true that I retained some distance from the dynamics I retained in the field because of my foreignness and because South Africa was new to me, it would be important to undertake a study with stronger ethnographic elements such as more sustained participant observation. Most of the fieldwork-derived data for this project came from semi-formal interviews, which respondents were happy to grant. However, I found that the distance between me and my subject matter also prevented some respondents from being as candid or open as they might have been with a ‘local researcher’, or a foreign-researcher who was more embedded into the culture (for instance through long residence). This distance began to be bridged towards the end of the fieldwork stay when my presence became more ‘known’ or ‘accepted’ within the waste management community.

My positionality as a foreign researcher conducting research in South Africa for a short period of time created the caveat that I was only privy to / aware of what respondents shared with me. In some instances I sensed that I was only able to scratch at the surface of the economic relationships I saw on display. I sensed that I received more ‘general’ answers from many respondents. This sense I became more aware of when a university lecturer requested his masters student to accompany me to the local landfill. The student, who was local to the area,

intimated to me the nuances of the dynamics of the economic relationships between waste pickers and middle men. Armed with this perspective, I was then able to ‘prod’ future respondents on these points, which then elucidated a more ‘round’ response. This particularly relates to the data I gathered for Chapter 6, on policy making, which I consider limited by these factors in its analytical understanding of the dynamics involved in the case study.

2.5 Summary

To summarise, an ESL approach is most appropriate to analyse the factors that complicate South Africa’s aim to achieve sustainable development in its waste management economy. It provides meta-, macro-, meso- and micro-level inquiry into the international, national and local entanglements involved in how sustainable development organises the South African waste management economy. The inclusion of empirical methods as a core component of ESL facilitates insight into the lived experience of waste management actors especially through ethnographic observation, interviewing, field notes and the collection of artefacts. The harmonisation of concepts from political science, economics, sociology and law to analyse the empirical observations, adds depth to the ESL examination of the international, national and local aspects of how sustainable development structures the South African waste management economy. This exercise involves embedding ideas from political scientist Dryzek’s work on environmental politics to identify the relevant rationality. Ideas from socio-legal scholars Halliday and Carruthers explain how that rationality moves through international, national and local spheres by way of legal translation. The work of innovation economist Mazzucato helps to build the argument that making and implementing waste management policy is difficult to do within a market failure centred public governance framework and an unequal society. The work of Bourdieu on competitive (inter)actions within markets, Weber on motivations for economic actions, combined with the work of Ewick and Silbey on actors’ legal consciousness provides a meso and micro level analysis of sustainable development in the economy.

ESL facilitates a holistic analysis that goes beyond other legal disciplines, as discussed in section 2.2 of this chapter. It consists of a framework flexible to accommodate the conceptual combinations discussed throughout this chapter that are required to investigate the dynamics within the South African waste management economy. This makes it highly applicable in the context of studies with a strong empirical component such as this one.

VIGNETTE 3:

INFORMAL WORK BUT NO FORMAL JOBS



Figure 2: The Materials Recovery Facility, Goedrand. Source: Author.

26th January 2017: Notes from one agenda item of a waste picker association meeting conducted in Sotho, with an interpreter present, regarding the MRF at Goedrand:

Construction of the MRF at Goedrand began in 2014. The owners of the MRF promised to offer up to 261 jobs to waste pickers from the local area. One of the waste campaigners present asked if anyone had gotten a job. None of the waste pickers was employed by the owner of the MRF. The waste campaigner had written a letter to Members of the Mayoral Committee (MMC) and the municipality regarding the jobs that were promised but that did not materialise. But what do waste pickers want to do next? Go to the media? Leave it alone? Take another action? The company that constructed the MRF has been promoting their promises to the government and to the National Waste Khoro (national waste meeting) but waste pickers are not being offered any jobs.

The waste pickers said that they were at Goedrand landfill site, and that was closed to make way for the construction of the MRF so they were moved, but they would like to go back to

that landfill. A man that others referred to as ‘Papa’, says that the landfill has been closed officially so that this is not possible and that they need to get help to get a job at the MRF. A woman referred to as ‘Mama’ said that waste pickers were first instructed to form cooperatives by the government and the larger waste picker association, then they were promised jobs at Goedrand MRF, so the cooperatives should get jobs there. Papa suggested that waste pickers should march to show the municipality that they lied to the waste pickers and that waste pickers want the jobs that they were promised. A third person said that a letter should be written to the new Members of the Executive Council (MEC) of the municipality saying what waste pickers want – the jobs that they were promised. If there is no response after one month, the waste pickers should march or give notice to march. Not everyone in the meeting is from the city so everyone should go back to their landfills and ask for consensus on sending a letter. By the time of the national waste picker meeting in July 2017, it should be decided whether to write a letter from the national waste picker association.

Two ladies suggested that the waste pickers should just send a letter and after one month if there is no response or an unsatisfactory response, the leaders should inform constituents and advise them to march. Someone else suggested that a letter should be sent and the municipality should be given 7 days to respond, and if they do not respond, write a second letter and give them another 7 days to respond. If there is no response, a third letter should be sent, giving 3 days to respond. If no response, then waste pickers should march. The waste campaigner suggested giving the municipality 21 days to respond to the first letter, 7 days for the second letter and in the second letter mention the plan to march. Waste pickers should do this because then the municipality cannot go to the press saying that the process was unfair. The meeting voted and unanimously adopted the three-letter approach. By the end of the meeting, I was able to surmise that the waste pickers were discussing the MRF I had visited in Vignette 2.

3 AN ESL APPROACH TO WASTE MANAGEMENT IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

3.1 Introduction

Chapter 2 presented the reasons for the applicability of an ESL approach to analysing the relationship between sustainable development and waste management in South Africa. Based on the ideas of Weber, it is flexible to blend ideas across disciplines that produce a holistic and systematic analysis of the relationships within the waste management economy. The dynamic of the South African waste management economy result from how sustainable development operates from the international to the local level to reinforce existing societal inequalities. This chapter sets out to show how sustainable development has largely ignored waste management and waste pickers in the literature. The chapter compares the issues facing the artisanal and small-scale mining (ASM) economy and the informal waste management economy to illustrate this point. The chapter further explores the debates around informality and formalisation to show how these are aptly applied to questions of sustainable development and waste management in South Africa.

The ESL approach taken by this chapter helps to demonstrate the value of this study by revealing the gaps in the waste management and sustainable development literature. This gap is derived on the basis of the finding that the sustainable development literature covers many environmental economies but there is a dearth of coverage of the urban waste management economy from a legal perspective (see Blackett 2018; Dias and Eslava 2013; Gill 2019; Samson 2017; Routh 2014; Routh and Fassi 2016 for some studies of urban waste management and law in the context of the Global South). The chapter makes the case for a study on waste management within the context of sustainable development through an analysis of the mining economy, which shares many similarities with the waste management economy. These similarities extend to the issues faced by informal economic actors including the challenges of

formalisation, health and safety concerns, the right to access the place of work and the elusiveness of sustainable development. The chapter draws on a wide variety of sources to show how the study addresses a gap in the literature by contributing to the empirical and conceptual enrichment of academic and policy thinking on waste management and sustainable development.

This chapter attains its aims in two parts. Firstly, it outlines the reason for studying waste management in the context of sustainable development. This includes a detailed discussion of the definition of sustainable development and waste, and their relevance to the overall thesis aims. This is followed by an analysis of issues common to artisanal and small-scale mining (ASM) and waste management, such as informality, to argue that it is possible to apply a sustainable development lens to the waste management economy in the same way that it is applied to other environmental economies. The sustainable development literature is capable to accommodate studies of the informal waste economy as it has with the ASM economy which is characterised by informality. Those who operate within the informal waste management economy and the ASM economy face criminalisation, barriers to entry and lack of access to skills development and health-threatening, hazardous work conditions (Blackmore et al 2013, 9; Dias and Samson 2016, 24,43; Echavarría 2013, 42-48, 86; Hilson 2016, 18).

Secondly, the chapter delves into an ESL analysis of waste management by scrutinising waste management at the meta-, macro-, meso- and micro-levels. This analysis reveals an insufficient coverage of urban waste management in the sustainable development literature; that most interactions within the formal waste management regime are informal; and that sustainable development focuses on formalising interactions. An ESL approach to waste management in the context of sustainable development facilitates a holistic and systematic approach to understanding how international, national and local factors are interwoven in South African waste management economy dynamics. The ESL approach interrogates the rationalities that

influence the regime and how these are related to the economic (inter)actions observed on the ground in South Africa. In terms of this chapter, the ESL analysis reveals the importance of concentrating on waste pickers and their role in the waste management economy as a topic of study. The ESL approach also underpins the wider findings of the thesis that South African sustainable development policy promises environmental protection, social development and economic growth, however, the policy fails to produce social and economic development for waste pickers. This outcome is the cost of South Africa's use of sustainable development as a tool to gain legitimacy within the international community.

3.2 Waste management in the sustainable development context

3.2.1 The concept of sustainable development

Before delving into the reasons for studying waste management in the context of sustainable development, this section defines the meanings of sustainable development, of waste, and the reasons for investigating the relationship between sustainable development and the waste management economy. The most widely accepted definition of this contested international concept was agreed by the international community of states during the 1987 World Conference on Environment and Development and codified in the resulting conference report—Our Common Future. Ideas which comprise sustainable development have been appearing much earlier than the 1987 World Conference. The 1980 World Conservation Strategy: Living Resource Conservation for Sustainable Development (WCS)—which was authored by IUCN, the WWF, the FAO and UNESCO—also mentions sustainable development several times, although it is not clearly defined in this document (IUCN 1980). Many have suggested that the stated goal of the WCS—that is, “the integration of conservation and development to ensure that modifications to the planet do indeed secure the survival and well-being of all people”—is the precursor definition of sustainable development (Magraw and Hawke 2008, 615). However, the ideas that embody sustainable development as

understood today have been extant at least since the 1972 Stockholm Declaration on the Human Environment which emerged from the first international conference for the discussion of environmental issues (Magraw and Hawke 2008, 614-615).

Our Common Future, widely referred to as the Brundtland report defines sustainable development as, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (WCED 1987, para 1, 41). For clarity, it is important to distinguish the meaning of sustainable development from similar terms such as ‘development’ and ‘sustainability’. The use of ‘sustainable’ in the definition immediately implies a distinction between ‘sustainable development’ and ‘development’, which is defined by the Brundtland report as involving a progressive transformation of economy and society (WCED, 1987, para 3, 41). This could be interpreted to mean that sustainable development is development which, at the very least, does not contribute to the depletion of resources. Sustainable development is differentiated from development because it involves environmental protection in addition to the transformation of economy and society. Development is otherwise defined as the “escape from the undignified condition called underdevelopment” (Esteva 2010, 1-2). This idea of underdevelopment as the pre-cursor to or opposite of development came to the fore in a speech given by former U.S. President Truman in which he suggested that all countries should aspire to follow the U.S. model of development in the post-second-world-war period (Esteva 2010, 1).

Sustainable development is also often confused with sustainability, and there is no strong distinction in much of the literature (see Beckerman 1994; Magraw and Hawke 2008, 623; Redclift 2005; Sands et al 2012, 206; WCED 1987). The UN Statistics Division Environment Glossary defines sustainability as:

“(a) the use of the biosphere by present generations while maintaining its potential yield (benefit) for future generations; and/or (b) non-declining trends of economic growth and

development that might be impaired by natural resource depletion and environmental degradation” (UNSD, 1997, 71).

This definition of sustainability identifies three out of the four principles that states have agreed fall within the umbrella of concepts attributed to sustainable development in international law: inter-generational equity, sustainable use of natural resources and the integration of environmental concerns into development (Sands et al 2012, 207; UNSD, 1997, 71). By this definition, the fourth concept, intra-generational equity and environmental justice, is what sets sustainable development and sustainability apart. In contrast, Dryzek makes a clear distinction in his work on environmental politics. He describes sustainability as “imaginative attempts to dissolve the conflicts between environmental and economic values” and characterises sustainable development as one of these imaginative attempts (Dryzek 2013, 15, 145). The other form of sustainability he identifies is ecological modernisation (Dryzek 2013, 15).

3.2.2 Why is sustainable development relevant?

Sustainable development is relevant to the thesis in two ways. The first is that this research study problematises waste management and recycling services as an environmental economy, with environmental, social and economic dimensions (Perman 2011, 115). This characterisation fits well with the idea that sustainable development is concerned to link human activity and welfare with environmental concerns, in line with anthropocentric approaches to environmental problems (Zalta 2015). This strong emphasis in anthropocentrism on human welfare has led the economist Amartya Sen to use the term ‘sustainable human development’ as a more precise moniker that recognises the link between sustainable development and human welfare (see Anand and Sen 1994, 45). Anthropocentrism has become the dominant view in ethical approaches to the environment, and is preferred by state and non-state actors including jurists (Beyerlin and Marauhn 2011, 77; Feris and Tladi 2005, 252; Handl 1995, 38; Sands

2000, 374-375; U.N. 2015; van der Linde and Basson 2013, 50-2; WCED Report, 1987, 27). The contrasting view is deontology, which developed in the 1960s but has origins in the Romantic movement (see Humphreys and Otomo 2016; van der Linde and Basson 2013). Deontology is more interested in safeguarding the environment for its intrinsic nature, than the impact of those protection measures (Feris and Tladi 2005, 252). Deontological ideas have not gained traction in international environmental law, but remain evident in documents such as Annexe 1 to Our Common Future: Proposed Legal Principles for Environmental Protection and Sustainable development adopted by the WCED Experts Group in Environmental Law; and the Draft Principles on Human Rights and the Environment by the UNCHR (Glazewski 2005, 7). The Proposed Legal Principles sets out “the fundamental right to an environment adequate for [their] health and wellbeing” for all human beings in Principle 1. The Draft Principles on Human Rights and the Environment provides that all “have the right to a secure, healthy and ecologically sound environment”, (E/CN.4/Sub.2/1994/9, Annex I (1994)). Although Chapter 7 of this thesis does highlight the link between sustainable development and human welfare, it does not use the term ‘sustainable human development’ because it is not in common use.

The second reason for focusing on sustainable development is the South African state recognition of the relevance of good waste management and recycling to good environmental management and sustainable development, more generally (Schedule 3, s.34 of the National Environmental Management Act 1998 (Act 107 of 1998) (hereinafter NEMA 1998); Schedule 2, s.11(2) of the NEMA 1998). The concepts which guide the shape of environmental law regimes in South Africa mirror those of international environmental law; and the most dominant normative concept, at least in law, is that of sustainable development, (s.24(b)(iii) of the Constitution; NWMS 2011, p 10; Preamble and s.2(a)(vi) of the Waste Act 2008). This is a point discussed in further detail in Chapter 5 on the South African econolegal regime. That

is not to say that the issue of waste management and recycling in South Africa cannot be seen through other lenses—for example, as a very immediate concern with the sustenance of livelihoods for those engaged in the sector; or in terms of the potential for the sector to create jobs and alleviate poverty; or as part of the ongoing discussion on how concepts such as legality, illegality, informality and formality exert pressure on various actors within the sector. But the thesis limits the focus to one, large aspect of the waste story: sustainable development.

3.2.3 How is waste understood in this thesis?

This sub-section defines waste, normatively and conceptually. It sets out the meaning of waste as codified in international law, and the relevant South African legislation in order to anchor the understanding of waste in normative terminology. Conceptually, it draws on the economics literature to define waste as capable of being an environmental public good at the centre of an environmental economy (see Perman 2011, 115). This position provides a basis for an overarching analysis concerned with waste-related economic interactions. It finds that normatively, waste is something that can be thrown away, and is either recyclable or non-recyclable. Conceptually, waste is understood as an environmental public good, to be managed by the government. Both the normative and conceptual understandings of waste can allow for the acceptance of informal and formal modes of waste management within an econolegal framework (see Ostrom 1990). In her book on governing the commons, Ostrom sets out models for the small-scale management of environmental resources, which can be applied to waste management (1990).

Legally / normatively

An awareness of the meanings of waste and appropriate waste-related terms set out in international law, by international organisations, and the applicable South African legislation provides a starting point for gaining insight into the relationship between legal and conceptual notions of waste. In its Global Waste Management Outlook of 2015, waste is defined very broadly by the UNEP as “unwanted or discarded materials” “rejected as useless, unneeded or

excess to requirements” that are a “combination of four wrongs – a wrong substance, in a wrong quality, in a wrong place at a wrong time” (Wilson and Rogero 2015, 22). The World Bank includes industrial, medical, hazardous, electronic, construction and demolition waste in the definition of solid waste contained in its What a Waste 2.0 report (Kaza et al 2018, 9). In its Waste Management report of 2012, it states that “waste is mainly a by-product of consumer-based lifestyles” (Hoornweg and Bhada-Tata 2015, 3).

There is no international legal treaty which specifically addresses the definition, disposal and treatment of municipal solid waste. The international law definition discussed here is drawn from an international legal instrument which addresses the movement of hazardous waste across borders. Article 2 of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1989 defines wastes as “substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law”. The reference to national law suggests that the Convention identifies national law as the source of guidance on what substances or objects may constitute waste. Further, the Convention, does not offer a definition for recycling to complement its very broad definition of waste. Instead, it mentions that recycling is one of the reasons for which the movement of waste across borders is permitted (Art.4(9)(b) of the Basel Convention 1989). The convention has been critiqued as a legal framework to facilitate global waste flows as opposed to a framework for waste minimisation (Barsalou and Picard 2018, 890). The framing of how waste is defined in the Basel convention increases the importance of how South African laws and policies treat waste as a concept. The Waste Act 2008 enshrines definitions for several types of waste at s.1. Of note is the basic definition:

“**waste**” means any substance, whether or no that substance can be reduced, re-used, recycled and recovered—

(a) that is surplus, unwanted, rejected, discarded, abandoned or disposed of;

- (b) which the generator has no further use of for the purposes of production;
- (c) that must be treated or disposed of; or
- (d) that is identified as a waste by the Minister by notice in the Gazette,

and includes waste generated by the mining, medical or other sector, but—

- i. a by-product is not considered waste; and
- ii. any portion of waste, once re-used, recycled and recovered, ceases to be waste;

Of interest, s.1(d)(ii) of the Waste Act 2008 has the effect that material which has undergone the recovery and recycling process is no longer waste, however the act is silent on a definition of what the waste material then becomes.

A look at the definition of recovery, reuse and recycle provide some clue into normative conceptions of materials which cease to be waste. “Recovery” is defined as “the controlled extraction of a material or the retrieval of energy from waste to produce a product” (s.1 of the Waste Act 2008). This definition suggests that what was previously waste is now considered something capable of becoming a “product”. The definition of “re-use”, “to utilise articles from the waste stream again for a similar or different purpose without changing the form or properties of the articles,” suggests an exclusion of processing which would change the material form of waste before it is re-used. This is likely outside the scope of the material streams being considered in this thesis, due to empirical observations of materials being collected and resold for the purpose of creating manufacturing raw materials as opposed to immediate re-use. “Recycle” is defined as “a process where waste is reclaimed for further use, which process involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material” (s.1 of the Waste Act 2008). This definition suggests that upon separation, some waste can be converted into a “product”, or in the first instance, a “raw material”. The definition also suggests that through a process of

separation, recyclable waste and non-recyclable waste can be isolated for either disposal or conversion to raw material or product.

Several terms are used to denote waste that has been recovered and recycled in the Waste Act 2008 and the NWMS 2011. The Waste Act 2008 refers to “recycled material” at s.17, however it does not define it. The NWMS 2011 also mentions “recycled material” and “recyclable waste” in several places without defining it (see NWMS 2011). It associates “recyclables” with paper, plastic, metal, glass and tyres, which corresponds with the types of material streams handled by those waste management actors who were interviewed for this thesis (see NWMS 2011).

Conceptually

Waste management is conceived as an environmental public good which requires government intervention and privileges formal modes of organisation, as opposed to informal modes of organisation (Kattel et al 2018, 4; Mazzucato 2016, 143; Perman 2011, 113, 121). As an environmental public good, waste management is a good related to market activity that needs to be provided for the benefit of society regardless of citizens’ capacity to pay (Kattel et al 2018, 4; Perman 2011, 115). The market activity in question produces a negative external effect on the environment and society but that is not quantified by the market, known as a ‘negative externality’ (Kattel et al 2018, 4; Mazzucato 2016, 143; Perman 2011, 113, 121). Orthodox economics thinking would suggest that the government provides for and regulates the environmental public good in order to address the negative externality because the market place does not provide an adequate mechanism for its regulation (Mazzucato 2016, 143; Perman 2011, 115). The provision can take the form of a market created for the purpose of reaching a public policy goal such as the reduction or elimination of pollution, through a mechanism such as carbon trading, or in the case of waste management the policy goal may be to reduce landfill space, through mechanisms which encourage recycling (Kattel et al 2018, 4,

6). I conceive of the ‘waste management economy’ as the subset of the environmental economy that is concerned to manage waste in a way that promotes the design, production, buying and selling of waste-management-related goods, products and services within an econolegal regime. I further define the ‘recycling economy’ as the subset of the waste management economy concerned with the design, production, buying and selling of recycling-related goods and services.

3.3 This study in the context of sustainable development

Research on sustainable development and its applicability in the local setting has covered a wide range of topics related to the environment, the economy and society. With regards to studies that focus on the environment, much effort has been put into understanding the dynamics that arise as a result of investment into natural resource extraction projects particularly in developing countries (Faundez and Tan 2015, 110). This particular observation refers to how international economic law has been deployed to facilitate trade and investment in extractive natural resources with limited focus on environmental protection. Other studies focus on the climate change; forest governance; mining; water, energy policy; and land rights (see Adelman 2019; Baxi 2019; Gebremichael 2019; Kaime 2019; Kidd 2019; Lesniewska 2019; and various others in Cullet and Koonan 2019). Studies on sustainable development and its impact on society can cover labour, gender and other human rights in the context of poverty alleviation and eradication (see Faundez and Tan 2015 for a discussion). The literature, in congruence with findings of this thesis, demonstrates that the conflict between the sustainable development pillars of environmental protection, economic growth and social development remains to be resolved practically (Faundez and Tan 2015, 111).

Sustainable development does, to some extent cover the transboundary movement of toxic waste across borders (Barsalou and Picard 2018, 888; Dehm and Khan 2019; Wirth 2008). However, it neglects to cover urban waste management dynamics in its literature to a great

extent (Gill 2019). The consequence of this has been that the literature does not reflect how people, especially waste pickers, connect with waste. The lack of coverage of waste pickers in the sustainable development law literature suggests that the literature privileges formality, when most recycling activity within the waste management economy is conducted by informal waste pickers. Other disciplines have a long history of covering waste pickers within their literature. The evidence for this is found in the vast literature written in South Africa by cultural geographers (Samson 2009; 2015; 2017); economists (Blaauw and Viljoen 2011; 2011; 2012; 2016; 2016; 2018; 2019); environmental scientists (Godfrey et al 2015; Godfrey et al 2016); and sociologists (Schenck 2011; 2012; 2016; 2016; 2018; 2019).

3.3.1 An ESL comparison of waste management with ASM

This section builds a case for the value of this study to the academic literature on sustainable development, environmental law and ESL. It uses an ESL analysis to survey the sustainable development-focused mining economy literature to demonstrate how an investigation into the waste management economy can detect similar issues. The first step, a brief evaluation of the ASM literature, reveals that many small-scale and artisanal miners operate on an informal basis in a formal econolegal framework. The second step draws on the wider literature and is centred on the relationship between informal and formal interactions within the waste management economy. This involves the definitions of informality and formality, and the relationship between waste pickers and informality. The two economies feature many similarities when an ESL analysis is applied.

It has already been established above and in Chapter 2, that the rationality in focus for the comparative analysis of waste management and ASM is sustainable development. The rationality, has been chosen for its impact on each economy following a review of the legal and policy framework governing the regime. Both the waste management economy and the mining economy are regulated by regimes which are formal and that privilege formal activities

and formalised actors (Echavarría 2013, 8-9; Samson 2015, 822). Both regimes have large numbers of informal actors, in the form of waste pickers and artisanal miners who have similarly entered their respective economies to ensure their survival (Buxton 2012, 23; Dias and Samson 2016, 6; Echavarría 2013, 72). Waste pickers and ASM miners also face similar challenges, such as criminalisation, barriers to entry to other economic activities, and lack of access to skills development within their respective economies (Dias and Samson 2016, 43; Echavarría 2013, 42-48, 86). Waste pickers and ASM miners both work under hazardous conditions that affect their health (Blackmore et al 2013, 9; Dias and Samson 2016, 24; Hilson 2016, 8;).

Waste pickers and ASM miners are considered to be on the periphery of the economies in which they operate despite their respective contributions (Buxton 2012, 3; Dias and Samson 2016, 15). Their activities are both highly labour-intensive (Blackmore 2013, 9; Dias and Samson 2016, 17). They are both likely to encounter middle men who engage in economic exploitation of waste pickers and ASM miners in their role as intermediaries between them and more formal actors (Blackmore 2013, 8; Dias and Samson 2016, 26). The (inter)actions of waste pickers and ASM practitioners as primarily informal actors arouses the debate between informal and formal modes of economic interactions, in the context of sustainable development which privileges formality. A debate through the lens of sustainable development can give insight into the structural problems of inequality within the waste management economy that persist as a result of sustainable development. Policymakers grappling with questions of how to formalise waste pickers, and ensure that all three pillars of sustainable development are achieved for waste pickers would benefit from such analysis.

ASM miners in the mining economy

ASM miners operate largely on an informal basis, with an estimated 100 million active across the world, in a mining industry regulated by a web of laws at international, national and local

levels (Blackmore et al 2013, 9; Echavarría 2013, 8-9). In some cases, ASM is seen as “a response to inadequate or inappropriate regulatory frameworks” which place a heavy financial burden on ASM miners who wish to comply with the law (Hilson 2016, 4, 14). Laws that place an excessive financial burden on formal actors to comply, and deter informal actors from becoming formal are recognised by the economist de Soto as “bad law” (de Soto 1989, 151). ASM miners can be subject to criminalisation if their activities are not seen as legitimate (Echavarría 2013, 42). The possibility for formalisation is slim in some cases because ASM may take place on land, which, although technically owned by the government, has been leased to a large mining company for prospecting purposes (Echavarría 2013, 53; Hilson 2016, 15). In others, the legal regime does not differentiate between informal and formal miners, or mining operations according to size (Echavarría 2013, 8-9).

ASM miners may be motivated by different, overlapping factors to work in the mining economy (Perry-Kessaris 2015, 60). Some ASM miners are parts of families and communities that have been engaging in mining for centuries (Echavarría 2013, 53). This would be classified as a ‘traditional’ motivation for mining action in the ESL framework (Echavarría 2013, 53; Perry-Kessaris 2015, 60). Others include the need to engage in several economic activities to ensure livelihoods, which would be classified as an ‘instrumental’ motivation (Hilson 10, 2016; Perry-Kessaris 2015, 60). In addition to the challenges they face in common with waste pickers, ASM miners may face problems related to sexual exploitation and land ownership (Echavarría 2013, 51).

Informal waste pickers in the waste management economy

Waste pickers are informal workers who collect 80-90 per cent of all materials recycled in South Africa, and form part of an international commodities value chain worth just under £1 billion to the South African economy (DST 2013, 20; Godfrey et al 2016, 2). It is estimated that ninety thousand people in South Africa work under harsh environmental conditions to

make a living from waste picking, and reduce reliance on South Africa's benefits system (Godfrey et al 2016, 2). Waste pickers generally work in two environments. The first of these is on the landfill, where their work contributes to environmental preservation through the reduction of landfill space (Godfrey et al 2016, 5). The second location is on the street, where waste pickers gather end-use material from a variety of sources including households, businesses and street-located rubbish bins. Less than 10 per cent of waste pickers in South Africa are organised into cooperatives that provide waste management services to waste generators (Godfrey et al 2016, 3). The vast majority work informally as individuals across a range of ages and nationalities. A waste picker may work up to twelve hours per day and earn £6 per day on average on a continuum from £2.50 to £17 per day compared with the South African minimum wage of £1 per hour (Fieldwork notes 2016 and 2017; s.1, Schedule 1 of the National Minimum Wage Act 2018). Street-based waste pickers in Johannesburg enjoy less barriers to enter and exit the waste management economy because the space in which they work is subject to less control than on a landfill, which is usually managed by a municipal authority or a private company (Fieldwork notes 2016 and 2017; Schenck et al 2019, 91).



Figure 3: Waste pickers at Onderstepoort Landfill, Pretoria. Source: Author.

An analysis of the legal regime governing waste management reveals that some economic activities related to materials procured by waste pickers are capable of being permitted whereas

others are not under South African waste management law. For instance, waste picking for recycled materials on a landfill is not permitted by law (s.51 of the Waste Act 2008), whereas waste picking on the street is permitted by law, subject to compliance with the legal requirements for doing so (s.24 of the Waste Act 2008). Waste pickers who are illegally resident in South Africa are not eligible for a permit, even if the activity is capable of being permitted under the waste management regime (s.42 of the Immigration Act 2002).



Figure 4: A sign at New England Road Landfill, Pietermaritzburg. Source: Author.

Actors operating in the South African waste management economy are mandated by law to have a permit to conduct waste management activities and to only engage in economic transactions with other waste management actors who also have a permit (s.21(2), s.23(1)(a), s.34 and s.37 of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013). Since landfill-based waste-picking is not capable of being permitted by South

African law, recycling companies who regularly engage in purchasing recycled materials from landfill-based waste pickers are acting in contravention of the law (s.51 of the Waste Act 2008). This practice is usually carried out with the permission of the landfill manager, despite it being in violation of the landfill manager's licence to operate (Fieldwork notes 2016 and 2017). Recycling companies with a waste management permit that purchase from waste pickers at a buy-back centre are technically not authorised to do so if the waste pickers do not have a permit to engage in waste management activities (s.23(1)(a) of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013). If a waste picker has a permit, a recycling company with a waste management permit is only capable of purchasing from the waste picker in a setting capable of being authorised for this purpose, such as a buy-back centre or MRF (s.23(1)(a) of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013; s.51 of the Waste Act 2008). Thus a waste picker with a permit and a recycling company with a permit would not be able to transact on a landfill. A recycling company without a permit would technically not be permitted to purchase recycled materials from a waste picker whether or not they have a permit to do so, as the waste picker would be going against the law by transacting with an unauthorised entity (s.23(2) of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013).

These scenarios raise a number of issues. Often, legal interventions that affect economic transactions between waste pickers and recycling companies incapable of being permitted punish the waste pickers for waste-picking activity, but not the recycling company (Fieldwork notes 2017; Private sector waste manager 3, Interview 20 of 2017). Legal interventions also punish waste pickers capable of being permitted who are collecting to sell to a recycling company with or without a permit. The consequence of this is that waste pickers may find themselves excluded from a landfill, or criminalised during the course of street-based waste picking (Fieldwork notes 2016 and 2017).

It is acknowledged that recycling companies face pressure from authorities to seek and obtain a permit for waste management activities (Private sector waste manager 2, Interview 12 of 2016; Senior waste management municipal official 1, Interview 2 of 2016). However, they may not face any pressure to ensure that they purchase recycled materials from persons and entities with permits, although the law requires them to do so (Fieldwork notes 2017; Private sector waste manager 3, Interview 20 of 2017). The waste picker is likely collecting recycled materials to sell to a recycling company in order to earn a living that ensures her/his basic survival (Schenck et al 2019, 543; Waste pickers 1-20, Interviews 26-45 of 2017). In the case of a landfill, it has been observed that recycling companies may not be present on a landfill but for the presence of sufficiently large numbers of waste pickers collecting materials on the site for resale (Fieldwork notes 2017; Waste picker leader 3 and 4, Interviews 21, 24-25 of 2017). Why are the authorities more inclined to criminalise waste pickers than recycling companies for partaking in activities pursuant to the same economic transaction? Chapter 7 offers some perspectives from waste pickers on the answer to this question.

Barriers to enter the formal waste management and mining economies

Barriers to entry into the informal waste and the ASM economies are low, whereas barriers to entry into the formal waste and ASM economies are high. Waste pickers and ASM miners both operate within economies with high levels of informality (Echavarría 2013, 18; Godfrey et al 2016, 2). Waste pickers, like ASM miners seeking to enter the formal economy need to fill in forms, have the education requisite to navigate the forms, as well as operating capital and the access to credit needed to meet the bureaucratic requirements of formalisation (Echavarría 2013, 9; Schenck et al 2019, 91). However, both waste pickers and ASM miners are generally understood to have low levels of education, and low levels of financial assets which makes it difficult for them to comply with the costs and technical aspects of the formalisation process (Dias and Samson 2016, 11; Echavarría 2013, 86; Samson 2009, 4-5; Schenck 2019, 85). The

costs involved in travelling to administrative centres to comply with formalisation processes has also been recognised as a barrier (de Soto 1989, 135; Echavarría 2013, 87).

In the context of mining, this is compounded in some cases by a lack of differentiated approach to different sizes of mining operations, whereas the waste management regime in South Africa recognises the different capabilities of actors to comply with the law (Echavarría 2013, 82; s.1, Schedule 1, Category A of the Waste Act 2008). The South African waste management regime created a more democratised environment for waste pickers to engage with the formal economy, than was the case for ASM miners in several other countries including Colombia, Ghana, Rwanda, Senegal and Tanzania (Echavarría 2013, 82; Hilson 2016, 15; s.1, Schedule 1, Category A of the Waste Act 2008).

3.3.2 ‘Informal economy’ and ‘Formal economy’

This section discusses the terms ‘informal economy’ and ‘formal economy’ before launching into a discussion of how these concepts relate to waste pickers in South Africa. It examines how the law treats economic interactions involving waste pickers and other waste management actors operating either informally or formally. The objective is to foreground issues of inequality and the difficulty of achieving sustainable development as shown in the scrutiny of waste picker economic interactions in Chapter 7.

Definition of ‘Formal economy’

The term ‘formal economy’ is not readily defined in the literature or international instruments but is implicit (see ILO Recommendation 204, 2015). Instead, the process of ‘formalisation’ has been defined as the transfer of informal, self-employed or waged workers, and informal entrepreneurial enterprises to a system in which these workers and / enterprises are registered by the authorities, and their activities are subject to the requirements of regulatory scrutiny and compliance (Chen 2012, 15-16; ILO Recommendation 204, 2015). This suggests that

formalisation is seen as a form of development, and the meaning of formal economy should be easily understood and accepted (Rittich 2019, 26).

Definition of 'Informal economy'

The term 'informal economy' is still being defined, debated and challenged as an idea, despite the fact that informality pervades the market economies of Global South countries like South Africa (Ashiagbor 2019, 2,5). The definition of and what is understood to comprise the informal economy differs among various schools of thought, including the dualist school, the legalist school, the structuralist school, the voluntarist school, and the il-legalist school (Chen 2012, 4-6; ILO 2013b, 4). The extensive research done by the International Labour Organisation (ILO) on the informal economy has been greatly informed by each of these schools and elements of each definition can be evidenced in ILO documents.⁵

The dualist school of thought sees the informal economy as completely separate from the formal economy, and includes modes of economic activity that provide income during times of crisis (Chen 2012, 4-5). The classic, dualist school definition arises out of a study published in 1973 that coined the phrase 'informal economy'; and defined it as comprising the low-income activities of those who cannot not find work in the formal, wage sector (Chen 2012, 4-5; Hart 1973, 68). This entanglement of informal waste management economic actors with those in the formal waste economy counters the dualist view of the two economies being separate in the South African context. The literature does point to a connection between informality and a lack of options within the formal sector (Ashiagbor 2019, 8; Schenck et al 2019, 91). Waste pickers in South Africa often turn to this activity because of a lack of jobs in

⁵ A search for 'formalisation' under the topic 'informal economy' on the ILO website, <<https://www.ilo.org/global/lang--en/index.htm>> reveals over 45 publications in addition to other documents on 13th September 2020.

the formal economy (Fieldwork notes and Interviews 2016 and 2017). However the entanglement of the informal and the formal waste management activities counters the dualist view of a clear separation between the two economies (Schenck et al 2019, 91).

The structuralist view focuses on the ways in which informal economic actors fill gaps left by formal economic actors through the operation of small-scale enterprises (Chen 2012, 5; Moser 1978, 1061). This view asserts that the informal waste management economy helps to facilitate market governance as part of the fabric of the wider urban economy (Roy 2005, 148). The existence of up to 90,000 waste pickers who collect 80–90 per cent of all materials recycled in South Africa fits with the structuralist view that the informal economy has arisen and expanded in response to a need (Ashiagbor 2019, 5; Godfrey et al 2016, 2; Schenck et al 2019, 81).

The legalist and voluntarist approaches are distinguishable through the motivations attached to them. The legalist approach regards informal economic actors as seeking to avoid the time and cost associated with formal economy bureaucracy (Chen 2012, 5; de Soto 1989, 132-133). Like legalists, voluntarists consider that individuals choose to work informally to avoid the costs of being formalised, but differ by reasoning that informal economic actors conduct a cost-benefit analysis of welfare provision in the formal economy before deciding to work informally (Chen 2012, 5-6; Maloney 2004, 1173). These arguments point to a deficiency in the state regulatory apparatus in the form of excessive bureaucracy and poor welfare services as a reason for the choice to work informally. The literature suggests that waste pickers are likely to cite bureaucracy as a reason for working in the informal sector as they value the low barriers to entry and exit from waste picking, which demonstrates the relevance of the legalist view (Schenck et al 2019, 91; Viljoen et al, 2018, 10).

The il-legalist school of thought deems informal economic activities as those that are not authorised, or that are deliberately hidden by those who engage in them (ILO 2013b, 4). In its

Recommendation 204 concerning the transition from the informal to the formal economy, the 104th session of the ILO conference defined the informal economy as:

“all economic activities by workers and economic units that are – in law or in practice – no covered or insufficiently covered by formal arrangements; and (b) does not cover illicit activities, in particular the provision of services or the production, sale, possession or use of goods forbidden by law, including the illicit production and trafficking of drugs, the illicit manufacturing of and trafficking in firearms, trafficking in persons, and money laundering, as defined in the relevant international treaties” (Art.2(a-b) of Recommendation 204 of 2015).

The above definition demonstrates the persistence of the view that unauthorised economic activities are illegal. In the South African context, the courts have adopted a permissive attitude to waste picking – an activity which may not comply with the law but should be allowed for socio-economic reasons – thereby lessening the relevance of the il-legalist argument.⁶ In one unreported case, landfill managers invoked the use of housing law provisions in order to evict waste pickers from the Marie Louise Landfill in Roodeport, Johannesburg.⁷ This course of action was taken after the use of teargas and gunshots by the South African Police force to remove approximately 400 waste pickers from the landfill proved futile.⁸ Presiding in this case, Boruchowitz J held that the eviction should not proceed on the basis that it would cause “severe economic hardship and disruption” to the waste pickers working on the site.⁹

⁶ *Pikitup Johannesburg (Pty) Ltd and City of Johannesburg vs Motale, M. and 138 others*, ZAGPHC 4 November 2003, Case No 14615/02 unreported, p. 16-18.

⁷ *Pikitup v Motale*, n.5, p. 1.

⁸ *Pikitup v Motale*, n.5, p. 6.

⁹ *Pikitup v Motale*, n.5, p. 16-21.

The adoption of the legalist view of informal economy

The foregoing discussion demonstrates that the definition of the informal economy has changed significantly from the original dualist definition of 1973. It now encompasses those whose economic activities are associated with “a broad range of vulnerabilities, such as limited access to social protection, denial of labour rights, and a lack of organization and representation” (ILO 2013a, 1). This broader definition does not simply involve “not registered, not regulated, unprotected and unrecognised” economic activity (ILO 2013b, 2-3), but extends to precarious and casual work within the formal sector (Ashiagbor 2019, 8). In the South African context, the dualist, voluntarist and il-legalist conceptions of the informal economy are less applicable to the waste management economy than those of the structuralist and the legalist schools. However, the legalist and structuralist conceptions are still in opposition to each other, with the legalist view being one adopted by many international organisations including the World Bank, and various U.N. bodies (Beegle et al 2014, 8-10; Commission on the Legal Empowerment of the Poor and UNDP 2008, 137; ILO 2015, 4). The legalist approach informs conditionalities for aid programmes or form the subject of ‘legal empowerment programmes’ (see Commission on the Legal Empowerment of the Poor and UNDP 2008; de Soto 1989; Otto 2009, 175; van Rooji 2012, 291).

The legalist school promotes the view that a reduction in the cost and complexity of bureaucratic requirements for operating formally would encourage more informal economic actors to enter the formal economy (see Commission on the Legal Empowerment of the Poor and UNDP 2008; de Soto 1989, 179, 185). It assumes that the informal economic actor has some degree of wealth that can be ‘unlocked’ through this process but does not place much weight on the informal economic actor motivation to retain autonomy over how he/she engages in economic activities (de Soto 1989, 158-159; Roy 2005, 149). Many waste pickers have little material wealth or assets, and wish to retain autonomy over their economic position (Fieldwork notes 2016 and 2017; Samson 2009, 4-5; Schenck 2019, 85).

This is one of the flaws in the legalist view espoused by the sustainable development narrative. Sustainable Development Goal (SDG) 8, lists the formalisation of micro,-small and medium-sized enterprises as a target (8.3) and wishes to measure “the proportion of informal employment in non-agricultural employment” as a measure of whether this goal has been reached (SDG Indicator 8.3.1). The structural school would respond to this by highlighting that informality is a mode of urban organisation, that, far from being an antithesis to market governance, is facilitative of economic activity, particularly where high unemployment and barriers to entry to the formal sector exist (Roy 2005, 148-150). The mutual reliance of informal and formal waste management actors on each other to meet their economic aims suggests that this view is very relevant to the South African scenario.

The idea that the management of waste necessitates a government-led response, when conceived of as an environmental public good, would lean towards the legalist view that formalisation is necessary for the government, a formal entity, to effectively manage waste. However, formalisation does not guarantee better economic conditions for those being formalised, in the same way that sustainable development, which privileges formalisation, does not result in better economic conditions for informal economic actors (Rittich 2019, 21). The push towards legalist conceptions of informality and thus the promotion of formalisation programmes, is tied to the continuation of colonial era ways of relating between Global North and South countries (see Rittich 2019 for a discussion). Despite this, in Chapter 8, I adopt the legalist view to discuss the benefits of formalisation of waste pickers and how barriers to entry into the formal waste management economy can be addressed despite its shortcomings. I adopt this view because, on a very practical level, the legalist approach promotes the formal recognition of longstanding informal modes of working as a way to formalise the work of waste pickers without unnecessary bureaucratic interference.

3.4 Summary

This chapter started by reiterating the importance of an ESL approach to the issue of sustainable development and waste management. Then this chapter discussed the definition of key terms related to sustainable development and the waste management economy for reasons of conceptual clarity before it considered the way in which sustainable development ignores waste pickers in the literature. Sustainable development was defined as development that meets the needs of the present without jeopardising those of the future (WCED 1987, para 1, 41). This definition distinguished sustainable development from sustainability and development, which are related but separate terms. Waste, not clearly defined normatively in international law, was understood for the meaning attributed to it through the normative lens of the South African econolegal regime. Conceptually, waste was recognised as an environmental public good. Recycling was defined as the process of waste reclamation for further use (s.1 of the Waste Act 2008). Waste pickers were defined as informal workers who collect and sell waste for a living. The ‘waste management economy’ was defined as the subset of the environmental economy that is concerned to manage waste in a way that promotes the design, production, buying and selling of waste-management-related goods, products and services within an econolegal regime. The ‘recycling economy’ was defined as the subset of the waste management economy concerned with the design, production, buying and selling of recycling-related goods and services.

Next, the chapter discussed the ways in which sustainable development ignores waste and waste pickers in its canon of legal literature. This analysis covered the similarities and differences between waste pickers and ASM miners to show that a study of sustainable development and waste pickers is not only possible, but necessary to fill the gap in the literature. The main commonality between waste pickers and ASM miners is the consequences of their heavy reliance on informal economic transactions to earn a living. They both face

criminalisation, health and safety hazards, a lack of training, a lack of inclusion and barriers to entry into the formal economy.

Finally, the chapter discussed the various approaches to informality that exist, and chose to adopt the legalist school in recognition of its alignment with the priorities of sustainable development. The legalist approach has been employed by international organisations, and the South African government as a means to further integrate waste pickers into the economy because it recognises the divergent capital of different economic actors. This study, of waste management actors and sustainable development law, addresses a waste-management-related gap in the sustainable development law literature.

VIGNETTE 4: EXTERNAL INFLUENCES

10th March 2017

It is the middle of my fieldwork. I am at a MRF just outside of Cape Town. The concept of the bottle mentioned in the preface returns at a practical level. This time, the bottle is made of pink recyclable plastic. It is sitting in a pile of other recyclable materials that will also not get recycled. The reason? It is not economically viable to do so because of its colour. On this visit, I learn that recyclable plastic bottles need to be of high quality and sold in high volumes to be commercially viable. Bottles that are most recyclable are high quality clear plastic PET ones, next up is high quality green plastic PET ones. The pile of recyclable materials on which the pink bottle is found does not meet this criteria. While pink, brown, orange and other colours may be commercially attractive from a branding and consumer standpoint, they are not economically viable sources of recyclable materials. Pink, brown and orange bottles mixed with clear or green bottles during the recycling process will contaminate the colour of the plastic once melted and render the batch un-sellable to manufacturers.

Recycling these colour bottles on their own is not feasible because the volumes of bottles manufactured in this colours is not high enough to make a profit. This situation has led to at least one waste-stream focused industry association to produce a ‘Design for Recycling’ document to encourage manufacturers to design and produce bottles that are more likely to be recycled at the post-consumer stage, as opposed to ones that are more attractive for the retail market. The pink bottle is certain to end up in the landfill, even though it is technically recyclable. The effect of the pink plastic PET bottle not being recycled is missed earnings for waste pickers, increased landfill space used by the municipality and a break in the recycling value chain and circular economy. Recycling is often thought of as an environment-focused activity but without economic profit (rent) it would not be viable.

4 SUSTAINABLE DEVELOPMENT: THE LEGAL RATIONALITY FOR WASTE MANAGEMENT

4.1 Introduction

Chapter 3 illustrated the need for a study that interrogates how sustainable development has affected the economic relationships involving informal waste management actors in South Africa. This study fills a gap in the sustainable development literature that has primarily focused on other environmental economies. The focus on the informal waste management economy invites a discussion of the debates about formalisation, which is privileged by sustainable development over informality. Sustainable development arrives in South Africa with more than an aim to formalise. It is also accompanied by market-fixing ideas that, like formalisation, do not automatically result in improved social and economic conditions for waste pickers. Chapter 4 focuses on the international framework of law and legal ideas that incubate sustainable development. South Africa chooses to adopt sustainable development as the meta-idea that shapes its waste management economy after many years of political isolation within the international community of states. In addition, South Africa embraces sustainable development from international law in its most legalistic form, the integration principle, for several reasons. The country wishes to increase its capital among state and non-state actors, it has legitimacy deficit among other state actors, and sustainable development helps South Africa to develop its project of societal transformation.

This chapter investigates how sustainable development has come to be considered the rationality driving the construction of the waste management economy in South Africa. The chapter discusses the reasons for South Africa to adopt sustainable development from the international regime and incorporate it into its national framework for the management of waste. The chapter also investigates the process of legal translation by which sustainable development as a formal rationality has moved from one regime to another.

To recall from Chapter 2, a formal rationality is a way of apprehending the world related to the legal, economic and scientific spheres of social life (Dryzek 2013, 9; Kalberg 1980, 1156). The work of socio-legal scholars Halliday and Carruthers, discussed in detail in Chapter 2, frames the discussion of the reasons advanced for the use of sustainable development by the South African government to regulate the waste management economy. Halliday and Carruthers explain that international concepts can move from one field to another through the process of legal transplantation or legal translation (2009, 28). Both processes involve the mutation of a concept's meaning to fit with the rationalities already extant in the new field (Behrends et al 2014, 5; Halliday and Carruthers 2009, 28). Where legal transplantation and legal translation differ is in the source of the concept, and the role of those doing the transplanting or translating. Legal transplantation involves the movement of legal ideas and technologies from one country or jurisdiction to another, whereas legal translation involves the movement of "global scripts" from the international to the national, or the global to the local (Halliday and Carruthers 2009, 27).

As an internationally-conceived formal rationality, sustainable development must undergo the process of legal translation to move to the South African regime. The success of legal translation is dependent on a number of factors, including the competency of translators, who need to understand the global and the local languages; the coherency of the norm being translated; and the likelihood that the translated rationality will not only be enacted but implemented both formally and informally (Halliday and Carruthers 2009, 34, 294, 300). The process comes with the caveat that some economic rationalities are far removed from the actions which take place in the local setting (Orford 1997, 443, 446-447). Crucially, translators are limited to using the languages available in the global and local fields during the translation process (Halliday and Carruthers 2009, 28). Thus, the form that sustainable development takes in South African law would be dependent on the capacity of South African legal language to

absorb the elements that comprise sustainable development as a principle in international law, and the normative value ascribed to sustainable development in international treaty law and customary international law.

The chapter offers three reasons in each of its three substantive sections as to why sustainable development has come to influence the shape of the waste management economy in South Africa. The first reason, set out in section 4.2, relates to South Africa's low capital in comparison to other states within the international community (Bourdieu 1986, 241-242). The issue of low capital means that South Africa is more likely to be receptive to international ideas than other states (Halliday and Carruthers 2009, 22). The second reason, detailed in section 4.3, relates to South Africa's lack of credibility, or what Halliday and Carruthers would call South Africa's "legitimation deficit" in the international community (2009, 163). The third reason, discussed in section 4.4, concerns to the country's decision to promulgate a forward-looking constitution using international legal ideas as part of its commitment to societal transformation (Halliday and Carruthers 2009, 22, 161-163; Klare 1998, 150). Taken together, these three reasons, which form the basis for the chapter's three substantive sections, help to foreground discussions on how sustainable development is applied in the South African context in the chapters that follow.

4.2 Low capital among state and non-state actors

The first reason for South Africa to adopt sustainable development is that like many other countries in the Global South, South Africa is likely to have low amounts of the economic and political capital to contribute ideas to the "international field of power" (Halliday and Carruthers 2009, 22). By capital, the thesis adopts Bourdieu's definition of capital as "accumulated labour" and a set of "actual or potential resources" "which is convertible, in certain conditions" from one form, such as economic capital, into other forms such as social or cultural capital (1986, 46-47, 51). Halliday and Carruthers (2009, 21) would say that states

with low economic and political capital are likely to be very receptive to what they call “global scripts” – a terminology other economic sociologists of law might refer to as rationalities (Bourdieu 1977, 164; Kalberg 1980, 1151). By receptive, they mean that these states are likely to adopt internationally-conceived rationalities into their national regimes because of the opportunities to be had from conformity with standards adopted by other states (Halliday and Carruthers 2009, 161). Opportunities involve finance from developed countries and non-state actors with high levels of economic capital that overrides their “legitimation deficit”, or low authority to influence other actors in the international field (Bourdieu 1986, 252-253; Halliday and Carruthers 2009, 122-123; 161-163). Actors with a “legitimation deficit” that use such collaborations to advance their views include the World Bank, the International Monetary Fund and large multinational enterprises (Bourdieu 1986, 252-253; Halliday and Carruthers 2009, 122-123; 161-163).

However, it is debateable whether the opportunities to engage in finance and collaboration with international economic institutions have been beneficial. In the past, Global South-based lawyers were inclined to see post-independence programmes and projects undertaken with international institutions as liberating for their newly independent societies (Rajagopal 2003, 26). However, many structural adjustment policies imposed by international economic institutions as part of aid schemes often led to a decline in living standards within recipient countries, consistent with the colonial era (Tan 2011, 1). International economic institutions facilitated development activity reminiscent of colonial administrators such as resource extraction, exploitation of labour, and building infrastructure to ensure the sustainability of these activities (see Rittich 2019). The IMF, the World Bank and the WTO then faced criticism from Global South countries for being more aligned with the priorities of Northern countries than Southern ones (Alam and Razzaque 2015, 623). The result of these arrangements was that Truman’s vision of development for the Global South was imperilled, albeit the belief in the

narrative that aid and development would raise living standards persisted (Hickel 2016, 13; see Hickel 2017 for a discussion).

More broadly, the introduction of sustainable development in countries in the Global South has been the preservation of the status quo in their power relations with the Global North (Charlesworth 2002, 391; Tan 2011, 5). Differentiated political and economic capital among countries has created an international economic order that promotes the marketisation of developing countries' resources to achieve economic growth, in conflict with international human rights and environmental laws that seek to restrict it (Faundez and Tan 2017, 3). According to the Brundtland report, Global North countries with higher capital adopted sustainable development because "there was a growing realisation in national governments and multilateral institutions that it is impossible to separate economic development issues from environmental issues" (WCED 1987, para 8, 12). Countries in the Global North then posited environmental protection as an issue to which all countries should aspire (Gordon 2015, 51). The aim here was to overcome any accusation that countries in the Global South needed to restrict environmentally-damaging economic growth activities to compensate for the pollution caused by Global North countries during industrialisation (Gordon 2015, 51).



Figure 5: A sign detailing a Buy-Back Centre's international partners, Ekurhuleni. Source: Author.

The low capital of developing states like South Africa can be compared and contrasted with the position of non-state actors that have varying levels of capital, and along with nation-states, co-produce international concepts (Halliday and Carruthers 2009, 163). These non-state actors engage in the production of international concepts for a variety of reasons. Some non-state actors, such as courts and professional associations, are motivated “to stimulate domestic law reform or to engineer mechanisms for complex, cross-border transactions” (Halliday and Carruthers 2009, 122). Human and other rights activists have provided a critical voice to these processes, highlighting the inequalities that persist and are produced by these global efforts; making the point that liberalised economic policies are incompatible with the sustainable use of resources (Meinzer and Trautvetter 2018; Via Campesina 2020). South-South country cooperation, such as via the intergovernmental body, The South Centre, has proven instrumental in the representation of Global South concerns at international fora (Alam and Razzaque 2015, 621). Other Global South initiatives include the Group of 77 at the United Nations (G77) that focuses on economic issues generally, the Association of Small Island States (AOSIS) which focuses on the consequences of climate change, and the Association for African, Caribbean and Pacific States (ACP) that focuses on trade issues (Alam and Razzaque 2015, 621). In some cases, civil society organisations have lobbied for increased public

participation in the creation of policies (Cotula 2017, 21). Other non-state actors create standards to contribute to professional practice internationally: The International Law Association was one of the first to create a standard for sustainable development to develop “a balanced and comprehensive international law on sustainable development” (ILA 2002, 211). The International Standards Organisation, The Association of Chartered Certified Accountants and other professional standards organisations have either re-oriented their activities towards, or produced documents detailing the ways in which their organisations and members uphold sustainable development and the SDGs (ACCA 2017; ISO 2018; Shift Project 2018). South Africa’s engagement with non-state actors in the international field to co-produce the meaning and shape of sustainable development was done with the aim to overcome its low capital, regardless of the outcome.

4.3 Legitimacy deficit

The second motivation for South African policymakers to adopt sustainable development into the legal system is that, at the time the term entered the South African legal lexicon, the country was, as mentioned above, also suffering a “legitimacy deficit”, or lack of credibility within the international system (Halliday and Carruthers 2009, 12, 161-163; Sauter 2015, 190; Thomas 1986, 183). Halliday and Carruthers relate legitimacy to “goals, reputations, ties to illegitimate allies, disputable past practices, offensive ideologies or incapacity... [that] ...carry delegitimizing attributes that diminish their capacity to influence” (2009, 12). This statement is applied to the idea that South Africa lacked legitimacy or acceptance within the international community of nations due to the period of apartheid rule (see Thomas 1986).

International actors with legitimacy deficits are likely to acquiesce to international ideas and cooperate with other actors to overcome this disadvantage (Halliday and Carruthers 2009, 163). Thus, it would make sense for South Africa to adopt sustainable development, having re-joined the international community of nations in 1994, shortly after the adoption of a key international

document on sustainable development: the Rio Declaration on Environment and Development 1992 (Rio Declaration 1992; Worden 2012, 156). South Africa promulgated a new constitution just two years later in 1996, which drew upon already extant norms such as those codified in the International Covenant on Economic, Social and Cultural Rights 1966 as an inspiration for the clauses included in the final document (Liebenberg 2010, 19).

The inclusion of sustainable development in s.24 of the Constitution in a similar formulation to that of the integration element of the sustainable development principle in international law would be consistent with a desire by South Africa to gain recognition in the international field. The African (Banjul) Charter on Human and Peoples' Rights 1981, a regional human rights instrument, provides that "All people shall have the right to a general satisfactory environment favourable to their development" at Article 24. The Southern African Development Community Protocol on Environmental Management for Sustainable Development 2014, commits Southern African countries including South Africa to improving waste management, and associated legislation (Article 6) within the context of sustainable development (Article 1 and Article 4) and international sustainable development instruments (Preamble). Other national Constitutions have enshrined some form of environmental right. The Indian Constitution places a duty on the state to protect and improve various aspects of the environment (Article 48A and Article 51A(g) of the Indian Constitution 1950); and to ensure that "No person shall be deprived of his life....except according to procedure established by law" (Article 21 of the Indian Constitution 1950). The Ecuadorean Constitution of 2008 preserves "the right of the population to live in a healthy and ecologically balanced environment that guarantees sustainability and the good way of living" (Article 14 of the Ecuadorian Constitution 2008); and gives rights to nature, or Pacha Mama (the Earth) (Articles 71-74 of the Ecuadorian Constitution 2008).

The sources of international law that South Africa would draw on for its formulation of sustainable development relate to international treaty law and customary international law (Glazewski 2019, 316). The foremost expert on South African environmental law, Professor Jan Glazewski, writes that South Africa has adopted over fifty international environmental law conventions, including the Kyoto Protocol, the Paris Agreement, and enshrined the primacy of customary international law in the Constitution (s.231-s.232 of the Constitution; Glazewski 2018, Annexure 1; Kyoto Protocol 1997; The Paris Agreement 2015). Customary international law binds South African institutions unless it is in conflict with the Constitution or a Parliamentary Act (Glazewski 2019, 316). This is emblematic of the desire by South Africa to be included in the international regime because of its lack of political and economic capital. Despite the variance in normative value of sustainable development within both sources of law, accepting and incorporating sustainable development into its national framework signals to the international community that South Africa is committed to state-state cooperation. Section 4.3.1 builds on this idea and discusses the normative character of sustainable development in international treaty law and customary international law.

4.3.1 International treaty law

In terms of treaty, the presence of the words ‘sustainable development’ in an internationally-agreed legal instrument would not suffice to make the concept binding in international law; that is dependent on how it is used in the treaty (see Dupuy 2008; Magraw and Hawke 2008, 623). The appearance of sustainable development in the substantive text of the international treaty does not automatically create a binding obligation in international law either (Dupuy 2008; Magraw and Hawke 2008, 623). If an article in an international treaty states that the parties have an obligation to promote sustainable development, it is more likely that the agreement will create a binding obligation on those parties (Magraw and Hawke 2008, 623).

Otherwise it may, as is the case when sustainable development is found in a preamble, be suggestive of the aim or objective or purpose of the treaty (Magraw and Hawke 2008, 623).¹⁰

4.3.2 Customary international law

Scholars are divided over whether sustainable development is part of the customary international law canon. This relates to the division that exists among scholars over whether a norm or principle, such as sustainable development, has become custom. The acceptance of a legal concept as part of customary international law hinges on two issues: the first is evidence of practice by many states over a significant period; the second is that states must commonly hold the practice as mandatory (Dupuy 2008, 457; Art.38(1)(b) of the International Court of Justice (ICJ) Statute, 1945; Lepard 2010, 6). The legal scholar Guzman describes state practice as the “objective” element, and *opinio juris* as the “subjective” element of what constitutes customary international law (Guzman 2005, 123). *Opinio juris* is defined by the Oxford Dictionary of Law as an element of customary international law that “requires that custom should be regarded as state practice amounting to a legal obligation, which distinguishes it from mere usage” (Law and Martin 2018). Dupuy suggests that there must be “the existence of a binding obligation” (2008, 453). He adds ‘consent’ as a third limb to this – that consensus among states must be reached in how they regard and treat a concept for it to be accepted as international customary law (Dupuy 2008, 454).

The appearance of the concept in many binding and non-binding agreements, state constitutions, and international court and tribunal judgments is cited as both evidence for and against its acceptance as custom (Bonanomi 2015, 189-190; Dupuy 2008, 257; Lowe 2012, 19-37). Given the uncertainty which exists around the inherent rights and obligations ascribed to

¹⁰ The Preambles of the North American Free Trade Agreement 1992, and the Agreement Establishing the World Trade Organisation 1994 both list sustainable development as an objective.

sustainable development, it is difficult to affirm general practice and *opinio juris* among states (Bonanomi 2015, 192; Lowe 2012, 24). The difficulty lies in identifying what rights and obligations could be ascribed to each conceptual element of sustainable development – who would have the rights, who would have the obligations and who would have *locus standi* to enforce the right in a court of law (Lowe 2012, 27). *Locus standi* is defined by the Oxford Dictionary of Law as “the right to bring an action or challenge some decision” (Law and Martin 2018). The elements of sustainable development being referred to are: sustainable use of natural resources, inter-generational equity, inter-generational equity, and integration of development with environmental considerations.

For the legal scholar Lowe, sustainable development has no clear meaning or scope, and thus has insufficient identifiable normative meaning for it to be considered a normative concept of customary international law (2012, 29-31). Instead, he sees its normative value in its influence on judicial reasoning of international law cases which raise issues of relevant, conflicting norms (Lowe 2012, 31). In this way, it is a meta-principle of international law, one that informs how judges think about the operation of other principles and rules in the absence of state practice and *opinio juris* (Lowe 2012, 34). ICJ Jurisprudence on sustainable development in the adjudication of international disputes provides no great clarity on the application or meaning of sustainable development. The main ICJ case on sustainable development, *Gabčíkovo-Nagymaros*, offers two possible interpretations of the term for the benefit of states and other international actors.¹¹ In the majority opinion, sustainable development is interpreted to be a ‘concept’ in international law,¹² whereas Justice Christopher Weeramantry rejects this,

¹¹ *Gabčíkovo-Nagymaros Project (Hungary v Slovakia) (Judgement) [1997] ICJ Rep 7.*

¹² *Gabčíkovo-Nagymaros*, n.10, 140.

citing historical evidence in a separate opinion on the same case, for the existence of the concept in support of his contention that sustainable development is a “principle with normative value”.¹³

The argument for sustainable development to be considered part of customary international law is compelling. This is because of the increased acceptance of the term by international, regional and national jurists as a concept with normative content, and the increase in number of internationally agreed instruments and initiatives that promote its achievement. The adoption of the seventeen sustainable development goals by all 193 members of the United Nations in 2015, including South Africa, is suggestive of *opinio juris*, and the voluntary agreement by nations of varying stages of development to report on their progress to uphold the goals, indicates state practice (UN 2015; UN Sustainable Development Knowledge Platform 2017). This occurrence could be interpreted as evidence of increased global consensus on sustainable development as either a legal principle or a mere policy goal (Bonanomi 2015, 191).

4.4 Societal transformation for all South Africans

The third reason for South Africa to adopt sustainable development into its legal regime is the concept’s focus on the improvement of human welfare and the environment (see Anand and Sen 1994 for a discussion). This aligns with the goal of the state to improve the lives of all South Africans after the end of apartheid (Klare 1998, 150, 171). Part of this improvement included the crafting of a transformative constitution that aims to put the

“country’s political and social institutions and power relationships in a democratic, participatory, and egalitarian direction. Transformative constitutionalism connotes an

¹³ *Gabčíkovo-Nagymaros Project (Hungary/Slovakia) (Judgement) [1997] ICJ Rep 7*, Separate Opinion of Judge Weeramantry, p. 85.

enterprise of inducing large-scale social change through nonviolent political processes grounded in law” (Klare 1998, 150).

The move towards creating a transformative constitution was driven by the collective societal desire to overcome the apartheid legacy of entrenched societal inequality along racial lines (Klare 1998, 150, 171; Liebenberg 2010, 26). Twenty-five years on from the end of apartheid, 71 per cent of the assets in South Africa are owned by just 10 per cent of the population, largely along racial lines (Sulla and Zikhali 2018, 51). The most industrialised country in sub-Saharan Africa, South Africa has a poverty rate nearing 50 per cent, with the bottom 60 per cent owning only 7 per cent of the wealth, leading the World Bank to suggest that it is the most unequal society in the world (Sulla and Zikhali 2018, 42, 51).

As a country new to democracy, South Africa relied heavily on progressive ideas within international law to inform its 1996 constitution making project (Liebenberg 2010, 19). This was as a result of its low capital and desire for legitimacy within the international community as previously discussed in this chapter (Halliday and Carruthers 2009, 161-163; Liebenberg 2010, 19; Sauter 2015, 190; Thomas 1986, 183). In the realm of economic and social rights, much influence was derived from the International Covenant on Economic, Social and Cultural Rights 1966 (Liebenberg 2010, 19). Numerous international environmental treaties and soft law instruments have influenced the form and content of s.24 of the Constitution which focuses on sustainable development (Glazewski 2005, 11; Glazewski 2018, Annexure 1). A soft law instrument is understood as one that provides “guidelines of behaviour” such as U.N. resolutions and “treaties not yet in force”, that are not yet or non-binding on states (Law and Martin 2018). The concept of sustainable development has been recognised by South African

courts as “[the] fundamental building block around which environmental legal norms have been fashioned, both internationally and in South Africa...”¹⁴

By including sustainable development in the Constitution at s.24, the state promises everyone in South Africa that it will seek to improve and maintain the natural environment while promoting economic and social development. This fits with the move towards what the legal scholar Klare identifies as egalitarian and large-scale social change (s.24 of the Constitution; Klare 1998, 150). Whether the guarantee of sustainable development in the Constitution has translated into economic and social development for waste management actors who collect up to 90 per cent of all recycled materials is scrutinised in Chapter 7 (Godfrey et al 2016, 1).

Whereas a broader analysis of the constituent parts of s.24 takes place in Chapter 5 on the South African legal framework, it is placed here to foreground a discussion of its relationship with international environmental law. The s.24 definition of the Constitution appears to be drawn from the four emerging elements which comprise sustainable development as a principle of international environmental law (Sands et al 2012, 210-211). Section 24 of the Constitution is as follows:

“Everyone has the right –

- (a) To an environment that is not harmful to their health or wellbeing; and
- (b) To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –

¹⁴ Judge Claasen in *BP Southern Africa (PTY) Ltd v MEC for Agriculture, Conservation Environment and Land Affairs 2004 (5) SA 124 (W)*, p. 25. The reasoning employed by the judges in the Constitutional Court case, *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others (CCT67/06) [2007] ZACC 13* also hinges around sustainable development.

- i. Prevent pollution and ecological degradation;
- ii. Promote conservation; and
- iii. Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

Here, a principle is taken to mean a standard which policy makers and jurists must consider but which are not binding on those whose activities fall within the law to which it is being applied. (Dworkin 2013, 42). A legal principle, unlike another type of standard such as a policy – which states a goal to be reached by policymakers – acts as a barometer of morality or justice (Dworkin 2013, 39). This idea of a legal principle as a moral standard means that it can have legal consequences because it may be used to guide a legal decision, but it does not hold the binding quality of a legal rule (Dworkin 2013, 40). However, even this argument is contested in international environmental law jurisprudence, which recognises the debate and controversy surrounding the distinction between principles and rules; soft law and customary international law.¹⁵

There is much disagreement over the scope of sustainable development as a principle in international law, a status of which was confirmed in the *Iron Rhine* case at the Permanent Court of Arbitration (Sands et al 2012, 187).¹⁶ The ILA’s New Delhi Declaration 2002 lists seven substantive and procedural principles governing the implementation of the law relating to sustainable development. These are: the sustainable use of natural resources, the principles of inter-generational equity and intra-generational equity and the eradication of poverty, the

¹⁵ *Iron Rhine Arbitration, Belgium v Netherlands, Award, ICGJ 373 (PCA 2005), 24th May 2005, Permanent Court of Arbitration [PCA], 37 and 58.*

¹⁶ *Iron Rhine*, n.14, 37-38.

Common But Differentiated Responsibility (CBDR) principle,¹⁷ the precautionary principle, the principle of public participation and access to information and justice, the principle of good governance, and the principle of integration and interrelationship of human rights, social, economic and environmental objectives (New Delhi Declaration 2002). In their review of the literature and jurisprudence, Sands et al identify a list of four of what they call “elements” of sustainable development emerging (2012, 207). These elements correspond with the four substantive principles outlined in the New Delhi Declaration 2002. Therefore, the coming discussion will focus on the elements identified by Sands et al (2012) or the substantive principles listed in the New Delhi Declaration 2002 which fall within the scope of sustainable development. These are: sustainable use, of natural resources inter-generational equity, intra-generational equity, and integration (New Delhi Declaration 2002; Sands et al 2012, 207). This ability of sustainable development to act as an umbrella to other international environmental law principles fits with Lowe’s insistence that it is a meta-principle (2012, 31).

The following discussion considers each element of sustainable development as recognised in international law, in order to justify the focus on the integration element in the analysis of the South African waste management economy found in subsequent chapters. First I define and discuss features of each element: sustainable use; inter-generational equity; intra-generational equity and environmental justice; and integration. This discussion then informs the arguments that support a focus on the integration element as opposed to the environmental justice element, which has been deployed by many environmental activists, human rights and cause lawyers in

¹⁷ The CBDR principle recognises that all states have the responsibility to manage environmental problems and that the capacity of states to do this is related to their current state of development (Sands et al 2012, 233).

their pursuit of justice within the waste management economy (Dryzek 2005, 210, 218; Samson 2015).¹⁸

4.4.1 Sustainable use

The principle of sustainable use of natural resources calls on states to manage natural resources through legislation and policies that promote the maintenance of adequate stocks of natural resources and allow for development to take place (Sands et al 2012, 210-211). The principle of sustainable use is built on the international environmental law principle that states have sovereignty over natural resources with responsibility to not cause damage either within or outside of its territory (Sands et al 2012, 191; Cordonier-Segger 2004, 109). However, sustainable use differs from the idea of sovereignty over natural resources because it requires that resources, such as fish or forests, are used in a sustainable manner (Cordonier-Segger 2004, 110). More broadly, the African Convention on the Conservation of Nature and Natural Resources 1968 urges a regional commitment to the sustainable use of natural resources within the carrying capacity of the environment.¹⁹ The principle appears in the 1972 Stockholm Declaration Principles 3 and 5 call for the non-exhaustion of renewable resources; and the World Charter for Nature 1982 paras 4 and 10(a) call for resource use that maintains “optimum sustainable productivity”, among other agreements.²⁰

The relevance of the sustainable use concept has been considered context-dependent in the jurisprudence relating to the integration of environmental concerns and sustainable

¹⁸ *Pikitup vs Motale, n.5.*

¹⁹ Preamble of the African Convention on the Conservation of Nature and Natural Resources 1968.

²⁰ Preamble of the Zambezi Action Plan 1987; Article 3(4) of the UNFCCC 1992; Preamble and Articles 1,2, 8,11,12,16,17 and 18 of the Biodiversity Convention 1992; Preamble and Article 1 of the OSPAR Convention; the Preamble of the WTO Agreement; para 27 of the 1992 Rio Declaration; and the UN Millennium Declaration 2000.

development (Bonanomi 2015, 122; Lowe 2012, 29).²¹ At the national level, the Philippine Supreme Court case *Minors Oposa* has been instructive.²² The Court found the environmental principles codified in the Philippine Environment Code to be policy principles as opposed to specific legal rights, bolstering Lowe's concern that it would be impossible to have an absolute rule requiring sustainable use.²³ Apart from the impossibility to have an absolute rule, Cordonier-Segger highlights the difficulties associated with defining the legal contours of what consists of sustainable use (2004, 110). This may explain why 'sustainable use' as a concept is absent from many other accounts of the sustainable development jurisprudence reviewed.²⁴ As previously stated, the Constitution preserves the right "to have the environment protected (s.24(b)...promote conservation (s.24(b)(ii); and secure ecologically sustainable ...use of natural resources" (s.24(b)(iii); thereby enshrining this element of sustainable development in national law.

4.4.2 Inter-generational equity

The principle of inter-generational equity is based on the idea that people alive today are trustees of the earth for those in future generations and beneficiaries of the earth today (Weiss 1990, 199). The principle, which extends back in the history of international law as far as the 1893 *Pacific Fur Seal* arbitration,²⁵ has formed part of many international environmental

²¹ *Gabčíkovo-Nagymaros*, Separate Opinion of Judge Weeramantry 1997, n.12, p. 92.

²² *Minors Oposa v. Secretary of The Department of Environmental and Natural Resources* 33 ILM 173 (1994).

²³ *Minors Oposa v. Secretary of The Department of Environmental and Natural Resources* 33 ILM 173 (1994), Separate Opinion of Judge Feliciano, 11, 17-18.

²⁴ This includes Sands et al 2012, Dupuy 2008, and Magraw and Hawke 2008. Bonanomi engages extensively with sustainable use in the context of WTO jurisprudence.

²⁵ *Award between the United States and the United Kingdom relating to the rights of jurisdiction of United States in the Bering's sea and the preservation of fur seals 15 August 1893 (Pacific Fur Seal)*

treaties since then.²⁶ With specific reference to international agreements related to sustainable development, Principle 1 of the Stockholm Declaration 1972 sets out the responsibility to protect and improve the environment for future generations, and Principle 4 of the Rio Declaration 1992 recognises that we need to draw on the resources of the Earth for our sustenance and development.

The applicability of the principle of inter-generational equity is still debateable. The principle has been invoked in opinions and judgments emanating from the ICJ.²⁷ In cases where judges have relied on the principle of inter-generational equity in their judgements, Lowe points out the difficulty in identifying the trustees and beneficiaries, along with their associated duties and rights of action or *locus standi* in non-specific cases (2012, 27).²⁸ This difficulty contrasts with the ILA approach in the New Delhi Declaration 2002 which places inter-generational equity as a central concept and asks that fairness and justice be included in the application and interpretation.²⁹ This principle appears in the Constitution in the form of “the right to have the

²⁶ These include the Preamble of the International Convention for the Regulation of Whaling 1946, the Preamble of the African Convention on the Conservation of Nature and Natural Resources 1968, Article 4 of the Convention concerning the Protection of World Cultural and Natural Heritage 1972, and Article 3 of the UNFCCC, the 1978 Kuwait Convention for the Co-operation on the Protection of the Marine Environment from Pollution, Preamble; 1982 Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, known as the Jeddah Convention, Article 1 (1), and the Preamble of the 1976 Convention on Conservation of Nature in the South Pacific.

²⁷ *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, [1996] ICJ Rep 226; *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests (New Zealand v France) case* [1995] ICJ Rep 288 (dissenting opinion by Judge Weeramantry) 341-342; *Maritime Delimitation in the Area between Greenland and Jan Mayen (Denmark v Norway)* [1993] ICJ Rep. 38 (Separate Opinion of Judge Weeramantry) 274.

²⁸ *Minors Oposa*, n.21.

²⁹ New Delhi Declaration 2002, para 2.1.

environment protected, for the benefit of ...future generations, through reasonable legislative and other measures” (s.24(b) of the Constitution).

4.4.3 Intra-generational equity

The principle of intra-generational equity appears in numerous international environmental legal texts, however, its legal status is ambiguous (Sands et al 2012, 213; Lowe 2012, 29; see Magraw and Hawke 2008). Based on the general legal principle of equity, or fairness, intra-generational equity calls on states to ensure that resources used by the present generation are distributed in a just manner (Cordonier-Segger 2004, 125). It prescribes that everyone is entitled to necessities such as housing, education and nutrition and is often combined with the commitment to eradicate poverty (Schachter 1977, 11-12).³⁰ As a result, it features prominently in sustainable development agreements.³¹

The principle also appears in several cases related to the use of transboundary water resources.³² However, the existence of these cases has not stopped academic commentators from holding variant views on the status of intra-generational equity as a principle. For instance, Lowe recognises that a legal judgment can lead to the equitable use of river resources across territorial boundaries, but he questions how equity may be applied to multilateral and global problems (2012, 29). He accepts that equity can be negotiated as a principle to be included in a multilateral environmental agreement (Lowe 2012, 29). However, he is of the view that unless all interested parties with *locus standi* can appear before a Tribunal to represent

³⁰ New Delhi Declaration 2002 paras 2.2 and 2.4; MDG 1.

³¹ Such as Principles 3 and 5 of the Rio Declaration 1992, Annex B of the UNFCCC, para 13 of the Brundtland Report, the Johannesburg Declaration on Sustainable Development 2002 and Chapter 3, s3.1 of Agenda 21, MDG 1, SDGs 1-5, and 10; New Delhi Declaration 2002, paras 2.2 and 2.4.

³² *Gabcikovo-Nagymaros*, n.10; *Pulp Mills on the River Uruguay (Argentina v Uruguay) (Judgment)* [2010] ICJ Rep 14.

themselves, it would be difficult to adjudicate on a balance between environmental protection and development (Lowe 2012, 29).

In contrast, Schachter is of the view that intra-generational equity has become a legal norm because it is central to the idea of distributive justice, a component of environmental justice (Schachter 1977, 8). Understood as the right and opportunity for all to be involved in the environmental decision making process, environmental justice demands that those who partake in it share the benefits and burdens equitably (Schlosberg 2009, 50-55). This is similar to the formulation offered by Cordonier-Segger, “fairness in utilisation and enjoyment of resources including the cost of degradation, disposal and rehabilitation of resources, among all persons and groups both domestically and internationally” (2004, 131). By invoking this definition, Cordonier-Segger provides a basis to accept that intra-generational equity is a legal concept of a normative, and justiciable quality at both the local and international scale. Intra-generational equity appears in the Constitution as “the right (b) to have the environment protected, for the benefit of present ... generations, through reasonable legislative and other measures...” (s.24(b) of the Constitution).

4.4.4 Integration

The principle of integration takes environmental protection into account during the process of economic and social development (Sands et al 2012, 215). Sands et al describe integration as the most legalistic element of sustainable development because the concept “requires the collection and dissemination of environmental information and the conduct of environmental impact assessments” (2012, 215). Integration was confirmed as a requirement of international law in the *Iron Rhine* case.³³ Its history in international law stretches back to the 1949 UN Conference on the Conservation and Utilisation of Resources (the UNCCUR), which had its

³³ *Iron Rhine*, n.14, 59 and 243.

germinations in U.S government ideas at the time about the importance of considering resource conservation in development plans (Sands et al 2012, 27). This conference solidified UN responsibility for environment and development initiatives at the international level and influenced the shape of 1972 Stockholm Declaration Principle 13 for states to take “an integrated and co-ordinated approach to their development planning so as to ensure that their development is compatible with the need to protect and improve the human environment” (Sands et al 2012, 27). The concept also appears in the 1982 World Charter for Nature.³⁴ It underpins Agenda 21 which resulted from the UN Conference on Environment and Development, the Johannesburg Declaration on Sustainable Development 2002, and other sustainable development agreements such as the Rio Declaration 1992, the UNFCCC, the MDGs and the SDGs.³⁵ In terms of international economic institutions, the concept of integration has led to the establishment of the Environment Department at the World Bank and the inclusion of sustainable development in the agreements establishing the WTO and the European Bank for Reconstruction and Development (EBRD) (Sands et al 2012, 216).

The integration principle has informed the integration of environmental concerns into the jurisprudence of the General Agreement on Tariffs and Trade and the WTO (Sands et al 2012, 216). Having heard several cases on the principle of integration of environmental protection with social development and economic growth, the WTO also recognises the growth of environment and trade issues over the years in the form of declarations and the establishment of the WTO Trade and Environment work programme (Dupuy and Viñuales, 2015, 392).

³⁴ World Charter for Nature 1982, paras. 7 and 8..

³⁵ See Principles 3 and 4 of the Rio Declaration; Article 3 (4) of the UNFCCC; MDG 7, SDGs 2, 6,7, 9, 11, 12, 13, 14 and 15. Article 6 (2) (d) of the 1974 Paris Convention, the Preamble of the 1978 Kuwait Convention and the Preamble of the 1978 Treaty for Amazonian Cooperation all incorporate the principle of integration.

Relevant cases concern whether shrimp farming methods suited for certain environmental and developmental situations affected sea turtles;³⁶ and whether the export of certain raw materials can be restricted to boost local social and economic development (Bonanomi 2015, 111-117).³⁷

Integration is often regarded as a procedural rule to be applied and implemented by national administrative bodies facilitating environmental information sharing and the conduct of environmental impact assessments (Magraw and Hawke 2008, 627-628). Environmental information sharing refers to the state duty to provide

“appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes... [and] facilitate and encourage public awareness and participation by making information widely available [including] effective access to judicial and administrative proceedings, including redress and remedy, shall be provided” (Principle 10, Rio Declaration 1992).

An environmental impact assessment is a procedure that is used to evaluate “proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority”.³⁸ The principle of integration also calls on administrators and legislators to respect other procedural principles for it to work such as good governance and prior informed consent (Magraw and Hawke 2008, 628). Good governance refers to an adherence to the rule of law, and freedom from corruption of public officials (Magraw and Hawke 2008, 628-629). Prior informed consent has two meanings: the duty to

³⁶ *US – Import Prohibition of Certain Shrimp and Shrimp Products (Panel and Appellate Body, 1998)*.

³⁷ *China – Measures Related to the Exportation of Various Raw Materials (2012)*.

³⁸ Principle 17, Rio Declaration 1992.

consult indigenous peoples who may be affected by the adoption of a measure or the obligation of a State to not export certain wastes to another State without its prior informed consent (Dupuy and Viñuales 2015, 66-67). In the national context, the duty to consult indigenous peoples and marginalised communities is most relevant.

4.5 Summary

Sustainable development is with confidence an international legal principle and forms part of customary international law, and international treaty law. Whereas the four elements of sustainable development as an international legal principle appear in the Constitution, they do not all have the same legal weight. In terms of the legal framework which will be discussed in Chapter 5, there is a great emphasis on the economic and social aspects, in addition to the environmental protection element of sustainable development in South African waste management legislation. This points to the integration formulation especially since other elements, such as sustainable use, are context specific; and inter-generational equity raises the issue of *locus standi* with regards to justiciability.

As highlighted in Chapter 1 and is discussed in detail in Chapter 5, the principle of environmental justice principle has been invoked successfully by environmental activists, civil society organisations and cause lawyers working towards justice in the South African waste sector (Dryzek and Schlosberg 2005, 210, 218; Samson 2015).³⁹ Environmental justice, as a principle, facilitates waste pickers to demand that their rights are upheld. However, the integration principle both addresses waste management actor concerns with their economic and social welfare and prosperity, and informs policymakers' concerns with environmental impact assessments, information sharing and good governance. Therefore, the integration element is

³⁹ *Pikitup vs Motale*, n.5.

prioritised in the wider thesis analysis over and above the other elements discussed above (Magraw and Hawke 2008, 627-628). This finding does not detract from the legitimacy deficit and low capital factors which led policymakers to craft waste management legislation using sustainable development as the guiding principle.

In summary, this chapter set out why South Africa has adopted sustainable development from the international regime and into its legal and policy framework. The chapter discussed how sustainable development is understood within international law, which laid the groundwork for discussions in subsequent chapters on how the integration element of sustainable development has been deployed within the South African regulatory framework that governs waste management. Bearing in mind Halliday and Carruthers' assertion that it is easy to show correlation in legal language between international and national fields, yet difficult to show how such correlations occur, the chapter argued that three objectives contribute to South Africa's use of sustainable development within the econolegal system that regulates waste management (2009, 24). The need to address a legitimacy deficit in international law, low capital in comparison with other states, and a desire to transform its society into a more equitable one are all reasons for South Africa to adopt sustainable development. Halliday and Carruthers' ideas on legal translation explained the process by which sustainable development moves, through the process of translation, from the international regime to the national waste management regime. South Africa wished to both be included in the international regime, but also include its citizens in its aspirations.

The analysis in this chapter provides a context from which to understand the focus of further chapters. Chapter 5 is concerned with how sustainable development has become integrated into the South African legal framework. Chapter 6 investigates how policymakers in pursuit of international legitimacy have harnessed sustainable development to create waste management policies which eventually fail its most vulnerable citizens. Chapter 7 demonstrates how a

cocktail of social, economic and legal factors conspire to fail waste pickers from improving their socioeconomic standing within an econolegal framework influenced by sustainable development. The thesis concludes that South Africa adopts sustainable development into its national law in order to be accepted into the international field of power in spite of the negative consequences for its citizens.

VIGNETTE 5: A LOCAL GOVERNMENT WORKER

6th March 2017

Ayala Yasin works in middle-management within the Solid Waste Planning Department of a metropolitan municipality in South Africa. She is primarily responsible for assessing private sector company applications for waste management accreditation within the city, and giving support to these actors to comply with the application requirements. This process can take anywhere from three weeks to three months depending on what is required to fulfil the application. After being accredited, businesses are required to report on their activities on a quarterly basis and are liable to be reviewed every three to five years. I interviewed Ayala in March 2017 about her work and learned that her first role in waste management was in the private sector, which she believes helps her to do her job quite well, even though there are some challenges. Her typical day consists of mainly administration, followed by site visits to private sector companies to ensure that their sites and paper work are compliant with the by-laws that apply to them.

Ayala is concerned that development is taking place at such a fast pace that natural resources within her city are becoming more and more scarce. Migrants from other cities and countries are placing more pressure on city rivers, wetlands and waterways when they come in search of a place to informally settle. The city then struggles to maintain its urban plans, for it may discover that an informal settlement has sprung up where a road was earmarked to be built. This has an effect on the city's delivery of effective waste management services.

Outside of work, Ayala is married with three children. She strongly believes that no one should be buying plastic bags at all, and that the plastic bag levy is too low. As a result of this, she uses reusable bags for shopping, and encourages her children to take materials to school to be recycled, a common practice in South Africa.

5 THE SOUTH AFRICAN ECONOLEGAL REGIME FOR WASTE MANAGEMENT

5.1 Introduction

The appearance of sustainable development in South African waste management law is partly attributable to the process of translation of legal ideas or rationalities from the international legal regime to the national, provincial and local ones. Chapter 4 provided a detailed, nuanced discussion of this process, including the reasons that South Africa would choose to include sustainable development as a major aim of the legal regime that governs its waste management. The previous Chapter, 4, situated South Africa's use of sustainable development within its desire to re-integrate into the international community of state and non-state actors, and its post-apartheid societal transformation project. Chapter 4 built on Chapter 3, which surveyed the sustainable development and waste management focused-literature both globally and in South Africa, in order to situate this thesis within the wider literature related to waste management. Chapter 3 in turn built on Chapter 2, which introduced the theoretical and methodological ideas that have informed the shape of the process of desktop and fieldwork research and analysis. The social and economic transformation promised by sustainable development does not transpire in the life of waste pickers trapped in a waste management economy that perpetuates societal inequalities. This is because the market logic and formalisation programmes that accompany sustainable development are ill-equipped to solve complex societal challenges such as waste management. Furthermore, sustainable development privileges formalisation programmes for waste pickers that are not guaranteed to improve their conditions.

Chapter 5 addresses South African legal framework for waste management, and is concerned with examining how sustainable development fits within the country's legal framework after its translation. This chapter explores how the South African belief in and the tradition of using

the law to regulate social norms applies to sustainable development in the waste management economy. Sustainable development has conferred both individual and collective rights on South African citizens in national law. Sustainable-development-oriented waste management laws at local government level have rendered some waste picker economic activity legal and some illegal. This differentiation illustrates how sustainable development functions to shape economic, environmental, legal and social norms. The legal system does not provide a framework for the legal inclusion of all waste picker activity. The chapter then scrutinises how the South African tradition of using law to regulate social norms has facilitated the integration of sustainable development into the fabric of its waste management econolegal regime. It completes the background necessary to discuss, from an empirical perspective, the elements of waste management law and policy in focus in Chapter 6, and the impact of sustainable development on the lives of waste pickers who engage with one specific buy-back centre in Johannesburg in Chapter 7.

Firstly, this chapter analyses the Constitution for how it has articulated environmental rights and more specifically sustainable development in section 5.2. This involves an analysis of the content and type of constitution found in South Africa, and its relationship with international law, followed by attention to sustainable development as a right guaranteed to all who live in South Africa. The 1996 Constitution, regarded as progressive and transformative in nature (Davis and Klare 2010, 404; Sauter 2015, 190), is also understood to be greatly influenced by customary international law (Glazewski 2019, 316-317).

Secondly, the chapter examines the structure of the South African legislative framework for sustainable development and waste management at national, provincial and local government levels. Section 5.3 delves into how sustainable development as an international legal rationality has been translated into South African law at the national, provincial and municipal level. It pays special attention to the laws that govern waste management activities in Johannesburg,

specifically how the web of national, provincial and local government laws characterise the legislative framework for landfill and street-based waste pickers.

Thirdly, the chapter goes on to consider judicial responses to sustainable development and waste management in the context of the character of South African legal culture. It concludes that South Africa has a tradition of using the law to regulate social norms as argued by Klare (1998, 169). The translation and implementation of sustainable development into the legal framework governing waste management indicates that it is valued as an instrument to shape economic, environmental and social norms. The issues discussed in this chapter foreground the findings on the impact of legal translation on the economic lives of waste management actors including waste pickers made in Chapters 6, 7 and 8. Sustainable development has also promoted recycling as an environmental activity that can create livelihoods for both formal and informal actors in the waste management economy (Fieldwork notes 2016 and 2017). The waste management econolegal regime does render certain waste management activities legal and others illegal (s.21(2), s.23(1)(a), s.23(2), s.34 and s.37 of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013; s.24 and s.51 of the Waste Act 2008). Waste pickers are encouraged to formalise but this has been largely unsuccessful in South Africa (Godfrey et al 2015, 43; Godfrey et al 2016, 3). The waste management econolegal regime is based on market failure theory and market-fixing ideas that have made the realisation of its stated promises difficult.

5.2 Sustainable development in South African constitutional law

This section contextualises sustainable development in the South African legal framework.

Firstly, it discusses the features of the Constitution and how environmental rights are characterised in the Constitution. Secondly, it examines how the international concept of sustainable development has been interpreted in the Constitution.

5.2.1 The South African Constitution



Figure 6: The South African Constitutional Court, Johannesburg. Source: Author.

The Constitution has been classified and described in many ways by numerous commentators. Some describe it as ‘liberal’, ‘transformative’, ‘postliberal’, or ‘democratic’ with the rights being afforded to all South African citizens being understood as similar to those from ‘modern’, ‘democratic’ traditions in the West (Glazewski 2019, 315; Klare 1998, 152; Klug 2007, 290; Sauter 2015, 198). The supreme law of South Africa, the Constitution is nestled in a legal system drawn from common law, civil law and traditional legal sources, given the history of the country as one colonised by both the English and the Dutch (Glazewski 2019, 316). The Constitution was promulgated following a multi-stakeholder process convened by the Convention for a Democratic South Africa (CODESA) to draft the Constitution (Klug 2007, 273). The public was able to participate in the constitution-making process through the thousands of meetings held throughout South Africa, which resulted in over 2.5 million submissions from citizens on topics they would like to see included in the Constitution (Sauter 2015, 191). The Constitutional Assembly then drafted the new Constitution which was certified by the Constitutional Court in July 1996 and brought into operation in 1997 (Klug 2007, 276; Sauter 2015, 192). The Constitution sets out a number of rights, contained in its Bill of Rights section, that the government promises to guarantee to its citizens (s.7-s.37 of the Constitution).

The rights conferred include non-derogable rights, i.e., those which cannot be suspended in a state of emergency; and rights afforded to all, which are guaranteed by the state, and require the work of those in society. Section 24 of the Constitution guarantees to the right to a healthy and protected environment. Section 39 of the Constitution obliges courts, tribunals and relevant fora in South Africa to consider international and foreign law in the interpretation of these rights (s.39(1)(b) and (c) of the Constitution).

5.2.2 The formulation of sustainable development in the Constitution

Environmental rights were not a consideration in South African constitutional law in 1955 when the African National Congress-conceived Freedom Charter was promulgated, and detailed rights they wished all South Africans to enjoy (Glazewski 1991, 167). Environmental rights were introduced into South African constitutional law with the advent of the Interim Constitution of 1993 (Winstanley 1995, 85). Section 29 of the Interim Constitution 1993 states, “Every person shall have the right to an environment which is not detrimental to his or her health or well-being”. The use of the words ‘every person’ can be interpreted as conferring an individual right to a healthy environment as opposed to a collective one, because of its reference to person in the singular (Feris and Tladi 2005, 256).

The 1996 Constitution states at s.24 that,

“Everyone has the right –

- (c) To an environment that is not harmful to their health or wellbeing; and
- (d) To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –
 - i. Prevent pollution and ecological degradation;
 - ii. Promote conservation; and
 - iii. Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

The formulation of environmental rights in the 1996 Constitution covers some international environmental principles and all of the elements of the principle of sustainable development as identified by Sands et al in their groundbreaking work on the principles of international environmental law (2012, 206-217). The formulation of sustainable development has been influenced by the over 50 international environmental law conventions that South Africa has incorporated into its law via s.231 of the Constitution (Glazewski 2018, Annexure 1). The environmental principles covered include the precautionary principle (s.24(a) and s.24(b)(ii) of the Constitution); the principle of preventive action (s.24(a) and s.24(b)(i) of the Constitution); and principle of sustainable development (s.24(b) and s.24(b)(iii) of the Constitution). The elements of sustainable development included in the Constitution comprise the principles of intergenerational equity and equitable use of natural resources (s.24(b) of the Constitution); the sustainable use of natural resources (s.24(b)(iii) of the Constitution); and the integration principle (s.24(b)(iii) of the Constitution), all discussed in detail in Chapter 4.

5.2.3 Individual and collective rights to sustainable development in the Constitution

The inclusion of environmental rights in the Interim Constitution 1993, and the 1996 Constitution, was followed by a debate about to whom the environmental rights set out in the South African Constitution apply and are afforded (Feris and Tladi 2005, 257-258). Section 24, as discussed above, appears on the surface to confer an individual right. The right could be construed as applying to a group of people for its reference to “present and future generations” (s.24(b) of the Constitution). In terms of obligations, s.8 of the Constitution prescribes that the provisions contained in the Bill of Rights must be upheld by “the legislature, the executive, the judiciary and all organs of state” (s.8(i) of the Constitution). Section 8(ii) also requires a “natural or a juristic person” to uphold provisions in the Bill of Rights of the Constitution, entertaining the possibility that these rights may have horizontal application (Feris and Tladi 2005, 258). The concept of horizontal application refers to the idea that fundamental and other rights contained in a constitutional law can bind and be invoked by private parties to a legal

dispute, which could potentially cover disputes in which the actions or omissions of a private company causes harm to an individual persons or collective group of persons (Feris and Tladi 2005, 258; Unseld 2017). The Constitution also affords the right for anyone to initiate a case if they are “acting in their own interest” (s.38(a) of the Constitution); “acting on behalf of another person who cannot act in their own name” (s.38(b) of the Constitution); “acting as a member of, or in the interest of, a group or class of persons” (s.38(c) of the Constitution); “acting in the public interest” (s.38(d) of the Constitution); or acting as “an association...in the interest of its members” (s.38(e) of the Constitution). This would infer that environmental rights under the South African Constitution are applicable both individually and collectively. As the supreme law of the land, that creates the bridge between international law and all other levels of South African law, the Constitutional guarantee of “ecologically sustainable development” takes precedence over any other laws that contravene it (Alberts 2015, 409; s.2 and s.24(b)(iii) of the Constitution).

5.3 Sustainable development in the context of South African waste management law

This section presents how sustainable development has been articulated as the primary aim of the various environmental laws and policies that make up the system of national, provincial and local municipal rules that govern the management of waste in South Africa. The first sub-section examines how sustainable development has shaped this framework firstly by setting out the most relevant national laws, including the Waste Act 2008 and the NWMS 2011. Subsequently, the second sub-section gives an overview of the laws related to the management of recycled material and waste handled by waste pickers at the provincial and local government levels.

5.3.1 In national waste management law

According to the Department for Environmental Affairs, which holds the government portfolio for oversight of waste management, there are six legislative documents which govern waste

management at the national level. These are the South African Constitution (Act 108 of 1996), the Environmental Conservation Act (Act 73 of 1989) (Environmental Conservation Act 1989), the National Environmental Management Act (Act 107 of 1998) (NEMA 1998), the National Environmental Management: Air Quality Act (Act 39 of 2004) (Air Quality Act 2004), the National Environmental Management: Waste Act 2008, (Act 59 of 2008) (Waste Act 2008) and the National Waste Management Strategy 2011 (NWMS 2011). I add another, the National Framework for Sustainable Development 2008 because it sets out how and in what way South Africa intends to achieve sustainable development nationally. With the exception of the Constitution, which has been discussed above, the relevant features of each document are as follows:

The Environmental Conservation Act 1989 focuses on the protection of the natural environment through environmental conservation measures. The Act does not explicitly mention sustainable development but does include sections on the regulation and control of environmental pollution (s.19 and s.20 of the Environmental Conservation Act 1989), and activities which have a detrimental effect on the environment along (s.21-s.23 of the Environmental Conservation Act 1989), with the associated penalties (s.29 and s.30 of the Environmental Conservation Act 1989). However, the sections related to waste management permits (s.20 of the Environmental Conservation Act 1989) have been repealed and replaced by s.80 and s.81 of the Waste Act 2008 on transitional arrangements from the old waste management permit regime to the new licensing one. Therefore its relevance to the current regime for the management of waste is less relevant than before Waste Act was gazetted in 2009.

The Air Quality Act 2004 focuses mainly on measures related to the monitoring, management and control of air quality caused by pollution from fuel, emissions and other environmental stressors. The Act creates institutions, norms and standards, and penalties for the regulation of

air quality. The Act is therefore less relevant to the work of waste pickers who handle mainly non-hazardous recyclable materials.

The NEMA 1998 is primarily a framework agreement that establishes institutions, procedures and dispute resolution mechanisms for environmental governance at the national level. The Act does not only reflect sustainable development ideas that are internationally-conceived. As Glazewski writes, some of these ideas are unique to South Africa. Section 2(4)(d) of the NEMA 1998 provides that, “Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.” This obligation on the state is directly related to the desire to address the wrongs of apartheid. Regarding waste, the Act has three points of focus. The NEMA 1998 mentions waste in relation to definitions for commercially confidential information, and pollution (s.1(1)(iv) and s.1(1)(xxiv)(iii) of the NEMA 1998); the need to respect the waste hierarchy (s.2(4)(iv) of the NEMA 1998); and access to information and whistle-blowers (s.31(1)(a) of the NEMA 1998). However, the NEMA 1998 does not provide any substantial framework for waste management, beyond the general environmental principles set out in s.2, including sustainable development, which covers waste (s.2(3) and s.(4)(a) of the NEMA 1998). The NEMA 1998 is meant to be read in conjunction with the Waste Act 2008, which sets out at s.5 that the environmental principles found in s.2 of the NEMA 1998 including the principle of sustainable development at s.2(4) of the NEMA 1998 apply to the operation of the Waste Act 2008.

Shortly before the promulgation of the Waste Act 2008, policymakers at the national level created the National Framework for Sustainable Development in July 2008 to guide all governmental, private and social entities on how to promote sustainable development in their policies and decision making (Sustainable Development Framework 2008, 7). The Framework

document states that South Africa's constitutionally enshrined definition of sustainable development was influenced by the definition found in the Brundtland Commission report (Sustainable Development Framework 2008, 14). The Framework document identifies the dearth of "effective mechanisms to reduce waste at source" as a policy weakness in the country's legislative framework for environmental management in 2008 (Sustainable Development Framework 2008, 31). One of the ways the Framework suggests to overcome this is through collaboration at the national, regional and global level to achieve "efficient and effective integrated planning and governance" (Sustainable Development Framework 2008, 8). This collaboration would cover government aims to dematerialise the economy, i.e., government plans to reduce waste sent to landfill because "rising waste levels...undermine capacity for sustainable economic growth" (Sustainable Development Framework 2008, 35-36). It identifies "community-based waste collection and re-sale of reclaimed materials" as a hidden opportunity for economic growth and poverty eradication, and cites the development of the then 'Waste Management Bill' as crucial to this (Sustainable Development Framework 2008, 38-40).

The Waste Act 2008 is more comprehensive than the previous Acts in the way it addresses the management of waste. The Act establishes norms and standards at the national level for waste classification (s.7(1)(a) of the Waste Act 2008); waste service provision (s.7(1)(b) of the Waste Act 2008); storage, treatment and disposal of waste; waste minimisation and the waste hierarchy (s.7(2)(a) of the Waste Act 2008); extended producer responsibility (s.7(2)(b) of the Waste Act 2008); which apply at the provincial level per s.8. It establishes general duties in respect of waste management (s.16 of the Waste Act 2008); lists of waste management activities (s.19-s.20 of the Waste Act 2008); and how they are to be monitored and licensed (s.43-s.59 of the Waste Act 2008). The Act creates bureaucratic posts responsible for the management of waste, such as waste management officers (s.10 of the Waste Act 2008); directs

provincial and municipal authorities to prepare plans for the integration of waste management within their jurisdictions (s.11 of the Waste Act 2008); and provides guidance on the contents therein (s.12 of the Waste Act 2008), and reporting on their implementation (s.13 of the Waste Act 2008). Measures for how waste management plans are to be prepared by industry as discussed in detail in Chapter 7 of this thesis (s.28 of the Waste Act 2008) or by an organ of state (s.29 of the Waste Act 2008); what those plans should contain (s.30 of the Waste Act 2008); and the procedure by which they are to be approved, and reviewed (s.31-s.34 of the Waste Act 2008) are also included. The Act also establishes a national waste information system which records information that is used to monitor, evaluate and improve the effectiveness of the Act (s.60-s.64 of the Waste Act 2008); and measures for compliance and enforcement of the Act (s.65-s.68 of the Waste Act 2008). In addition, the Act provides that consultation with Cabinet ministers, other relevant government officials, and public participation are necessary for the discharge of the Act depending on the circumstances (s.72-s.73 of the Waste Act 2008). The Act also contains provisions on contaminated land (s.35-s.41 of the Waste Act 2008); and unauthorised waste disposal (dumping) (s.26-s.27 of the Waste Act 2008); which are outside the concerns of this thesis.

It is pertinent that the Waste Act 2008 provides the legislative basis for the establishment of the NWMS 2011 at s.6. This provision is one of the most important within the Act because it includes a clear direction for the types of policy that need to be established in order to give effect to the Act. This includes the waste hierarchy – re-use, recycling, recovery, treatment and disposal (s.6(1)(a) of the Waste Act 2008); waste reduction (s.6(2) of the Waste Act 2008); and environmental education (s.6(1)(d) of the Waste Act 2008). The NWMS is also expected to cover cooperative governance in waste management (s.6(1)(c) of the Waste Act 2008); to have regard to international agreements related to waste (s.6(1)(b) of the Waste Act 2008); and compliance measures (s.6(1)(e) of the Waste Act 2008).

The Waste Act 2008 requires the government to establish a NWMS which outlines the plans and procedures relating to waste management and recycling including “practical measures for achieving co-operative governance” that would achieve this (s.6(1)(c) of the Waste Act 2008). The Waste Act also provides that organs of state “must give effect to the NWMS 2011 when exercising a power or performing a duty in terms of this Act or any other legislation regulating waste management” (s.6(4) of the Waste Act 2008). Furthermore, the Waste Act states that the NWMS needs to be reviewed at least every five years (s.6(5)(e) of the Waste Act 2008). Thus, the NWMS 2011 is the piece of policy which governs other waste management policies most comprehensively.

From the above, a few points arise about the waste management regime and how it applies at the national level. Firstly, the Constitution is the legislative ‘bridge’ between sustainable development in international law and national law as considered above and analysed in Chapter 4. Secondly, as discussed above, the Waste Act is the main Act in the group of Acts addressing waste management in South Africa that has been promulgated to give effect to the waste management dimensions of the constitutional guarantee of sustainable development (s.24 of the Constitution). Thirdly, urban waste management is managed primarily at the local government level (Alberts 2015, 410), which is discussed in section 5.3.2.

5.3.2 In provincial and local government waste management law

This section scrutinises how relevant waste management laws passed at the level of the Gauteng provincial legislature, and the Metropolitan Municipality of Johannesburg include the aim of sustainable development in their quest to manage waste in their respective jurisdictions. The focus on the laws of the province of Gauteng, and the municipal laws of the city of Johannesburg (located in Gauteng province) corresponds with the focus on data gathered from a buy-back centre located in Johannesburg, discussed in Chapter 7. More explicitly, this section

provides an explanation of how regulations governing waste management activities on the landfill and on the street apply to waste pickers.

Local government law is consistent with national and provincial law in its citation of sustainable development as one of the main objectives of provincial and municipal waste management legislation (s.3(1)(b) of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013; Gauteng Provincial Integrated Waste Management Policy 2006, 1, 3). The management of landfills is governed by a system of licences granted by national and provincial governments in South Africa (s.43-s.59 of the Waste Act 2008). Entities wishing to manage landfills are required to apply for a licence that governs activities that they control, which have, or are likely to have, a detrimental effect on the environment (s.45 of the Waste Act 2008). The entity may be required by law to appoint a person to manage the waste management licensing application process (s.46 of the Waste Act 2008). The list of activities that entities are allowed to govern on landfills appear in the Government Notice (“GN”) No. 921 of 29 November 2013: List of waste management activities, that have, or are likely to have a detrimental effect on the environment.

The licence granted specifies the person to whom it is issued (s.51(1)(c) of the Waste Act 2008); the amount and type of waste that may be recycled and recovered or disposed of (s.51(1)(h) of the Waste Act 2008); and the conditions under which the salvaging of waste may be undertaken (s.51(1)(i) of the Waste Act 2008). This excludes any activity not pursued by the landfill manager, such as waste-picking. Individuals who do not own or manage a landfill, such as waste pickers, would fall outside of the list of persons with authorisation to carry out a waste management activity on the landfill. South African waste management law at national, provincial and local levels provides that the recovery of waste from landfills by unauthorised persons including waste-pickers is illegal (s.2 of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013; s.14.1, s.14.2 and s.15 of the Gauteng

Provincial Integrated Waste Management Policy 2006, 15-18; s.24 of the Waste Act 2008). The Johannesburg official interviewed was very clear that waste-picking is not allowed on landfills under any circumstances (Senior waste management municipal official 1, Interview 2 of 2016). This view was also shared by the waste campaigner interviewed (Waste campaigner 1, Interview 5 of 2016).

Street-based waste-picking would fall under different legal provisions – those concerning the authorisation of waste service provision. As with landfills, the provision of waste management services by a person or entity not authorised to do so is considered illegal (s.21(2) and s.34 of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013; s.11:1 and s.13 of the Gauteng Provincial Integrated Waste Management Policy 2006; s.24 of the Waste Act 2008). Therefore, waste pickers who do not apply for authorisation to provide waste management services before carrying out such activity would be doing so illegally.

The above discussion shows that lack of inclusion of all major forms of waste picker activity by the law can create differential outcomes for different groups of waste pickers. In Johannesburg, municipal officials used the court system, albeit unsuccessfully, to stop waste-pickers from working on landfills. As discussed in Chapter 3, in the 2003 case of *Pikitup v Motale*, the city of Johannesburg sought to remove waste pickers from the Marie Louise landfill in Johannesburg.⁴⁰ The court ruled against this on the basis that to remove the waste pickers would be injurious to the waste pickers' livelihoods because of a lack of options to enter the formal job market.⁴¹

⁴⁰ *Pikitup vs Motale*, n.5, p. 1.

⁴¹ *Pikitup vs Motale*, n.5, p. 10.

5.4 Sustainable development in the context of South African legal culture

5.4.1 The character of South African legal culture

South African legal culture is understood as conservative because lawyers and judges are considered to apply a careful, highly technical and formalistic approach to legal analysis and legal interpretation (Klare 1998, 168-170). By legal culture, I mean the habitus or tendencies of legal professionals to adopt a particular attitude, sensibility, rhetoric and “intellectual reflex” (Klare 1998, 166). The careful and highly technical approach is further typified by a tendency towards literal and rule-bound interpretations of legal texts, which involves reaching “relatively specific conclusions from general and abstract premises” (Klare 1998, 168). Judges in South Africa are understood as not wont to interpret the law in a way that leads to a new policy direction (Klare 1998, 168).

As adjudicators of legal problems, judges are expected to dispense with personal, political and ideological biases in the discharge of their duty to interpret legal texts (Klare 1998, 157; Sachs 2011, 30). The use of legal ideas to change social dynamics is commonly done through the enactment of laws as opposed to through judicial activism, a fundamental element of the rule of law (Klare 1998, 156-157). In the experience of Albie Sachs, a former Justice of the Constitutional Court, judges do not reach a particular opinion “purely on rational autopilot” (Sachs 2011, 35). Klare would add that judges, like people, do not reason in a vacuum and are influenced by the norms, codes and practices of their professional culture (Klare 1998, 168). Many South Africans hold the belief that law is a powerful vehicle for positive social change, whether applied in the hands of judges or evident in the process to draft a new constitution, discussed above (Klare 1998, 169).

5.4.2 Judicial responses in case law

South African judges have embraced the formulation of sustainable development in the law, and expressed the need for a change in their adjudicative practices to include its consideration

in environmental cases. In *BP Southern Africa*, which concerned whether environmental impact should be considered in the decision making process to grant a licence to operate a petrol filling station, page 25 of the judgment states that:

“sustainable development” is the fundamental building block around which legal norms have been fashioned, both internationally and in South Africa, and is reflected in section 24(b)(iii) of the constitution. Pure economic principles will no longer determine in an unbridled fashion whether a development is acceptable. Development, which may be regarded as economically and financially sound, will in future be balanced by its environmental impact, taking coherent cognisance of the principle of intergenerational equity and sustainable use of resources in order to arrive at an integrated management of the environment, sustainable development and socio-economic concerns. By elevating the environment to a fundamental justiciable human right, South Africa has irreversibly embarked on a road, which will lead to the goal of attaining a protected environment by an integrated approach, which takes into consideration inter alia socio-economic concerns and principles”.⁴²

In addition to solidifying the High Court’s acceptance of sustainable development, this quote shows that the Court understands the need for socio-economic issues to be given equal consideration to economic development and environmental protection if sustainable development is to be achieved.

The case of *Fuel Retailers* gives insight into how the Constitutional Court has approached sustainable development.⁴³ In his dissenting judgment on how environmental authorities

⁴² *BP Southern Africa*, n.13, p. 25.

⁴³ *Fuel Retailers*, n.13.

should approach the detrimental environmental effects of the building of a filling station on a property, Sachs J intones at paras 113 and 114 that,

“Sustainable development presupposes accommodation, reconciliation and (in some instances) integration between economic development, social development and environmental protection. It does not envisage social, economic and environmental sustainability as proceeding along three separate tracks, each of which has to be weighed separately and then somehow all brought together in a global analysis. The essence of sustainable development is balanced integration of socio-economic development and environmental priorities and norms. Economic sustainability is thus not part of a check-list that has to be ticked off as a separate item in the sustainable development enquiry. Rather, it is an element that takes on significance to the extent that it implicates the environment. When economic development potentially threatens the environment it becomes relevant to NEMA. Only then does it become a material ingredient to be put in the scales of a NEMA evaluation.”⁴⁴

In the main judgment of the same case, *Fuel Retailers*, Ngcobo J charts the history of sustainable development in international law⁴⁵, and quotes eminent Weeramantry J to relate how the term is conceived in international law with its formulation in the Constitution.⁴⁶ This case shows that the highest appellate court in the country is active in the consideration of the environmental, social and economic pillars of the integration element of sustainable development. Both *Fuel Retailers* and *BP Southern Africa*, cited above, show that sustainable

⁴⁴ *Fuel Retailers*, n.13, 113-114.

⁴⁵ *Fuel Retailers*, n.13, 46-53.

⁴⁶ *Fuel Retailers*, n.13, 54-56.

development is now well-understood as a cornerstone concept in South African environmental jurisprudence.⁴⁷

The issue of changes to adjudicative processes to include sustainable development was discussed in the case of *Mineral Development*.⁴⁸ This case concerned whether the environmental concerns of local residents should be considered in the process of granting a mining licence. In the judgment handed down, Olivier JJA states at para. 20:

“Our Constitution, by including environmental rights as fundamental, justiciable human rights, by necessary implication requires that environmental considerations be accorded appropriate recognition and respect in the administrative processes in our country. Together with the change in the ideological climate must also come a change in our legal and administrative approach to environmental concerns.”

This sentiment has been echoed in *BP Southern Africa*. In this case, Claassen J asserted at page 22 of the judgment that,

“The respondent and the Department are at the centre of these “administrative processes” as far as the promotion and protection of the constitutional right to the environment in Gauteng is concerned. They cannot avoid this constitutional duty. They are required to carry it out by means of adequate legislation and other programmes.”⁴⁹

These two cases, which arose in South African jurisprudence not long after the promulgation of the 1996 Constitution, involve the impact of commercial activities on the environment in

⁴⁷ *Fuel Retailers*, n.13; *BP Southern Africa*, n.13.

⁴⁸ *Mineral Development, Gauteng Region and Another v Save the Vaal Environment and Others* [1999] 2 SA 709 (SCA), para. 20.

⁴⁹ *BP Southern Africa*, n.13, p. 22.

which people live. Both judgments reinforce the idea that the rights to achieve sustainable development and to protect the environment are recognised as applying both to individuals and to a collective. Government bodies are duty bound to consider sustainable development in their administrative decision-making processes (Glazewski 2019, 319). Since then, cases revolving around environment-related rights have mushroomed in South Africa.

The invocation of environmentally-related constitutional rights does not appear in cases known to involve the right of waste pickers to continue their work on landfills, or concerning the viability of recycling initiatives.⁵⁰ *Pikitup v Motale* touches upon issues of environmental justice for waste pickers working on the Marie Louise landfill in Johannesburg but negotiates the terms of this struggle in the language of housing provisions.⁵¹ The case concerning REDISA hinges on financial corruption, despite the fact that it has the effect of reducing opportunities for waste pickers to sell recycled tyres within a structured system.⁵²

5.5 Summary

This chapter demonstrated how sustainable development is embedded into the structure that governs waste management in South Africa. It examined the character of sustainable development and environmental rights in the Constitution and reviewed the web of national, provincial and local government laws and policies that govern waste management to illustrate its findings. Finally, it explored how judicial responses to sustainable development as a ‘new’ concept constitute a new approach to environmental jurisprudence within South African legal culture.

⁵⁰ *Pikitup v Motale*, n.5; *REDISA v DEA*, n.4.

⁵¹ *Pikitup v Motale*, n.5, p.1.

⁵² *REDISA v DEA*, n.4.

A few observations are made. First and foremost is the observation that sustainable development confers both individual and collective rights to South African citizens. Sustainable development as a rationality has conceptual value to shape social and economic norms. The promise of sustainable development in the form of integration – economic growth, social development and environmental protection – sets a very high bar for those implementing policy to follow. The South African democratic project is only 25 years old, so jurisprudence covering the constitutional right to sustainable development and waste-management law is still developing. However, to date, no cases concerning waste pickers have utilised sustainable development as a concept in reported arguments. In its incarnation at the local government level, waste management laws aimed at achieving sustainable development render some economic transactions undertaken by waste pickers legal, and others illegal as discussed in Chapter 3. The lack of inclusion of some waste picker activity in what is considered legal raises the case for social and environmental justice in the law. This exclusion further demonstrates the power of sustainable development to shape economic, environmental, legal and social norms. This is particularly relevant to the analysis in the following Chapter 6, which addresses the challenges of creating waste management policy aimed at sustainable development, and as well in Chapter 7, which is centred on a case study of waste pickers in the city of Johannesburg.

VIGNETTE 6:

A PRIVATE WASTE MANAGEMENT COMPANY CEO

19th October 2016

I met Gerardhus Nel, the CEO of one of South Africa's largest waste management companies, at an industry conference where he gave a presentation on his vision for the industry. In his presentation, he discussed his company business model, which, while focused on making profits for shareholders, is concerned to reward workers from disadvantaged backgrounds who work hard and show promise and willing. The reward he offers comes in the form of training and well-defined career progression. He believes that the waste management sector has huge potential to rebalance historical inequalities in the country and his speech was an exhortation to other company executives in the room to consider the possibility that they can also adopt this business model.

I joined him and another private waste management executive for a discussion about the "bottom line" during one of the conference breaks. Without cash flow, profit, finance, and efficiency of processing and volumes of materials, their businesses would not be able to function. Mr Nel said that the reason he can maintain his business model successfully is by keeping both his senior executives and his lower waged workers invested in his plan. He did this by offering his senior staff more perks such as longer holidays and flexible working, and being consistent and robust in the rewards given to lower-waged workers. In his research on senior executive job motivation, Gerardhus found that senior level executives are likely to be more driven in a job that gives them the flexibility to see more of their family, than in a job that allows them to buy a second sports car. Gerardhus himself is divorced with two children. The national reach of the business means that most of Gerardhus' day is spent travelling to and in meetings with staff at various levels of the organisation, listening to problems and giving

direction. He also meets with government officials, current and potential clients and buyers to manage these relationships. Nearly 80 per cent of the materials processed by Gerardhus' company is bought from informal workers, either waste pickers or "a man with a bukkie"⁵³ as opposed to solely commercial clients. This means that the business potentially supports more lower-income families than those of their direct employees. His experience is that different provincial and municipal governments have varying levels of efficiency when it comes to facilitating bureaucratic applications for private sector actors, including processing times for environmental licences. In one municipality, his business decided to operate before a licence was granted because it was found that any fine given by the government was lower than the profits to be made.

⁵³ "Bukkie" is the South African word for a pick-up truck. In this case, a man with a bukkie is likely to be a middle man who has bought recycled materials from waste pickers with limited access to transportation, for resale to a bigger company.

6 WASTE MANAGEMENT STAKEHOLDERS AND POLICY

MAKING FOR SUSTAINABLE DEVELOPMENT

6.1 Introduction

Chapter 5 focused on how sustainable development has been integrated as a legal concept in the South African econolegal regime at the levels of national law and local government law. Constitutional law enshrines sustainable development as an individual and collective right for all in South Africa. National laws aimed at sustainable development largely omit waste pickers from its formulation of rights and obligations in the waste management regime, even though waste pickers collect nearly 90 per cent of the general waste that is recycled in South Africa (Godfrey et al 2016, 1). National laws also aimed at achieving sustainable development through the formalisation of waste pickers but have not been successful at doing this. Indeed, over 90 per cent of all registered waste picker cooperatives have failed (Godfrey et al 2016, 3). Furthermore, local government law aimed at sustainable development renders some waste pickers' economic activities legal and others illegal.

The articulation of sustainable development at different levels of South African law has been replicated in waste management policy and economic relationships. Sustainable development has been lucrative for large waste management players in South Africa, whereas waste pickers have experienced little change in their position as vulnerable economic actors. This reality is because waste management policy is based on market-fixing ideas that are not suitable to the dynamic conditions seen in the waste management economy.

This chapter analyses empirical material that inform a substantial number of the findings of the thesis. It shows that sustainable-development-oriented waste management policy is based on market-fixing ideas and market failure policy that results in the failure of key waste management policies. The chapter further demonstrates, from an empirical perspective, how

sustainable-development-oriented waste management policy has failed to deliver improved economic and social conditions for waste pickers. Chapter 6 uses the language of ESL to tell the story of how key waste management policies have been constructed and subsequently failed at achieving sustainable development. The way in which the sustainable development rationality presents itself extends beyond matters pertaining to the legal system and legal compliance discussed in Chapter 5.

The current chapter delves into how government and private sector policy making stakeholders in South Africa work to create a waste management economy aimed at achieving sustainable development. It uses empirical data gathered during the fieldwork period from October – November 2016 and January – April 2017. The chapter largely draws on Mazzucato’s views on market-fixing and market-shaping models of economic policy making to scrutinise national waste management policies related to IndWMPs for the waste tyre industry (2016). It assumes the Polanyian understanding that economic markets are created as a result of actions and interactions based on decisions taken by “social authority” or political leaders within society (Polanyi 2001 [1944], 70). The analysis is framed through the language of rationalities, regimes, actions and interactions, fused with Bourdieu’s vocabulary generated from his empirical insights on how the state creates markets, discussed in detail in Chapter 2.

This chapter acknowledges that the laws which govern waste management and have immediate impact on waste management actors are created at the local government level. The local level analysis is carried out in Chapter 7 and helps to establish the impact of sustainable development on the most vulnerable in society at the level of (inter)actions. However, before undertaking this analysis, Chapter 6 focuses on national government-led policy making processes for three reasons. Firstly, the policy making framework that guides the shape of locally implemented policies is decided at the level of national government. Policymakers at other levels of government are prohibited by the Constitution from (co-)creating locally tailored policies

which conflict with national law and policy (s.104(3) and s.156(3) of the Constitution). Secondly, the policy outcomes, both positive and negative and readily identified by stakeholders, emanated directly from policies devised at the national level and which were 'felt' by waste management actors at all levels. Thirdly, since policies made at the national level have an impact on policies devised at lower levels of government and on waste management actors throughout the country, any real possibilities for change must take place in the national policy making sphere.

The chapter narrows down its analytical focus to the IndWMP aspect of the NWMS 2011 policy Goal 1 of the NWMS 2011, concerned with promoting waste minimisation, re-use, recycling and recovery of waste for four reasons. Firstly, the chapter is concerned with how policies for the waste management economy are made through the lens of stakeholders, as opposed to the legal architecture and process for creating legally binding instruments which inform and are informed by promulgated policies, a topic covered in Chapter 5 on waste management law making. Secondly, Goal 1 of the NWMS 2011 is the policy goal which governs the recycling-focused activities of waste pickers who are instrumental in the diversion of recyclables from landfills because they collect 80-90 per cent of all materials recycled in South Africa (Godfrey et al 2016, 1). Thirdly, policies associated with Goal 1 of the NWMS 2011, such as IndWMPs, were the subject of much comment from private sector actors concerned with government policy making failure and the viability of the private sector. Fourthly, the current approach taken to IndWMPs has resulted in possibly the widest consultation of stakeholders in South African waste management policy making history (Scholtz, 2018). This represents a departure from a policy making practice which minimises input from the private sector, civil society and the general public.

The scene being analysed here takes place outside of the legislative. It is not a physical one, but the makeshift and virtual one in which policy making is informed. It comprises

correspondence, and national, provincial, regional and local government-convened fora and meetings that present the setting in which government and stakeholder representatives can communicate their vision for how things should work in the sector. Much of the communication takes the form of gazetted calls by the government to industry, civil society and the general public for the submission of policy proposals, followed by responses to those calls, both formal and informal, and the subsequent exchanges that arise among the parties. The inclusion of various stakeholders in the policy making process is what Dryzek would refer to as democratic pragmatism, which is aimed at creating legitimacy in the policy making process among the general public (2013,100). The scrutiny of the waste management policy making process is important for my investigation because the NWMS 2011 is mandated by law to give full effect to the Waste Act 2008.

Section 6.2 of this chapter considers the character of the various national policies that relate to sustainable development and waste management in terms of market-fixing and market-shaping economic approaches to policy making. The section starts with the National Framework for Sustainable Development 2008, which is the overarching policy governing the implementation of sustainable development policies in South Africa. Then it examines the NWMS 2011, Goal 1 of the NWMS 2011, to promote waste minimisation, reuse, recycling and waste recovery, and then more narrowly IndWMPs as one of the targets of Goal 1. Section 6.2 concludes that waste management policy making in South Africa draws on market-fixing ideas.

Section 6.3 draws on a case study of the IndWMP for waste tyres to investigate the implementation of a particular waste management policy aimed at achieving sustainable development, and evaluating the performance of the policy. The section examines the operation of the Recycling and Economic Development Initiative of South Africa (REDISA), a non-profit company that was mandated by law to manage the IndWMP for recycled tyres. The period of interest is from the inception of REDISA in 2012 to its recent court battle with the

Minister of Environmental Affairs, which, concluded in January 2019 after the loss of its mandate. Part of the analysis reviews the approach to economic policy making for tyre recycling, and considers that the market-fixing ideas employed in the development of REDISA contributed to its failure, a finding reinforced by accounts shared by waste management stakeholders.

Section 6.4 focuses on how the motivations, capital and habitus of waste management actors diverge and contribute to making the policy making process difficult. I chose to group actors into government, formal private sector actors and informal private sector actors because the attributes of the actors within those groups are aligned. This analysis reinforces the point that the diversity of characteristics observed among waste management actors is evidence that the waste management economy is very dynamic. The features of the waste management economy are not static in a way that would make market-fixing ideas and market failure theory an appropriate approach for achieving policy success. The conflicting nature of waste management actors' motivations, habitus and capital bolsters the suggestion that sustainable development policy based on market failure theory is likely to fail. Sustainable development policy has not been designed to respond to fluid conditions within the waste management economy.

In conclusion, current waste management policy in South Africa states that it will achieve sustainable development. However, the policy formulated is based on market-fixing ideas that are likely to lead to market-failure and little or no improved social conditions for waste pickers. As it stands, the market failure market logic that could operationalise itself through sustainable development in the waste management economy is not attached to a public governance framework that provides flexible mechanisms of oversight of the economy.

6.2 The waste management policy framework

This section has two main aims. First, the section discusses the features of the main policy instruments that govern waste management aimed at achieving sustainable development in South Africa. The policy framework for achieving sustainable development in the waste management economy in South Africa is multi-layered. It flows from the constitutional right to a healthy environment, which requires the government to “secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development” (s.24 (a), (b) (iii), The Constitution 1996), to a web of national, provincial and local government policies. At the national level, the framework includes the National Framework for Sustainable Development 2008, and the NWMS 2011, the overarching policies outlining government efforts to achieve sustainable development, and good waste management respectively.

Secondly, the section evaluates the features of the main policy instruments related to the formation of REDISA, the NPC responsible for managing the waste tyre industry and aimed at achieving sustainable development. Specifically, this evaluation involves an assessment of relevant aspects of the National Framework for Sustainable Development 2008 and the NWMS 2011 for their alignment with Mazzucato’s market-fixing and market-shaping models of public policy making discussed in Chapter 2. The assessment of the NWMS 2011 reveals the extent to which the IndWMP concept is aligned with the traditional market-fixing model or the innovative market-shaping model. Mazzucato is of the view that economic models based on market failure theory may lead to failure and that a mission-led, market-shaping policy approach is required to ensure that sustainable development is achieved (2016, 141). It finds that the ideas included in policies aimed at achieving sustainable development in the South African waste management economy are both ambitious, and difficult to achieve because they

are market-fixing, a conclusion reinforced by the investigation into the workings of REDISA in section 6.3.

6.2.1 National Framework for Sustainable Development 2008

Policymakers at the national level created a National Framework for Sustainable Development in July 2008 to guide all governmental, private and social entities on how to promote sustainable development in their policies and decision making (Sustainable Development Framework 2008, 7). The Framework states that South Africa’s constitutionally enshrined definition of sustainable development was influenced by the definition found in the Brundtland Commission report (Sustainable Development Framework 2008, 14). The Framework document identifies the dearth of “effective mechanisms to reduce waste at source” as a policy weakness in the country’s legislative framework for environmental management in 2008 (Sustainable Development Framework 2008, 31). One of the ways to overcome this is through collaboration at the national, regional and global level to achieve “efficient and effective integrated planning and governance” (Sustainable Development Framework 2008, 8). This collaboration would cover government aims to dematerialise the economy, i.e., government plans to reduce waste sent to landfill because “rising waste levels...undermine capacity for sustainable economic growth” (Sustainable Development Framework 2008, 35-36). It identifies “community-based waste collection and re-sale of reclaimed materials” as a hidden opportunity for economic growth and poverty eradication, and cites the development of the then ‘Waste Management Bill’ as crucial to this (Sustainable Development Framework 2008, 38-40).

6.2.2 National Waste Management Strategy 2011

As previously stated, the NWMS 2011 was created pursuant to s.6 of the Waste Act 2008. The Waste Act 2008 recognises the duty of the state to achieve sustainable development through the management of waste and recycling activities in South Africa (Long Title, Preamble, s.1-s.3 of the Waste Act 2008). The Act requires the government to establish a NWMS which

outlines the plans and procedures relating to waste management and recycling including “practical measures for achieving co-operative governance” that would achieve this (s.(1)(c) of the Waste Act 2008). The Waste Act also provides that organs of state “must give effect to the NWMS 2011 when exercising a power or performing a duty in terms of this Act or any other legislation regulating waste management” (s.6(4) of the Waste Act 2008). The Waste Act 2008 further states that the NWMS needs to be reviewed at least every five years (s.6 (5)(e) of the Waste Act 2008). The NWMS 2011 is the highest level policy document directly governing waste management in South Africa.

The NWMS 2011 states that it “seeks a common platform for action between stakeholders to systematically improve waste management in South Africa” (NWMS 2011, 10). The NWMS 2011 comprises eight goals to achieve sustainable waste management. Goal 1 is to “promote waste minimisation, re-use, recycling and recovery of waste” (NWMS 2011, 16). Goal 2 is to “ensure the effective and efficient delivery of waste services (NWMS 2011, 16). Goal 3 is to “grow the contribution of the waste sector to the green economy” (NWMS 2011, 16). Goal 4 is to “ensure that people are aware of the impact of waste on their health, wellbeing and the environment” (NWMS 2011, 17). Goal 5 is to “achieve integrated waste management planning” (NWMS 2011, 17). Goal 6 is to “ensure sound budgeting and financial management for waste services” (NWMS 2011, 17). Goal 7 is to “provide measures to remediate contaminated land” (NWMS 2011, 17). Goal 8 is to “establish effective compliance with and enforcement of the Waste Act” (NWMS 2011, 17).

Goal 1 and others should be reached through a “consultative and partnership based approach” with stakeholders from “households, businesses, community organisations, NGOs, parastatals and the three spheres of government” (NWMS 2011, 19). This approach sees the IndWMP, based on voluntary plans and targets, posited as the main tool of a “co-regulatory system”, which only requires intervention from government “where market failure prevails” (NWMS

2011, 20). The item of policy in focus is the IndWMP of Goal 1 of the NWMS 2011 because it includes the recycling activities of waste pickers.

Goal 1 of NWMS 2011



Figure 7: The waste hierarchy. Source: NWMS 2011, 18.

Goal 1 is aligned with waste picker contributions to the minimisation, recycling and recovery of waste. The goal is also aligned with the concept of the waste management hierarchy, enshrined in the Object of the Waste Act, and which must be considered by all stakeholders in their management of waste (NWMS 2011, 18). The waste management hierarchy prioritises ‘waste avoidance and reduction’, followed by ‘re-use’, ‘recycling’, ‘recovery’ and finally ‘treatment and disposal’ as the order in which post-use materials should be treated (NWMS 2011, 18; s.2 of the Waste Act 2008). Goal 1 comprises two objectives. The first objective is the promotion of waste minimisation in the design, composition and manufacturing of products. The second objective is the promotion of re-use, recycling and recovery (NWMS 2011, 35). The activities of waste pickers fall within the recycling and recovery of waste objective, and are measured by two targets with one accompanying indicator each (NWMS 2011, 35). The first objective has a target of “full achievement of the targets set in the four IndWMPs”, for the paper and packaging industry, the pesticide industry, the lighting industry and the waste tyre industry (NWMS 2011, 35). Goal 1 Objective 1 is measured by the indicator, “targets and measures for waste minimisation in the paper and packaging industry, pesticide

industry, lighting industry and waste tyre industry's IndWMPs" (NWMS 2011, 35). The second objective has two targets. The first target is "25% of recyclables diverted from landfill sites for re-use, recycling and recovery by 2015" and is measured by the indicator " % of recyclables diverted from landfill sites for re-use, recycling and recovery" (NWMS 2011, 35). The second target is "All metropolitan municipalities, secondary cities and large towns have initiated separation at source programmes by 2015" and is measured by the indicator, "number of municipalities in which separation at source initiatives are being implemented" (NWMS 2011, 35). This chapter narrows its focus to the first target of Goal 1, related to systems design that promote waste minimisation and the full achievement of the IndWMP target (NWMS 2011, 35). This is in keeping with the thesis' focus on the effect of sustainable development on economic and social outcomes for waste pickers.

Target of Goal 1: Industry Waste Management Plan (IndWMP)

Goal 1 target 1, which is in focus in this chapter, the IndWMP, may not immediately be understood as associated with the activities of waste pickers. On the surface, the IndWMP relates to the activities of the formal private sector. However, the design of the waste tyre IndWMP, the only waste-stream IndWMP in place during the fieldwork periods of October – November 2016 and January – April 2017 has manifested opportunities for waste pickers to be involved. Observations from February – March 2017 of the operation of the waste tyre IndWMP, included as a target and indicator of measurement, indicated that the engagement of waste pickers' skills are essential to the fulfilment of the plan (Fieldwork notes 2017; NWMS 2011, 35). Tyres could be collected on behalf of the company managing the IndWMP, REDISA, in locations such as landfills where waste pickers are already collecting other waste streams. As a result of this proximity, waste pickers collect many of the tyres which were managed under the tyre IndWMP, and sell them directly to REDISA (Fieldwork notes 2017).

In light of this, and the fact that IndWMPs were the subject of much comment from interviewees from formal and informal waste management actors, I briefly explain the IndWMP concept. The NWMS 2011 defines the IndWMP as “a planning instrument that will identify how a specific waste stream will be managed by industry” that “gives industry the opportunity to set out the standards that it will meet...and how it will adhere to these” (NWMS 2011, 45). The government had issued notices to the waste tyre industry, the paper and packaging industry, the electrical and electronic industry, and the lighting industry calling for industry leaders to submit plans for IndWMPs. This chapter discusses the waste tyre IWMP because it involves the recycling activities of waste pickers, and was the only IndWMP operational during the fieldwork period.

6.2.3 Waste management policy as ‘market-fixing’

This sub-section aims to show how the policies that govern waste management in South Africa are based on market failure economic approaches concerned with fixing market inefficiencies, in order to foreground the analysis of REDISA in the section 6.3. First, this section sets out what is meant by ‘market-fixing’ ideas and how they relate to market failure theory by mapping the discussion in Chapter 2. Subsequently, this section provides an analysis of the Sustainable Development Framework 2008, followed by the NWMS 2011 broadly, and then the IndWMP for their relationship to market-fixing ideas. It concludes that the design of the policies are best suited for static conditions that do not exist in the South African waste management economy, and would make the implementation of such policies prone to failure.

Market-fixing ideas and market failure policy

Recalling the discussion in Chapter 2, the market-fixing view sees governments only intervening to fix markets which arise from externalities (Mazzucato 2016, 143). Waste is commonly understood to be an economic externality, which arises out of activity in other economic markets unable to absorb the issues created by the externality without government intervention (Perman 2011, 126). Market-fixing ideas are based on the idea that efficiency in

markets arises out of individuals acting in their own self-interest (Kattel et al 2018, 4). Any intervention by government into markets should be limited to allocative efficiency measures, or ‘fixing’ the failure of the market to allocate resources for welfare-maximisation and efficiency (Kattel et al, 2018, 4; Mazzucato 2016, 143). One form of government intervention can arise out of the failure of the market to account for externalities, like climate change arising out of industrial activity, in order to bring the market back into equilibrium (Mazzucato 2016, 143-144). Government intervention would involve social cost-benefit analysis, also known as social cost-efficient analysis, that generates “meaningful estimates of costs and benefits”, which seeks to make “the best use of (fixed) resources at a fixed point in time (Kattel et al 2018, 13-14). This approach can be usefully applied to fixing disequilibrium in an already existing market, however, it is less suitable when policy makers endeavour to transform existing ones, or shape new markets (Mazzucato 2016, 144). This is because market-fixing ideas lack flexibility to calibrate correctly the appropriate features of a new market.

‘The market-fixing’ Sustainable Development Framework 2008

The Sustainable Development Framework 2008 is broad, and slightly removed from policies targeted only at waste management. The Framework recognises the importance of well-managed waste and recycling to achieving sustainable development driven economic growth in its statement that, “rising waste levels... undermine capacity for sustainable economic growth” (Kattel et al 2018, 6; Sustainable Development Framework 2008, 35-36). Policy documents affirm that waste management policy needs to be made on a “consultative and partnership based approach” (NWMS 2011, 19) to reduce waste at source (Sustainable Development Framework 2008, 31). This fits with the idea that policy must be taken in a specific, “socially desirable” direction that involves collaborative work with the private sector (Kattel et al 2018, 6; Mazzucato 2016, 141). The policy does not provide enough information on its approach to waste management to determine whether it is market-fixing or market-shaping.

The 'market-fixing' National Waste Management Strategy 2011

In contrast, the shape of the NWMS 2011 is dominated by a market-fixing approach. The NWMS 2011 explicitly suggests that “industrial policy and supporting economic instruments” must be combined with environmental policy to achieve overall objectives (NWMS 2011, 21). An application of Mazzucato’s ideas to the NWMS 2011 would suggest that this flagship policy must be taken in a specific, “socially desirable” direction that involves collaborative work with the private sector (Kattel et al 2018, 6; Mazzucato 2016, 141). The “socially desirable” direction relates to the first objective of Goal 1 of the NWMS 2011, “to promote waste minimisation”, and the second objective, “to promote re-use, recycling and recovery of goods and waste materials” (Kattel et al 2018, 6; NWMS 2011, 20-21).

The approach adopted does differ from the market-fixing scenario in which the private sector is encouraged to innovate without intervention from the public sector in one major way. The NWMS 2011 stipulates that private sector waste management actors are being consulted on the form that the final policy is to take (NWMS 2011, 19). Ultimately, the decision on the type of policy making approach to adopt rests with the state (Mazzucato 2016, 153). It may be in this vein that the state set up the Council for Scientific and Industrial Research (CSIR), a

“leading scientific and technology research organisation that researches, develops, localises and diffuses technologies to accelerate socioeconomic prosperity in South Africa. The organisation, which has been established by Parliamentary Act, contributes to industrial development and supports a capable state” (CSIR 2019).

The creation of an organisation that conducts research across a range of industrial sectors – from defence and security to waste – demonstrates that the state recognises that it has a valuable role to play in research on innovative solutions to the problems facing South African society (CSIR 2019; Mazzucato 2016, 145). This move accords with Mazzucato’s notion of science and technology policy research as a tool to support clearly defined public policy goals within

a particular sector (2016, 145). The CSIR has developed the Waste Research, Development and Innovation Roadmap to guide private and public sector investment into waste from 2015-2025, a tangible outcome of a research for innovation policy (Mazzucato 2016, 145; DST 2014).

The NWMS 2011 embraces economic instruments focused on “pricing, taxation, subsidies, incentives and fiscal measures” aligned with the ‘polluter pays’ principle, and which seek to address the “pervasive under-pricing of waste services” (NWMS 2011, 52). Pricing strategies are understood to change behaviour through “a set of incentives and disincentives” (NWMS 2011, 52). This includes financial strategies such as “full-cost accounting, cost-reflective tariffs, cost-recovery and, eventually, volumetric charging”, with certain economic mechanisms being specific to different waste streams (NWMS 2011, 23, 45). These instruments rely on estimations of costs and benefits, commonly understood as ‘cost-benefit analysis’, rooted in allocative efficiency ideas that are a cornerstone of the market-fixing approach (Kattel et al 2018, 13; Mazzucato 2016, 152). The dependence on tools that make minor adjustments in the market, and a reliance on budgetary constraints as an instrument of spending, is understood as focused on achieving allocative efficiency and static equilibrium (HM Treasury 2018, 21; Kattel et al 2018, 13, 17; Mazzucato 2016, 149). When this framework, focused on making minor adjustments in the market to maintain static equilibrium, is applied to an organisation such as the CSIR, it is in line with market-fixing ideas and market failure theory (Kattel et al 2018, 17; Mazzucato 2016, 152).

The NWMS 2011 has built into it several periods of review. These include annual reviews of pricing (NWMS 2011, 52), NWMS goals, targets and indicators (NWMS 2011, 63), unspecified periodic reviews of IndWMPs (NWMS 2011, 33), and a whole-policy review and update every five years (NWMS 2011, 68). In line with the preceding discussion, and that in Chapter 2 on what constitutes market-fixing ideas and market failure theory, a review of pricing

based on cost-benefit analysis remains driven by market failure theory and market-fixing principles. The commitment to a whole policy review of the NWMS 2011 in order to update and maintain the relevance of the policy every five years without any provision for adjusting the policy permanently is based on a market-fixing approach (Kattel et al 2018, 21; NWMS 2011, 68).

The introduction of the NWMS in 2011 represented a novel approach to waste management in South Africa, as it gave effect to a regulatory framework that did not exist before the passing of the Waste Act 2008 two years prior (NWMS 2011, 10). The NWMS 2011 indicates that the reviews to be undertaken relate to performance monitoring of municipal budgets by the National Treasury (NWMS 2011, 31); annual performance reviews of specific targets and indicators (NWMS 2011, 64); and national performance reviews of IndWMPs by the body that mandated the plan (NWMS 2011, 33). The new governance structure created by the NWMS 2011 is focused on static tools in the form of the measurement of performance against specific targets, in line with a market-fixing approach (Kattel et al 2018, 17; Mazzucato 2016, 151-152).

The requirement for the private sector to devise IndWMPs for approval by the government could be viewed as either market-fixing or market-shaping. The government call for IndWMPs from the private sector that “set targets for waste reduction, and for waste re-use, recycling and recovery” creates the possibility for the targets to be used as an instrument of performance review (Mazzucato 2016, 146). By asking the private sector to prepare proposals on how to reduce, reuse and recycle, the government seems attuned to industrial policy practice that views the private sector as better at innovation than the public sector (Kattel et al 2018, 5). This view would regard the partnership approach outlined in the Sustainable Development Framework and the NWMS 2011 as akin to market-fixing measures.

This analysis highlights one dimension of the investigation into whether the current framework for waste management has produced outcomes that lead to the stated public policy outcome of well-managed waste and recycling systems. The next section concentrates its focus on one specific iteration of the implementation of the NWMS, namely how the IndWMP aspect of Goal 1 of the NWMS 2011 has been working in practice. As of September 2020, the REDISA plan is the only IndWMP to be implemented in South Africa.

6.3 National waste management policy in practice: a case study of REDISA

This section builds on the previous analysis of waste management policy by delving into how the IndWMP model for the management of recyclable material streams was developed for the waste tyre industry. The section uses the example of REDISA to discuss how the operation of the IndWMP model in a specific form of market-oriented public governance framework results in failure. REDISA as an entity is a product of the workings of sustainable development within the waste management economy. Firstly, the section examines the entity's stated aims and objectives; and the structure and reach of its operations. Secondly, the section analyses how the market-fixing governance model in which REDISA is implanted contributes to its failure. Thirdly, the section scrutinises how this failure has been perceived by waste management stakeholders.

6.3.1 What is REDISA?

The aims and objectives of REDISA

REDISA, the NPC set up for the purpose of managing the IndWMP for the waste tyre industry in South Africa, was mandated by law to do so in November 2012 (Government Notice No. 988, 8). Government Notice No. 988 places obligations on REDISA to develop the tyre recycling industry in a specific way. This involves stimulating economic activity for waste pickers, small, micro and medium-sized enterprises (SMMEs), and technologies related to

pyrolysis,⁵⁴ crumbing⁵⁵, retreading⁵⁶, energy recovery⁵⁷ and cryogenics⁵⁸. All of the economic activities REDISA undertook should have been in compliance with Broad-Based Black Economic Empowerment (BBBEE) legislation aimed at promoting the advancement of Africans, Coloureds and Indians in the economy (Broad-Based Black Economic Empowerment Act 2003; Government Notice No.988, 9).⁵⁹

REDISA's now defunct website stated that the NPC had four aims: to implement, innovate, influence and inspire (REDISA 2019). Firstly, the NPC aimed to implement a plan to create "value through an overarching model which promotes waste minimisation, re-use and recycling" (REDISA 2019). This is manifestly in line with Goal 1 of the NWMS 2011 to "promote waste minimisation, re-use, recycling and recovery" (NWMS 2011, 35). Secondly, REDISA aimed to innovate to drive "sustainable behaviour as South Africa's first and only

⁵⁴ Pyrolysis is a process whereby materials comprised of oil, such as polyester, plastic bottles and tyres are decomposed at high temperatures to create oil that can be used for fuel (Simpson and Weiner, 2000)). REDISA asserted in our interview that eight to ten pyrolysis plants exist in South Africa (REDISA official 1, Interview 53 of 2017).

⁵⁵ Crumbing is a process whereby tyres are shredded to be converted for in agriculture, the building of roads, steel and reclaimed rubber products (Government Notice No. 988, 17).

⁵⁶ Retreading is the process whereby the layer beneath the exterior of tyres, called tyre casings, are used to create a new tyre. A tyre can be retreaded up to four times (Government Notice No. 988, 16-17)

⁵⁷ Energy recovery is the process by which energy is recovered from tyres through burning in a waste-to-energy plant for use in a cement kiln or for power generation (Government Notice No. 988, 17).

⁵⁸ Cryogenics is the process whereby tyres are shredded, then frozen and separated into its constituent parts to create products such as rubber dust, steel and moulded rubber products (Government Notice No. 988, 17).

⁵⁹ BBBEE Act 2003 aims to increase the number of Black people and Black communities that manage, own and control enterprises and productive assets; improve the human resource and skills of Black people and Black communities; achieve equitable representation in all occupational categories and levels in the workforce; gain preferential treatment in the procurement process; and have greater levels investment into companies that are owned or managed by Black people (s.1 of the BBBEE Act 2003).

NPC to implement the circular economy on a national scale,” (REDISA 2019). At the time of writing, it remained the only government-mandated NPC that has had this objective. It was only in January 2020 that industry news sources announced that the government intended to proceed with an industry-managed waste management plan for paper and packaging waste material streams (Infrastructure News 2020).

Thirdly, REDISA aimed to influence stakeholders by investing “in research and development to support its concept of waste into worth,” (REDISA 2019). Evidence of the form of its research and development activity is scant. For REDISA, the management of the waste tyre supply chain was seen as peripheral to what REDISA set out to achieve in South Africa (REDISA Official 1, Interview 53 of 2017). This view was corroborated by one central government official (Senior central government official 1, Interview 57 of 2017). This account from the REDISA official I interviewed and the senior central government official contradicted with the stated aim of REDISA in Government Notice No. 988 to “promote and support the establishment of recycling facilities nationwide” for the tyre industry (Government Notice No. 988, 16).

Fourthly and finally, the company aimed to inspire because it created “fresh opportunities for individuals and businesses,” (REDISA 2019). Data from interviews conducted with stakeholders did not fully support this statement. For instance, one waste picker who worked closely with REDISA said that he was offered training opportunities to build the tyre recycling component of his business (Waste picker leader 4, Interview 25 of 2017). However, private sector stakeholders complained to me that the appearance of REDISA resulted in the near disappearance of waste tyre recycling by large-scale private sector actors because the responsibility for tyre recycling became centralised in REDISA (Private sector waste manager 4, Interview 23 of 2017; Private waste management industry association officials 3 and 4, Interview 58 of 2017).

The structure of REDISA operations

In my interview with a REDISA official, I was given insight into the then-operations of the NPC. In 2017, REDISA was led by a Chief Executive Officer, who managed a Board of Directors involved in the financial, legal and other aspects of its core business, waste tyre recycling (Fieldwork notes 2017). In terms of its core activities, when a waste tyre arrived at a REDISA-managed collection point, which could have been situated on a landfill, independent transporters moved the tyres to a recycling company directly or to a depot, after which it went to a recycling company (REDISA official 1, Interview 53 of 2017). At the recycling company, the waste tyres would undergo one of two processes initially – shredding or pyrolysis – described as ‘first demand’ activity (REDISA official 1, Interview 53 of 2017). In the ‘second demand’ phase, new products were created, such as blocks, mats and shoes from the shredded rubber, or from oil, tyre-derived fuel (REDISA official 1, Interview 53 of 2017). REDISA saw itself as managing the relationships that enabled the recycling chain to operate in this way. As opposed to getting involved in the day-to-day operations, REDISA provided support to its recycling business partners to comply with the law where necessary, and to make connections with relevant business partners to reach new markets (REDISA official 1, Interview 53 of 2017). REDISA also provided environmental education to the public (REDISA official 1, Interview 53 of 2017).

Approximately one million waste tyres are generated each month in South Africa.⁶⁰ Government Notice No. 988, which established REDISA, recognised that 75 per cent of all waste tyres are understood to be handled by waste pickers, therefore waste pickers must be included in any stakeholder-related activity led by the NPC (Government Notice No. 988, 9-10). In the context of offering support to its stakeholders, REDISA rendered assistance to waste

⁶⁰ *REDISA v DEA*, n.14, 7.

pickers working in collectives or informal cooperatives to complete the paperwork necessary to formalise their operations in compliance with the law (REDISA official 1, Interview 53 of 2017). They paid waste pickers R2 for each tyre they accepted, regardless of quality, though limits on the tonnage they could accept from any one waste picker were in place as a matter of law (Government Notice No. 988, 22; REDISA official 1, Interview 53 of 2017). They informed me that they charged manufacturers and producers of tyres R2.30 (plus VAT according to Government Notice No. 988) for each kilo of tyres collected and that the

“fee that we collect ... has been calculated on what service...we need to deliver to remediate those tyres...and over and above delivering the services you’re also building this....industry which incubates,” (REDISA official 1, Interview 53 of 2017).

Waste pickers I spoke with confirmed that REDISA engaged heavily with waste pickers generally (Waste picker leader 1, Interview 4 of 2016; Waste picker leader 3, Interview 24 of 2017; Waste picker leader 4, Interview 25 of 2017). One waste picker, who was responsible for working with other waste pickers to supply REDISA with tyres explained the nature of his work with the NPC. He would arrange for each waste picker working within a cooperative on his landfill who collected tyres to put them in a container he managed on behalf of REDISA (Waste picker leader 3, Interview 24 of 2017). He then kept records of how many tyres were collected by each waste picker working in cooperatives on his landfill (Waste picker leader 4, Interview 25 of 2017). Once the container was filled with roughly 1,230 tyres, he would contact REDISA to collect them. Once collected, REDISA would then pay the cooperative for the tyres collected and the cooperative would distribute the payments to each waste picker according to the number they collected individually (Waste picker leader 4, Interview 25 of 2017).

On the day I interviewed this waste picker, he invited me into the ‘office’ section of the REDISA container to interview him due to inclement weather (Fieldwork notes 2017). The mud and rain made sitting outside impractical. The mud generated also made it difficult for

waste pickers to work. This meant that I could spend a longer time conducting the interview (Fieldwork notes 2017). During this visit, I also interviewed another waste picker whose assessment of REDISA foreshadows the next sub-section. He opined,

“there is something wrong with REDISA. I heard the agreement they do with the government at the moment, REDISA is not doing that. So in future...they are gonna change something with REDISA...but I’ll ask...(REDISA) when they come here,” (Waste picker leader 3, Interview 24 of 2017).

6.3.2 The Failure of the REDISA Plan

This sub-section is concerned with how the market-fixing ideas that have informed the structure of REDISA have led to the failure of this NPC to carry out its legislative mandate to manage waste tyre recycling in South Africa. It relies on the discussion in section 6.2.3 on what constitutes market-fixing ideas and how these concepts lead to market failures instead of fixing them. The discussion here demonstrates how REDISA fit with the market-fixing narrative by showing how market-fixing ideas have contributed to the failure seen in REDISA scenario.

The potential for waste tyre recycling arose in South Africa out of the failure of the waste tyre manufacturing market to account for the post-consumer tyre care. The South African state, as an architect of policies which regulate markets, chose to adopt the traditional market-fixing model to guide its construction of the waste tyre market by instituting REDISA in 2012. Building an accurate picture of how the actions of REDISA led to its demise was difficult. Much of the information offered by REDISA in their materials and in my interview with one of their officials was disputed by other waste management actors. One private sector official was strongly of the view that REDISA was

“a not-for-profit...(that) collected all these levies (and) had no...major outlet for the funds...so they’re accumulating this massive pool of funds that’s...supposed to go to the creation of

downstream industries...which never really happened,” (Private waste management industry association official 4, Interview 58, 2017).

Another said,

“(REDISA is one of) a few massive failures of late.... They’ve got about R6 billion worth of funds sitting somewhere in order to develop this technology which should have been implemented a long time ago,” (Private sector waste manager 4, Interview 23 of 2017).

On the topic of pyrolysis, one well-known recycling industry leader asserted that there were no pyrolysis plants that she knew of in South Africa in operation in 2017 (Private sector waste manager 6, Interview 54 of 2017). She was aware of the one that I had visited in March 2017 in Kraaifontein, which she said, “is now being packed up and sent back to Japan,” (Private sector waste manager 6, Interview 54 of 2017). Another private sector official shook his head, ‘No’ when I asked about pyrolysis being undertaken in South Africa (Private waste management industry association official 4, Interview 58 of 2017). In respect of crumbing or shredding of rubber, one official opined that REDISA plans for recycling were focused on “turning tyres into ...garden furniture (which is) not an industrial-scale solution,” (Private waste management industry association official 4, Interview 58 of 2017). Waste pickers were also quick to weigh in that the REDISA plan “has failed,” (Waste picker leader 1, Interview 4 of 2016).



Figure 8: The pyrolysis plant at Kraaifontein, Cape Town. Source: Author.

The REDISA official I interviewed asserted that they see the activities of REDISA as focused on “promoting the concept of circularity, this waste into worth [concept]...we really are that body that... wants the world to rethink the future in terms of... the economic structures we have,” (REDISA official 1, Interview 53 of 2017). For the REDISA official I interviewed, the management of the waste tyre supply chain was seen as peripheral to what REDISA set out to achieve in South Africa (REDISA official 1, Interview 53 of 2017). This contradicted with the stated aim of REDISA in Government Notice No. 988 to “promote and support the establishment of recycling facilities nationwide,” (Government Notice No. 988, 16). One central government official was of the view that “REDISA...is working in the country...to make sure that the waste tyres do not end up in the landfill sites,” (Central government middle manager 1, Interview 22 of 2017). This claim was at odds with my experience of visiting a landfill where REDISA placed a container solely for the purpose of collecting tyres. Another central government official was very clear that, “REDISA overstepped their mandate...they want to be everything to everyone in the waste sector...they were established to look after tyres and that’s it,” (Senior central government waste management official 1, Interview 57 of 2017).

The conflicting accounts on and views of REDISA’s activities from the REDISA executive and from various actors were substantiated by the issues at focus in the court case involving

the NPC. REDISA, which had a stated focus on managing tyre recycling, was accused of corruption (Broughton, 2019).⁶¹ The lack of a mechanism by which REDISA's revenues could be channelled towards the government such as through shareholding, meant that the government was unable to benefit from REDISA's large financial reserves (Government Notice No. 988, 8; 35-36). Although REDISA won their appeal case, they are yet to regain their mandate to manage the tyre recycling industry from the government (REDISA 2019).⁶²

An analysis of REDISA's operations using market-fixing ideas exposes three factors which has resulted in failure. The first factor is that a focus on creating a plan based on allocating resources according to cost-benefit did not facilitate REDISA to nurture tyre recycling in South Africa. The second factor is that the establishment of the REDISA board with input primarily from the private sector, with limited participation from other stakeholders meant that REDISA lacked for direct involvement from key stakeholders. The third is the assumption that government should have a limited role in the operation of markets, and that a private sector body would be best placed to innovate.

To expand on the first factor, the REDISA plan was heavily based on the idea that the efficient allocation of resources can develop the waste tyre recycling market. In market failure theory, it is assumed that all actors within a market act out of self-interest, which, in the course of competition results in economic equilibrium and efficiency (Kattel et al 2018, 4). REDISA promoted the idea that cost has an inverse relationship with efficiency, which it cites as "secondary to the goals of job creation, SMME support and BBBEE" (Government Notice No. 988, 11). The plan aimed to shift REDISA's engagement away from larger companies that the

⁶¹ *REDISA v DEA*, n.14.

⁶² *REDISA v DEA*, n.14, 150.

NPC recognised could develop economies of scale in the delivery of recycling-related services towards the stimulation of SMME and informal waste actor-led service delivery (Government Notice No. 988, 9). It couched “efficiency” in this context as creating one waste tyre recycling plan for multiple types of tyres instead of separate plans for each different type of tyre, and emphasised the costs involved in devising and managing multiple plans (Government Notice No. 988, 10-11). The aim to stimulate SMMEs and the informal waste management economy was rooted in a recognition of the economic realities in South Africa. This made improving outcomes for vulnerable economic actors a priority, and a cost-saving in the long-run (Government Notice No. 988, 10-11).

In the case of REDISA, the NPC stated that it would use a levy on tyre manufacturers and retailers to create a market for tyre recycling (Government Notice No. 988, 27). Theoretically, this should have worked because of the assumption that everyone in the market is acting out of her or his own self-interest. However, testimonies from private sector officials working in larger organisations and from waste pickers themselves suggested that the operationalisation of the REDISA plan did not create sustained opportunities for economically vulnerable actors in the sector (Fieldwork notes 2016 and 2017). REDISA collected the levy, paid waste pickers and SMMEs for collected tyres, but did not take any concrete steps to create the tyre recycling market.

The second factor, the composition of the REDISA board, was symptomatic of the market-fixing idea that industrial policy should be derived primarily from the private sector (Kattel, 2018, 4). Specifically, the REDISA plan stated that the board was to be made up of

“two executive directors; one legal expert; one financial expert; five captains of industry and higher learning; one from the informal business sector...(and) no board member may represent any waste stream managed by REDISA” (Government Notice No. 988, 8).

In the REDISA context, this has meant that the government created a private sector company to develop and implement waste tyre industrial policy without the direct involvement of key actors in the tyre industry. The effect of this has been the removal of scrutiny from expert economic actors affected by the plan from the management structure of REDISA. The justification for this board composition is to maintain the independence of the board from the tyre industry (Government Notice No. 988, 8). However, accounts from industry officials outlined above suggest that the inclusion of actors from the tyre industry might have assisted the REDISA board to achieve some of its objectives, particularly in respect of the allocation of resources.

The third factor, limited government involvement in markets, has meant that government inspection of REDISA was restricted to one major, five-yearly external review, beyond the basic yearly operational reporting requirements (Government Notice No. 988, 26, 31).⁶³ The plan did aim for REDISA to seek the assistance of government organisations to help strengthen the performance of SMME and informal waste entrepreneurs, though this was at operational level (Government Notice No. 988, 45). This indicates that there was no provision within REDISA either at board or at internal operational level, for direct government involvement or influence except at the five-yearly interval. The absence of board level representation from the government meant that the DEA's understanding of REDISA's activities arose at a distance. More comprehensive knowledge of the activities of REDISA would technically have been uncovered in 2017 at the first five-yearly review.

⁶³ *REDISIA v DEA*, n.14, 5 and 8.

6.4 Multi-stakeholder involvement in policy making

This section delves into how the the motivations and capital and habitus of waste management actors in the tyre industry complicate the policy making process. The actors are grouped into government actors, formal private actors and informal private actors as these are representative of the three major perspectives observed within the waste management economy. I recognise that within each category, there are sub-sets of actors like central and local government officials; waste and informal actor campaigners and waste pickers; social enterprises or industry associations, that may express views differently to other actors within the larger group. The aim is to show that, in addition to the policy failures identified, conflicting stakeholder priorities and attributes make the policy making process difficult.

The failures of REDISA raise many questions regarding the achievement of sustainable development in the South African waste management economy. Firstly, it raises the question of why the stated objectives of REDISA have not been achieved. Secondly, it raises the question of how to ensure that existing waste management policies can be implemented in a way that is effective. Thirdly, it raises the question of what other factors complicate the process of waste management policy formulation. Section 6.2 of this chapter attempted to address the first concern. The question of how to ensure that existing waste management policies are implemented effectively is answered implicitly in section 6.2.3 of this chapter. That is to say that in order for a policy to be implemented effectively, those who are charged with carrying out the policy would need to, take action, per the policy, to ensure that it is implemented. The case-study of REDISA highlights that the first step to evaluating how waste management policy can be more effective, is to catalogue the ways in which a particular policy has been implemented. Next would be to be clear on what parts of the policy have been implemented, what remains to be implemented, and ask why they have not been implemented. Third and lastly, it emphasises the form of multi-stakeholder involvement in the process of creating public

policy that Mazzucato proposes, and how the inevitable difficulties that may arise if applied in the South African waste management economy can be overcome. The third and last concern is the subject of this section.

6.4.1 Benefits and challenges

The market and the economy are a direct result of the relationships between stakeholders present in society (Mazzucato et al 2020, 425). The NWMS explicitly calls for multi-stakeholder involvement in the formation of waste management policy but does not provide much detail on the form that this should take (NWMS 2011, 10). The dynamic that is evident in the form of multi-stakeholder engagement exemplified above by REDISA is cited as a key factor in its failure as discussed above in section 6.3.2. Thus, the crucial role for multi-stakeholder involvement in the policy making process cannot be understated.

Actors in the South African waste management economy are divergent in their motivations for being active in the economy, the capital they bring to economic transactions, and the habitus towards certain actions. This creates a demand for a willingness to learn from other stakeholders, and to embrace novel organisational structures and ways of working to ensure that policy making is an inclusive process (Mazzucato et al 2020, 428). The meaningful participation of all relevant stakeholders is needed given that in the REDISA example certain stakeholders were excluded in the implementation and maintenance of the plan including the government, tyre retailers and tyre manufacturers. Here, I analyse the motivations, capital and habitus of each major stakeholder in the waste management economy to create an understanding of what must be overcome in order for them to work together effectively.

6.4.2 Government actors' motivations

Government stakeholders are motivated to create waste management policy and laws including a “national recycling infrastructure” and request IndWMPs from the private sector (NWMS 2011, 8, 55-56; s.9 of the Waste Act 2008). In the ESL framework, government stakeholders

may be understood to be motivated by custom or by the desire to reach an aim or objective (Kalberg 1980, 1161; Perry-Kessaris 2015, 60). In terms of waste management policy making, government stakeholders could be regarded as possessing capital which allows them to reinforce certain social structures, such as those related to the law and the creation of markets (Bourdieu 1986, 46). The government has economic capital which comes from revenue streams, and which it can readily convert to money in terms of public spending (Bourdieu 1986, 47; Kattel et al 2018, 5). Habitus is often understood to be based on the embodied state, that is, being possessed by a person (Bourdieu 1986, 47). If it is understood as a tendency towards a certain type of action, then government stakeholders can be understood to have a tendency towards creating waste management policies that lead to compliance with the Waste Act 2008.

6.4.3 Formal and informal private sector actors' motivations

Private sector stakeholders comprise formal actors and informal actors. The formal actors include formal private sector companies, motivated by the profit motive to be in the waste management economy; and industry waste management associations motivated to provide support to larger companies (Fieldwork notes and Interviews 2016 and 2017). The informal waste management actors comprising waste pickers, waste picker cooperatives and organisations focused on campaigning for waste pickers are motivated to ensure waste pickers have a livelihood (Fieldwork notes and Interviews 2016 and 2017).

In reference to the ESL framework set out in Chapter 2, private companies are largely motivated by values based on the profit motive, similar to a belief (Kalberg 1980, 1149; Perry-Kessaris 2015, 60). Making profits can also be seen as an end-goal, which motivates them to act and interact in a way that achieves this end or purpose (Kalberg 1980, 1152; Perry-Kessaris 2015, 60). Individual companies cited other reasons in addition to the profit motive. One company promoted the idea that it was set up solely for the purpose of improving the livelihoods of waste pickers, therefore it was motivated to achieve an aim or a purpose – social

justice for waste pickers – so this would be classified as ‘instrumental’ (Perry-Kessaris 2015, 60). Another company may have been set up due to family custom or tradition, as the official interviewed refers to family involvement in construction and waste management business ventures (Kalberg 1980, 1162; Perry-Kessaris 2015, 60; Private waste manager 4, Interview 23 of 2017).

Industry association officials all made clear that industry associations are motivated to represent and advocate on behalf of their members, provide training, and a means of self-regulation within their waste stream. These ideas could be understood as the end-goal, or organisational purpose, and would therefore fit with the idea of an instrumental or means-end rational motivation (Kalberg 1980, 1152; Perry-Kessaris 2015, 60). They may be considered to be motivated by values based on providing support to their members (Kalberg 1980, 1149).

Bourdieu would understand the formal private sector’s profit making motive in relation to a desire to maintain and increase companies’ economic capital (1986, 47). The profit making motive is what has motivated private companies to build social capital through the formation of waste management associations, which, as formalised social networks, work to increase recycled material collection and lobby government (Bourdieu 1986, 51). The formalisation of its social networks create a form of institutionalised capital that allows private companies to better navigate government policies in order to maintain their commitment to making profits.

Waste pickers, waste picker cooperatives and campaigning organisations are all motivated to ensure the survival of waste pickers and improve their livelihoods. Ensuring waste pickers livelihoods could be regarded as an end-goal, which motivates this group of actors to act and interact in a way that is instrumental to achieving this end or purpose (Kalberg 1980, 1152; Perry-Kessaris 2015, 60). In terms of capital and habitus, waste pickers often find themselves engaged in this type of economic activity because the low levels of economic and social capital

that they possess reinforces their position in society and prevents them from engaging in more profitable activities (Bourdieu 1986, 46). The habitus of waste picker campaigning organisations leads them to build capital for waste pickers by using their formalised social and political networks to lobby government (Bourdieu 1986, 51).

Waste pickers, waste picker cooperatives and campaigning organisations have, for the most part until the end of the fieldwork period in April 2017, been absent from the policy making sphere. The example of REDISA demonstrates that policy making has largely been confined to interactions between the government and the formalised private sector. This dynamic excludes the voices of waste pickers, who are responsible for collecting up to 90 per cent of all materials recycled, thereby demonstrating a very tangible contribution to the sector (Godfrey et al 2016, 1).

6.5 Summary

This chapter set out to explore how policymakers work to create waste management policy focused on achieving sustainable development, paying particular attention to the role of stakeholders. Section 6.2 analysed South African national waste management policy. The examination found that the National Sustainable Development Framework 2008 cites waste as a policy priority. The Framework suggests that multi-level collaboration including community-based initiatives and private sector cooperation is necessary to achieve sustainable development in the waste management economy. The NWMS 2011, based on the Waste Act 2008, sets out in its entirety, a comprehensive national government strategy for waste management. As with the National Framework, it cites multi-stakeholder collaboration as crucial to its success. The NWMS 2011 further details the national waste management goals, of which Goal 1, focused on waste minimisation, recycling and recovery, and more specifically Objective 1 focused on waste minimisation, is central to the analysis in the chapter. Objective 1 was chosen because the activities of waste pickers is integral to making plans associated with

the objective operational. The target of Objective 1 is the IndWMP, of which, the REDISA waste tyre recycling plan was the only one operational during the fieldwork period of October – November 2016 and January – April 2017. Finally, the section found that the NWMS 2011 rests on an economic rationale based on market failure theory and market-fixing ideas.

Section 6.3 of this chapter examined the aims, structure and activities of REDISA, the organisation with a legal mandate to carry out the plan for tyre recycling, and evaluated its performance as a policy. The examination found three factors that contribute to the failure of the REDISA plan. Firstly, REDISA was focused on a model that used cost-benefit analysis to guide its direction, as opposed to one flexible to reach a public policy goal. Secondly, REDISA was required to have a range of stakeholders on its executive board, excluding government officials and representatives from the tyre manufacturing and retailing sector. This lack of involvement from key stakeholders led to minimal government oversight from an auditing perspective, and a lack of opportunity for experts in the tyre industry to shape a new part of the sector. Thirdly, REDISA was expected to manage the tyre recycling economy in a way that created opportunities for SMMEs and waste pickers in tyre recycling. However, many private sector officials were adamant that REDISA failed to achieve this. Waste pickers noted that REDISA was not operating as it should. A lack of government representation in the day-to-day activities of REDISA would have contributed to the government being unable to record in a timely manner that REDISA was not carrying out its mandate.

Section 6.4 of this chapter examined the motivations, habitus and capital of various waste management actors in order to expose how waste management actors may conflict with each other. The discussion demonstrated how these disparate attributes act to make multi-stakeholder policy making a convoluted enterprise. A policy making practice that does not consciously seek to reconcile the positions of waste management actors can contribute to the failure of sustainable development to be realised in South Africa.

The chapter notes that current policy states that it will achieve sustainable development. However, current policy is market-fixing in nature, and designed for static economic conditions. Chapter 7 details how waste picker and buy-back centre interactions in the CBD of Johannesburg highlight that sustainable development is an elusive goal in the South African waste management economy. Chapter 8 advances this analysis in section 8.4.2 by arguing that policy aimed at achieving sustainable development needs to be responsive to changing market conditions and the needs of stakeholders. This requires a market-shaping approach, which has a heavy emphasis on stakeholder collaboration to achieve a particular public policy goal. The approach must also recognise that in the South African context, the variant motivations, capital and habitus of waste management actors must be reconciled in the process of creating suitable waste management policy.

VIGNETTE 7: A WASTE PICKER

15th November 2016

Thembeke is a waste picker and waste picker activist based in a township outside of a large metropolitan city in South Africa. She lost her job in 1997 shortly after apartheid ended and has not worked full-time since. She says that it is difficult to find work in South Africa over the age of 40. Since 2005, she has been waste picking in order to pay her bills and support two school-aged grandchildren. She starts her day very early, and goes door to door seven days a week, visiting homes, taverns (informal bars) and other businesses local to her township, asking for recycled material which she puts in the wheelie bin that she carries around. She also sorts through rubbish bins to find waste that she can resell. She works without gloves or any protective material, and does not eat any food from the bins as it can be contaminated, and encourages other waste pickers to do the same. She laments that waste picking is actively prohibited on the landfills in her city, which has left waste pickers with less access to waste than in other provinces.

The nearest buy-back centre is outside of her immediate community, making it difficult to take materials directly there due to expensive transportation costs. She settles by selling the materials to a middle man who gives her well below market price. For instance, she receives R200 for one tonne of glass from the middle man, and understands from a glass recycling company that if she can get it directly to them, she would receive R1000. She thinks this is grossly unfair especially given that middle men do not suffer any of the health risks that waste pickers do while undertaking their jobs. Many of her waste picking colleagues complain to her that sometimes the middle man does not pay them for the goods collected. She invited me to her home so that I can view her storage facilities and a book in which she details the payment

she receives for the materials she sells to the middle man. However, due to security concerns regarding her township, I decline.

She thinks the solution to waste pickers' woes would be access to land on which they can build a suitable working space. She hopes that they could use their creative and professional skills to make a living, through activities such as gardening, sewing, cooking, and in her case, baking, while continuing to use waste picking as a source of income. She envisions waste pickers coming together to run a crèche for those with children, and to purchase group health and funeral insurance plans to prepare for the inevitable. Many of her ideas have been inspired by a visit she made to waste picker cooperatives in Bogotá, Colombia to see how they have organised themselves. Her family, she says, has paid into a funeral plan for her.

When I met her in November 2016, she was doing several things related to her vision for waste pickers, including trying to raise funds to get a group of waste pickers including herself registered as a cooperative with the South African Department of Trade and Industry. Waste pickers in her township are willing, but do not have the R270 needed to pay the registration fee. She had also written a letter to her Provincial Premier in July 2016, demanding that waste pickers and other informal workers be afforded access to healthcare and education for themselves and families, adequate compensation for the cost and landfill space savings they make to the city, and the land needed to build a much-desired centre. She was contemplating how to follow up since she had yet to receive a response to her letter.

7 SUSTAINABLE DEVELOPMENT IN THE EVERYDAY

LIVES OF WASTE PICKERS

7.1 Introduction

The previous chapter showed that waste management policies can fail when the policy making infrastructure that supports the implementation of sustainable development is based on market failure theory. This happens because the market-fixing ideas that comprise market failure theory are not suitable to achieve sustainable development for economic actors in the South African waste management economy. The waste management economy is based on achieving the economic growth, environmental protection and social development associated with sustainable development. However, the economic and social development does not trickle down to South African waste pickers, who continue to live in poverty. Some waste management private sector actors participate in the economy because there are profits to be made. However, neither the economic logic nor the formalisation programmes associated with sustainable development have succeeded at improving the material conditions for waste pickers. This chapter uses the language of ESL to emphasise this point clearly in an empirical investigation into the economic relationships surrounding one buy-back centre in Johannesburg. It shows that waste pickers are motivated to work in waste management for survival because of a lack of options to enter the job market through other means. Waste pickers are not preoccupied with achieving sustainable development, unlike the buy-back centre managers with whom they transact. Ironically, the company does not make enough profit to run the programmes it intends to provide for waste pickers to ‘skill up’ and enjoy the improved social and economic conditions associated with sustainable development.

Chapter 4 introduced a range of principles concerning the environment and sustainable development that have evolved in international law. Of these, the concept of “integration” is often considered the most legalistic formulation of sustainable development for its requirement

of the collection and dissemination of environmental information and the conduct of environmental impact assessments (Sands et al 2012, 215). Integration in its formulation as the three pillars of sustainable development: environmental protection, economic development and social development, has been incorporated into the Constitution and other laws (s.3(i)(b) of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013; Gauteng Provincial Integrated Waste Management Policy 2006, viii, 4; s.1 of the Municipal Systems Act 2000; NWMS 2011, 10; Purpose, Preamble, s.1 and s.2 of the Waste Act 2008).

This chapter maintains a focus on how sustainable development, as the ‘formal rationality’ discussed in Chapter 2, and the (inter)actions of a range of actors, co-creates the econolegal waste management regime in South Africa. Chapter 6, the first empirical chapter, addressed those who are primarily ‘rule-makers’: the government and the formal private sector. Chapter 6 demonstrated that the way that sustainable development has been formulated in the South African waste management policy making regime has led to the failure of crucial policies. The current chapter devotes its effort to an ESL investigation of the experience of street-based waste pickers as ‘rule-takers’ in the waste management econolegal regime.

This chapter is based primarily on observations and interviews with waste pickers and staff at WasteBuy’s buy-back centre in Johannesburg, Gauteng. WasteBuy is a multinational enterprise that runs buy-back centres, which purchase recycled materials directly from street-based waste pickers. This places WasteBuy at the interface of waste pickers’ economic transactions characterised by informality, and the more formal econolegal regime where compliance with rules is key for the operation of their business.

Bourdieu’s ‘economic field of struggles’ concept and his language of capital, habitus and practice, are used in this chapter to depict its focus on the actual and potential roles of two of the three pillars (economic development and social development) of the integration principle

of sustainable development. This is for three reasons. Firstly, interviews with and observations of waste pickers revealed that their concerns are primarily immediate and personal. They tend to choose waste picking primarily to ensure their economic and social survival, rather than out of a concern for the environment (Interviews 2016 and 2017). Secondly, interviews revealed that those who work with waste pickers are concerned with the economic and social aspects of sustainable development within the waste management economy (Interviews 2016 and 2017). Thirdly, in terms of its classification as a form of economic activity, waste picking, is widely understood as a form of recycling, which has demonstrable environmental benefits. Waste picking directly contributes to a reduction in the use of natural resources such as raw materials used in every day manufacturing, while saving municipalities in South Africa approximately R309.2 – R748.8 million a year in costs through the conservation of landfill airspace (Godfrey et al 2016, 4-5). Despite their contribution to the South African waste management economy, waste pickers are unable to enjoy the benefits of sustainable development in their lives. This is because the waste management econolegal regime aimed at achieving sustainable development has been built using market-fixing ideas and market failure theory. As indicated in Chapter 6, market failure theory has proven to render the waste management econolegal regime aimed at achieving sustainable development unfit to do so.

The first three substantive sections of this chapter use the ESL grammar of rationality, regime and (inter)actions to analyse the interactions within the WasteBuy ‘economic field of struggle’ and the sustainable development rationality that influences its shape. Section 7.2 addresses questions of how WasteBuy and waste pickers (a) comply with and (b) translate the sustainable-development-inspired laws and policies governing their interactions. The analysis reveals that the lack of awareness among waste pickers of their legal obligations to obtain a permit to operate in the waste management economy arises from the way in which WasteBuy and municipal officials translate legal rules. The understanding of how the rules are complied

with and translated foregrounds an examination of how waste pickers and WasteBuy compete with competitors. Section 7.3 uses Bourdieu's 'economic field of struggles' to understand each actor's relative position. The analysis finds that the relationship between waste pickers and WasteBuy stands in contrast with Bourdieu's concept of an economic field, in which actors are guided to compete for their position within the field (2005, 199-202). The company seeks to improve the lives of waste pickers, the very people it needs to exploit in order to boost its market position.

Section 7.4 analyses what drives waste pickers to act in the way that they do – their motivations for actions – and how this is reflected in their relationship with law in terms of the variety of legal consciousness evidenced in their actions. Waste pickers are motivated to recycle informally for their survival, not by an urge to achieve sustainable development. Section 7.5 concludes by highlighting the importance of the findings for theory and practice. The chapter shows that waste pickers do not enjoy economic and social development because the conditions that are required for them to operate within a framework aimed at achieving sustainable development do not exist. The circumstances required for waste pickers to enjoy sustainable development do not exist because the waste management policy making framework is based on market-fixing ideas that stymie sustainable development. The policy making framework, influenced by a traditional economic approach, has been so designed to legitimise South Africa's place in the international community of state and non-state actors. Waste pickers have been the casualty in this endeavour.

7.2 Rationality: translation and legal compliance

This section focuses on how waste pickers, WasteBuy personnel and regulators (a) comply with and (b) translate 'sustainable development' into their own terms. First, it returns to the relevant aspects of the law governing waste picking. This includes a review of the system of licensing that governs urban solid waste management, both on landfills, and on the street as

discussed in Chapters 3 and 5. This necessitates a revisit of Halliday and Carruthers' framework for translating legal rules, detailed in Chapter 2. Next, it sets out who WasteBuy and the waste pickers who come into contact with them are, and finally, how they comply with and translate the law. The investigation finds that waste pickers' limited understanding of waste management rules results in part from the way in which these rules are translated to them by WasteBuy and the municipality.

7.2.1 Waste management laws, by-laws and policies

The management of landfills is governed by a system of licences granted by national and provincial governments in South Africa. Entities wishing to manage landfills are required to apply for a licence that governs activities that they control and which appear in the Government Notice ("GN") No. 921 of 29 November 2013: List of waste management activities, that have, or are likely to have a detrimental effect on the environment. The licence granted specifies the person to whom it is issued (s.51(1)(c) of the Waste Act 2008); the amount and type of waste that may be recycled and recovered or disposed of (s.51(1)(h) of the Waste Act 2008); and the conditions under which the salvaging of waste may be undertaken (s.51(1)(i) of the Waste Act 2008). This excludes any activity not pursued by the landfill manager such as waste-picking, which would not be licensed. Waste pickers would fall into the list of persons without authorisation to carry out a waste management activity on a landfill. South African waste management law at national, provincial and local levels provides that the recovery of waste from landfills by unauthorised persons including waste pickers is illegal (s.2 of the City of Johannesburg Metropolitan Municipality Waste Management By-Law 2013; s.14.1, s.14.2 and s.15 of the Gauteng Provincial Integrated Waste Management Policy 2006; s.24 of the Waste Act 2008). Street-based waste-picking falls under legal provisions concerning the authorisation of waste service provision. As with landfills, waste management service provision by unauthorised persons is considered illegal (s.21(2) and s.34 of the City of Johannesburg

Metropolitan Municipality Waste Management By-Law 2013; s.11.1 of the Gauteng Provincial Integrated Waste Management Policy 2006, 13; s.24 of the Waste Act 2008).

7.2.2 The framework for translating legal ideas

Chapter 2 explained that legal ideas, including legally-relevant rationalities, ‘move’ by a process of ‘legal translation’—the translation of a legal idea present in one field into ‘local languages and idioms’ (Halliday and Carruthers 2009, 27). This requires the person doing the translation to have some degree of fluency in the languages used in the fields and regimes involved (Halliday and Carruthers 2009, 27). As a result, they come to be in a position of power because they can determine how a message is construed in the field and regime receiving the translated idea (Halliday and Carruthers 2009, 27). They can decide to what extent they rely on the norms found in either the originating or the receiving field, or both, when arriving at a construction of the concept in the new field or regime (Halliday and Carruthers 2009, 28). Halliday and Carruthers also point out that the enactment of legal rules does not equate implementation (2009, 34). As with all others who translate legal ideas, waste pickers may or may not be consciousness of the ways in which they are translating sustainable development in their every day (inter)actions with others in the waste management economy.

The translators: waste pickers



Figure 9: A street-based waste picker. Source: Author.

Waste pickers are actors in what Bourdieu would term the ‘field’ of waste management who work informally to collect waste on the street, door to door, and on landfills and waste dumps and then sell it back and make a living (Dias and Samson 2016, 11; Samson 2009, 3). Waste pickers who sell to WasteBuy interact with cleaners and security guards in shops, housing and office complexes, entertainment and other venues; and householders; the purchasers of their collected goods – middle men, buy-back centres and MRF personnel (Fieldwork notes and Interviews 2017). To a lesser extent they interact with municipal and other government officials; industry bodies, householders and the general public (Fieldwork notes and Interviews 2017).

Waste pickers work under difficult conditions, for long hours and in weather hot and cold, throughout South African urban settings. They can be divided according to which of two ‘fields’ they work in: the streets, or landfills and waste dumps. Those I encountered working on the streets tended to work individually; and to be relatively young and male and homeless, un- or under-employed, and estranged from their families (Fieldwork notes and Interviews 2017). They can be seen walking up to 20 kilometres per day on busy city streets and motorways with and without pedestrian walk ways, carrying trolleys overladen with recycled material (Fieldwork notes 2016 and 2017). Those I encountered working on landfills and waste

dumps might work individually or in cooperatives. They are older and live with the family unit. They tended to have lost their job after the end of apartheid, and turned to waste picking to eke out a living (Fieldwork notes 2017). They work among feral cats and birds, and risk being injured by municipal waste management vehicles (Fieldwork notes 2017).

Waste pickers' work is vital to the functioning of the waste management economy. They collect an estimated 80 – 90 per cent of all materials recycled in South Africa (Godfrey et al 2016, 1). This has made them the subject of numerous programmes concerned with formalising their operations, although 90 per cent of these have failed (Godfrey et al 2015, 43; Godfrey et al 2016, 3). Many waste pickers interviewed are aware of the impact that their work has on the environment while also expressing a lack of understanding of their rights and of sustainable development as a concept. Waste pickers who do not hold cultural and symbolic capital in the form of leadership positions, are perceived as powerless within the economy because they do not directly contribute to waste management policy creation. They also perceive themselves as powerless within the economy for a variety of reasons (Fieldwork notes 2017).

In contrast to the rule-makers discussed in Chapter 6, rule-takers are those who operate within a framework of rules already translated by other actors, or those who are translating rules unaware that they are translating because they interpret what they are doing differently (Halliday and Carruthers 2009, 332). This group is largely unaware of the contours of the economy in which they act, and how these contours shape their experience of life within that economy. Their legal consciousness, which will be discussed in detail in section 7.4.2 of this chapter, is reflective of their position in society, and is determined by their economic, social and political capital (Bourdieu 1986, 46-47; Ewick and Silbey 1998, 38).

The translators: WasteBuy



Figure 10: WasteBuy operations. Source: Author.

WasteBuy is a South-African owned and headquartered multinational company that specialises in the operation of buy-back centres – companies that purchase recycled materials from waste pickers and the public, then bale it and sell it on to a resin producer or material converter. The headquarters of WasteBuy are in Johannesburg. WasteBuy interacts with several economic actors including their landlords, other buy-back centres, municipal officials and waste pickers themselves. They describe themselves as,

“about more than just job creation, we are about giving people a sense of worth, a spirit of hope, a future to look forward to and a chance to take back ownership of their and our communities, through life skills and technical skill development.” (WasteBuy 2019).

During the fieldwork period from January – April 2017, the WasteBuy Johannesburg buy-back centre employed a centre manager, an office assistant, a security guard and two handymen, one full-time and another part-time (Fieldwork notes 2017). The centre manager is responsible for the smooth running of operations at the site, selling recycled materials bought from waste pickers to larger recycling companies, and generating new clients (Fieldwork notes 2017). The office assistant keeps records of volumes of recyclable materials weighed, and handles transactions with waste pickers (Fieldwork notes 2017). The handymen check the recycled

materials being bought to ensure that materials purchased are of good quality with low levels of contamination (Fieldwork notes 2017).

WasteBuy provides income opportunities to over 500 people according to its website; the majority of these are waste pickers (WasteBuy 2019). A WasteBuy worker in Johannesburg on 1st March 2017 said that the company buys materials from roughly one hundred and fifty (150) people daily and that in December 2016, they had over three hundred (300) but many had stopped coming once the holidays were over. On 2nd March 2017, the same official and I viewed their accounts book, which showed that in February 2017, anywhere from forty (40) to fifty (50) people, mainly waste pickers, sold at WasteBuy in Johannesburg daily (Fieldwork notes 2017). WasteBuy purchases 1.5-1.9 tonnes per day, rising to two (2) tonnes per day at month-end (Fieldwork notes 2017). While it is unclear whether the numbers promoted on their now-defunct website are accurate, it is clear that the number of people who sell to WasteBuy does fluctuate over a period of time.

7.2.3 Waste management actors' translation and legal compliance

In terms of legal compliance, the volumes of materials handled places the company firmly below the 30 tonne of waste per day threshold required to apply for a waste management licence, a fact confirmed in the interview with the CEO (Private sector waste manager 3, Interview 20 of 2017; s.1, Schedule 1, Category A of the Waste Act 2008). The company is solely required to apply for accreditation from municipal authorities to perform recycling activities, and to confirm to them that the volumes they handle are below the threshold for a waste management licence application (s.21(2) and s.34 of the City of Johannesburg Waste Management By-Law 2013). The application process requires WasteBuy to be in contact with city accreditation officials. From the point of view of WasteBuy's CEO, this appears to be working well:

“[O]ur site in Joburg is actually ...on a city-owned piece of land, City Parks. It was falling to pieces, it's derelict and we've actually started to bring it up so they're happy to have us there. So we stick to regulations, to by-laws. We've written them a letter. They know we're there. And that's it. We're happy, we have a good relationship with them,” (Private sector waste manager 3, Interview 20 of 2017).

The description given by the WasteBuy CEO of the company's relationship with the Johannesburg municipality suggests that they have little or no conflict with the municipality as landlord and the municipality as regulator. The position of the municipality on WasteBuy is unclear. The municipal official I interviewed was careful not to discuss any specifics about companies with whom the municipality engages (Senior waste management municipal official 1, Interview 2 of 2016).

Providers of waste management services who engage with WasteBuy, including waste pickers, are also expected to apply for accreditation from the municipality, though this is both strongly resisted by and uncommon among waste pickers (Godfrey et al 2016, 3). The WasteBuy CEO views this requirement of waste pickers as unreasonable in a description of a discussion with central government officials about the issue, “I said [to central government], you are talking to people who barely got out of high school and you want them to understand legalese,” (Private sector waste manager 3, Interview 20 of 2017).

In the interview with a Johannesburg waste management official, she mentions,

“...we are giving permits [to] everybody who is handling waste, starting from the waste picker to the big companies, every man....[then] every month they need to report back to us to say this is how much waste that they've recovered...one of the challenges [we face] is that some [waste pickers] are not South Africans, so they don't have any papers. Some...are South Africans but they don't have papers also. Remember that waste picking is done by the downtrodden,” (Private sector waste manager 3, Interview 20 of 2017).

Here, the municipal waste management official implies that the municipality encourages permit registration by waste pickers and at the same time the municipality is understanding of the circumstances in which waste pickers find themselves. Unlike formal companies who may find the municipality cancelling their permits for non-compliance with waste management by-laws, there is no suggestion that waste pickers face a penalty for non-compliance. This creates an environment for waste picker non-compliance with by-laws to be accepted across the sector. In my observations, waste picker non-compliance with legal requirements to operate has not proved a barrier for buy-back centres to purchase waste from them, from either the buy-back centre or the municipality perspective.

How the municipality 'translates' and complies

My interview with the municipal waste management official revealed that the municipality has the capacity for some degree of what Halliday and Carruthers (2009, 27) would term 'fluency' in the language used across waste management fields, such that they have the power to determine how messages about sustainable development are 'translated'. For example, the municipal official outlined, in line with the legal provisions set out above that:

“Everybody who is handling waste, starting from the waste picker to the big companies, every man... first they need to register with us...so this allows us, so for example you come here and you ask us, how many waste pickers, we should be able to know,” (Senior waste management municipal official 1, Interview 2 of 2016).

At the same time, the municipal official admitted that this legal rule is applied differently to different actors. For formal companies who are not in compliance with the rules, she said that,

“all the people who are not complying or who are not playing the game.... yes, we talk to them. Where they are just not reporting or they are not implementing any policy of the city, we would visit them and get them to participate....Non-compliance such as “not reporting to us....will

have an impact....when [they] want to renew,” (Senior waste management municipal official 1, Interview 2 of 2016).

She further explained that “...if we found you committing or doing illegal dumping or something else, we scratch your permit,” (Senior waste management municipal official 1, Interview 2 of 2016). Waste pickers on the other hand, are not automatically expected to be in possession of a permit, as previously mentioned (Senior waste management municipal official 1, Interview 2 of 2016). The municipality also recognises their disadvantaged position by instituting a programme to register them. The official explained that they also,

“provide training on waste management, because [the municipality has] recognised that they are doing an important role in assisting the city to achieve that higher rate of... recyclables, of recovering and then in doing that, as we train them on that waste management...the other objective is to improve their working conditions. We also train them on safety, health and environment. We also train them on the city by-laws...They need to know that if they come here to take your bin, they must just take what they want but they must put everything back,” (Senior waste management municipal official 1, Interview 2 of 2016).

The municipal official is also aware of the implications of the differential treatment of waste pickers. She stated, in relation to treatment of waste pickers, “remember you cannot be under one government and then you seem to break the same laws that are guiding you...,” (Senior waste management municipal official 1, Interview 2 of 2016).

How WasteBuy ‘translates’ and complies

WasteBuy has the necessary cultural, social and economic capital to navigate econolegal regulations, as well as to translate them for waste pickers. The WasteBuy officials I met at the buy-back centre site speak fluent English and several native South African languages, which permits them to communicate with both waste pickers and rule-makers where needed. This corresponds with Halliday and Carruthers’ idea about the necessity of being fluent in several

technical, legal and everyday languages in order to translate rules from one to another (2009, 27). Their proximity to the street-based waste pickers I interviewed puts them in a position of power because they can choose which legal ideas and in what form these are translated to waste pickers in terms that they can understand (Halliday and Carruthers 2009, 27). They can also choose how legal ideas are translated to reduce conceptual complexity in their interactions with waste pickers. Their fluency in English and native tongues means that they are seen as credible by waste pickers who need to navigate the rules in order to carry out economic transactions. They are also seen as credible by those actors who operate in the originating field.

WasteBuy has avoided the translation of the legal provisions that prohibits them from interacting with waste management actors without a permit in their economic interactions with waste pickers. The CEO said that it is unreasonable for waste pickers to be expected to “understand legalese” (Private sector waste manager 3, Interview 20 of 2017). The legal requirements for reporting do not require them to identify the waste pickers from whom they purchase, therefore they act to insulate waste pickers from this form of scrutiny where they may not have a permit (Fieldwork notes 2017; Private sector waste manager 3, Interview 20 of 2017). The fact that WasteBuy does not request from waste pickers evidence of their permit to operate means that they do not play an active role in ensuring that the waste pickers from whom they buy comply with the law.

How waste pickers ‘translate’ and comply

None of the waste pickers I interviewed at WasteBuy expressed a nuanced understanding of the econolegal regime that governs their recycling activities (Fieldwork notes 2017). Waste pickers are not required by WasteBuy in the course of their dealings to present a waste management permit issued by municipal authorities, even though it is illegal to conduct waste management activities without a permit. This means that waste pickers are not aware of their legal responsibilities in their primary economic relationship. The result is that waste pickers

are not aware of the effect in law of their non-compliance with their legal responsibilities, and may thus interpret them as irrelevant or unimportant.

The failure by WasteBuy to make waste pickers cognizant of their legal obligations in the course of their dealings could be regarded as “Against the Law” within the Ewick and Silbey framework. The CEO does not regard the purpose of the omission as an intention to flout or defy the law. It would seem to serve a practical purpose – to ensure the smooth running of the company’s commercial operations. The practice could be regarded as widespread based on waste pickers’ accounts of their economic interactions with other buy-back centres. This course of action by WasteBuy also raises the question of whose responsibility it is to inform waste pickers of their legal obligations.

7.3 Regime and the economic field of struggles

This section moves from the meta-analysis of the section 7.2 to a macro-analysis of the economic field. It does this by applying Bourdieu’s economic field concept to WasteBuy’s operations. First, this section sets out what Bourdieu means by his ‘field of struggles’ concept, and the conceptual language around capital, habitus and practice that he uses to explain it. Then, it discusses in detail how the WasteBuy economic field, characterised by socially-constructed competition, fits with the field of struggles concept. This section goes on to argue that it is paradoxical that WasteBuy would like to help the very people from whom it makes a profit. Finally, this section discusses how the pricing of recyclable materials affects the profitability of the business and actions in mitigation.

7.3.1 Bourdieu’s ‘field of struggles’

In Bourdieu’s parlance, firms operating within the same economic field are caught in ‘struggle and competition’ with each other (2005, 199). An economic field is “a socially constructed field of action in which agents equipped with different resources confront each other in order to gain access to exchange and to preserve or transform the current prevailing relation of force”

(Bourdieu 2005, 199). Prices are seen as both “stakes and weapons” because they create an element of risk and can be used as a strategic tool to promote certain values and interests (Bourdieu 2005, 200). Dominant firms have the power to set the rules of play within the market including to initiate price changes, distribution pathways, and new products (Bourdieu 2005, 201). They can choose to work to improve the position of the field as a whole or of just their market share or position in the field as a company (Bourdieu 2005, 201). Economic forces orient firms in the field towards competitive practices that improve their position in the field, or if dominant, perpetuate and reinforce it (Bourdieu 2005, 202). A second-tier firm can improve its position through technological innovation, reducing its prices or filling a gap not met by other firms (Bourdieu 2005, 202-203). The field exists in the form that it does because of how the distribution of capital and the relative positions of actors shape the actions and interactions in the field (Bourdieu 2005, 193).

In order to apply the ideas above to the dynamics at WasteBuy in the next sub-section, it is necessary to revisit Bourdieu’s concepts of capital and habitus. To recap the earlier discussion on this topic, Chapter 2 identifies three forms of capital, each of which can be converted to another through labour or practice: social – derived from membership of social networks (Bourdieu 1986, 51); cultural – whether embodied as ‘habitus’, objectified in cultural goods, or institutionalised as qualifications (Bourdieu 1986, 46-47, 51); and economic – assets readily convertible into money and vice versa (Bourdieu 1986, 47). Social and cultural capital derive from economic capital (Bourdieu 1986, 54). It is the concepts of capital, and habitus, that facilitate the ensuing analysis of waste pickers’ and private sector waste managers’ positions within their mutually occupied socially-constructed economic field at WasteBuy.

Socially-constructed competition

Bourdieu would explain the motivation for setting up WasteBuy and for working in this sector as reflective of the habitus, or the organising principle that guides the direction of the CEO’s

and the centre manager's practice (1977, 18; 1995, 54). Their habitus is informed by a degree of cultural capital in what Bourdieu calls the institutionalised state, that is, in the form of educational qualifications and knowledge, which allows its holder to analyse the law and economic opportunities to his / her advantage (1986, 47). This would correspond to the CEO's and the centre manager's positions as persons fluent in English, with corporate working experience. They have the necessary education and skills to analyse waste management law and navigate the multiple, complex economic relationships required to establish WasteBuy as a going concern. In economic terms, this cultural capital is converted into economic capital through the creation of a business model that is cost-effective and maximises the company's property rights and the company's commitment to social justice (Bourdieu 1986, 47, 54).

In the quotations below, the CEO and the centre manager exposed the extent to which they were aligned with the company's stated aim to respect and develop waste pickers mentioned in section 7.2. Observations of working practices, and interactions with WasteBuy personnel during site visits revealed that WasteBuy is a company which prides itself on an ethos of social justice, life and life-skill development for waste pickers. The CEO and the centre manager both said that they left jobs in other industries (hospitality and business) to work with waste pickers (Private sector waste manager 3, Interview 20 of 2017; Private sector waste manager 5, Interview 46 of 2017). The CEO recalled that:

“...somewhere in a corporate job seven years ago, I sat looking at these people and I said, ‘gheez these guys work hard,’ and realising that they were actually entrepreneurs in themselves, I started to research whether they had any frameworks to sort of be able to attach themselves to or associations, or anything to make their lives any easier and ultimately, there is none, absolutely not,” (Private sector waste manager 2, Interview 20 of 2017).

The WasteBuy centre manager expressed her motivation for working in waste:

“[I]t means that I get to work with these guys and watch them grow, watch them develop. That’s the whole idea. In actual fact, that’s why I left what I was doing and came here. Because I was more interested in watching them grow and develop. So [it] entails me helping them to develop as human beings,” (Private sector waste manager 5, Interview 46 of 2017).

Regarding WasteBuy’s plans to improve waste pickers’ lives, the centre manager explained that the company initially wished to rent or purchase a flat where waste pickers could be housed. Then the company would train waste pickers on essential skills that would enable them to enter the formal job market. However, these plans have not taken off because the company had not realised its profits (Private sector waste manager 5, Interview 46 of 2017).

The disposition of the centre manager and the CEO towards their work is a form of embodied cultural capital, or habitus, that closely resembles that of WasteBuy. Their cultural capital in the institutionalised state that presents as educational qualifications affords them the social capital that, as part of the educated class, would enable them to be successful at gaining and maintaining a position at WasteBuy. In the case of the CEO, who is also the company’s founder, economic capital as finance facilitated WasteBuy to implement its initial plan to start trading.

The desire to improve the lives of the people with whom they work has caused WasteBuy to use its economic capital to offer waste pickers small measures of assistance.

A waste picker named Zwele confirmed this approach in his description of his experience with WasteBuy. He said, “...here if you want some tea they will make for you. If you want something they give it. If you want to wash yourself there are showers. If you want to go to the toilet you can go,” (Waste picker 3, Interview 28 of 2017).

Another waste picker named Nkosi explained,

“If I come here I want to bath, I know there’s shower you see. I get to the shower you see. That is why I like to scale here....because they helping us too much. Even December time they give us presents.... which means they think for us. They get happy about us,” (Waste picker 20, Interview 45 of 2017).

The present-giving forms part of WasteBuy’s policy to reward excellence according to the administrative assistant at the centre.

Bongo explained that it is more than just free showers and tea that WasteBuy provides waste pickers with when he said that,

“...[S]ometimes if I have R100 it’s finished now. If you have R200 it’s finished now. Tomorrow you will go again.... at least...they can help you here. Sometimes, you can put your money ‘til December then you see. That’s why I like here because they are helping us. Then you can put your money not to waste your money. To get something. Yeah,” (Waste picker 17, Interview 42 of 2017).

Bongo referred here to the service that WasteBuy offers in which waste pickers can withdraw their earnings from sales to WasteBuy at any point from the day they bring materials to sell to a date in the distant future (Fieldwork notes 2017).

In addition to the services that WasteBuy offer, waste pickers were forthcoming with how their experience at this buy-back centre contrasted with that received at other companies. Jack contrasted his experience of WasteBuy with that at another buy-back centre:

“...[Y]eah man and you see they [WasteBuy] are consistent. Most of the time they have got money. Man eish. In some scraps I use eish, you will find them without money man eish. Where I used to sell before, man I used to find them rude on occasional. Occasional, I having to wait some two hours for the money.... except these short hours that they are opening, everything is fair,” (Waste picker 13, Interview 38 of 2017).

Gabriel shared a story of mistreatment with me:

“I can take you somewhere where they hit people.... they hit people, they clamp you. They swear at you, just for nothing... just for nothing. Just for standing there... you are treated like a dog....they call you names and they, eish. It makes me feel bad because ah, I’m not like that, I don’t take things that lightly you see. So if they...I’m asking myself what did I do wrong? Or, why are they swearing at me, because I’m bringing money, but you are swearing at me you are slapping me, for nothing. So I would love to see things change when it comes to the way they are treating us.... as I’ve explained, here they are friendly. They are everyone is willing to help you. There is no one who is going to rob you or swear at you. [The centre manager] is a good person. The sister is a good person. And the guys here...here is a nice place to go,” (Waste picker 12, Interview 37 of 2017).

The evidence shows that waste pickers recognise the underlying ethos of WasteBuy in the company’s actions towards them.

Pricing and profitability

To recall Bourdieu’s views on pricing, he sees prices both as a source of risk and a source of strategic deployment, which can be used by dominant firms to promote certain values and interests, and maintain the rules of the game (2005, 200). The quotes below reveal how some of the restrictions that WasteBuy faces when it comes to pricing are experienced by waste pickers. Their unique position in the market means that the prices that WasteBuy is paid for recyclables from other buy-back centres are a source of risk, because they are lower than they would get if they were able to sell to a recycler or resin producer. The prices that they offer to waste pickers are a source of strategic deployment because it allows them to pay slightly lower than competitors in the market, but not so low that waste pickers go elsewhere. The strategy is enhanced by the company’s practice of paying waste pickers for every gram of material sold instead of rounding it down to the nearest kilo, and offering the same price per kilo regardless of the amount they purchase. WasteBuy thus becomes more attractive to waste pickers than

other buy-back centres, or “scraps” as the waste pickers I interviewed in Johannesburg call them, that only pay for full kilos or vary the rate paid depending on the number of kilos being sold. Another strategic action is the decision to treat waste pickers with respect, and provide them with basic amenities. Waste pickers are willing to accept a trade-off of lower or more constant prices for better treatment than they receive elsewhere.

This business model has been influenced by the actions of the more dominant firms in the market (Bourdieu 2005, 201). The firms in the market with a higher percentage market share determine the prices that WasteBuy has to consider when setting prices they offer to waste pickers. WasteBuy is unable to offer higher prices than it currently gets without running a loss, and has to offer lower prices than many of its competitors because it is the only way for it to make a profit, even if that amounts to 20 cents per kilo. The price fluctuations observed at WasteBuy are as a result of the changes in prices offered by the more dominant firms in the market, an observation made by Bourdieu in his analysis of the French housing market (2005, 201). The economic forces present in the waste management economy enable the firms more dominant than WasteBuy to influence the strategies devised by WasteBuy within the market (Bourdieu 2005, 202).

To contextualise this, when asked for an opinion on the prices paid for recyclable materials, the WasteBuy centre manager stated that they were:

“Ridiculous bad. Why?...‘cause...I make 20 cents profit per kilo....so you see how bad that is. 20 cents profit per kilo. So, to have to make a business a viable business it means you have to push the volumes big time. So yeah, so yeah I think the prices ...something really needs to be done as far as I’m concerned,” (Private sector waste manager 5, Interview 46 of 2017).

To contextualise this quote, WasteBuy sells the materials that they purchase from waste pickers to other buy-back centres because they do not own a baler (Private sector waste manager 5,

Interview 46 of 2017).⁶⁴ These buy-back centres then sell onto recyclers, who make raw material resin, and generally purchase materials baled by the tonne. These buy-back centres also purchase recyclables from waste pickers, which means that WasteBuy sells to their competitors (Private sector waste manager 5, Interview 46 of 2017). The centre manager cites one company that is “a little out of town” and “they offer the best prices,” (Private sector waste manager 5, Interview 46 of 2017). The location means that it would be difficult for waste pickers based in the central business district (CBD) to reach there, which offers WasteBuy some protection in terms of their waste picker clientele leaving them for the other company. At the same time, WasteBuy needs to offer waste pickers a price that is close to that of their competitors’ or waste pickers will stop coming. A small gap between their buying and selling price translates into low profit margins, which then affects their overall profitability as revealed in the centre manager’s quote above (Fieldwork notes 2017; Private sector waste manager 5, Interview 46 of 2017). These considerations create a delicate economic balance for WasteBuy. The low profit margin and a lack of equipment are not the only constraints that WasteBuy faces. Commodity prices in general fluctuate, which the centre manager said affected public consumption and the availability of recyclables:

“If the prices hike, then people are not going to spend as much buying like, cold drinks which is PET then it’s going to be scarce out there. But when it comes to them...the collectors, they just collect what is available and they bring it to me,” (Private sector waste manager 5, Interview 46 of 2017).

This is in addition to how commodity prices on world markets affect prices paid to WasteBuy for recyclables – something acknowledged by the CEO but dismissed by the centre manager

⁶⁴ A baler is a machine that compresses recycled material so that it may be sold by the tonne to a materials recycler.

(Fieldwork notes 2017; Private sector manager 3, Interview 20 of 2017). The decisions by waste pickers to sell at WasteBuy when prices fluctuate is also seen as a factor that affects the company's profitability by the CEO (Private sector manager 3, Interview 20 of 2017). The centre manager was unconvinced that fluctuations in the prices that WasteBuy pays and is paid for recyclables affects their business. When I observed and asked, "I notice that your prices change from time to time. So do you feel that that affects how the company goes?" She replied, "Let me see. I wouldn't say it does," (Private sector waste manager 5, Interview 46 of 2017).

Low profit margins, a lack of equipment and the cost and availability of consumer goods affect WasteBuy's profitability and business as a going concern, and the ability of WasteBuy to achieve the social justice aims the company sets for itself, discussed in section 7.3 of this chapter. The centre manager expressed disappointment regarding this outcome:

"Well, the role of the company was to teach these guys life skills...grow plants...how to make baskets, how to change a certain container into something that you can sell...but that will only be achieved as soon as we realise our profits...[then] we can help those guys," (Private sector waste manager 5, Interview 46 of 2017).

Waste picker responses to the prices offered by WasteBuy were varied. They were generally willing to share their views on pricing with me as I interviewed them within earshot of colleagues and WasteBuy personnel (Fieldwork notes 2017). They expressed awareness of the impact that prices made on their decision to sell to WasteBuy.

Regarding the prices, Tito said that,

"they suit me, because they are not the same prices, neh, from other scrap yards. From what I told you, that they don't treat us the same. That's why I come here. The prices are not the same. Other scrap yards their prices are up," (Waste picker 1, Interview 26 of 2017).

Several waste pickers noted that the way the price per kilo is calculated is of essence. Nkosi explained,

“Here they are paying right, like the big scraps. There’s the big scraps that they are paying more money like here. And here they are paying each and every point that you scale. On other scrap you can scale 0.5 [kilo] or 0.4 [kilo] they can’t pay you 0.4 [kilo]...they pay you money by 0.5 [kilo] and it depends on what you are scaling. On those things those plastic bottles, tins. They don’t pay half (kilo) price. Now here, every point you scaling you get paid,” (Waste picker 20, Interview 45 of 2017).

Other waste pickers such Thabi and Thandiso, supported this view in my interviews with them (Waste picker 5, Interview 30 of 2017 and Waste picker 16, Interview 41 of 2017). Jason adds a different dimension,

“Other places if you don’t have 20 kilos they gonna charge you a different price...some places if you have less than 20 it’s R1 a kilo. Here if you come with 5 kilos you’re still gonna get the same price,” (Waste picker 15, Interview 40 of 2017).

For George, the price issue was sector wide, “Most of the time I would say that the prices are too low,” (Waste picker 9, Interview 34 of 2017). One waste picker, Gabriel, has a bachelor’s degree in risk management that may afford him the cultural capital to articulate his points clearly. He speculated at length about the reason for the low prices at WasteBuy,

“Here is a nice place to go. Just that the prices are a little bit down...yes. I wish the prices were high... [because] I think they are selling to the wrong people...I think they have stuck with what they have started with. You know. They didn’t want to grow.... they are selling to the guy that we can also go and sell to...you see...that’s why I’m saying they don’t have really good connections. That’s why they’re selling at a low price,” (Waste picker 12, Interview 37 of 2017).

Actions in mitigation: technological innovation, and market penetration

For Bourdieu, a non-dominant firm like WasteBuy can improve its position through technological innovation, reducing its prices or filling a gap not met by other firms (2005, 202-203). Technological innovation would include measures that increase WasteBuy's capacity to add more value to the product they sell, such as through baling (at the very least). The source of the baler would raise questions. If WasteBuy purchases a baler, it would potentially have flexibility with regards to where it can sell the baled materials. If WasteBuy is given / loaned a baler by another company, conditions may be attached to the use of the baler and to whom they can sell materials. WasteBuy may find themselves restricted to selling only to the company that gave them the baler. It is possible that the company can set prices to WasteBuy which are more favourable to the company than to WasteBuy. WasteBuy may be offered lower prices by the company than if they had their own baler and could sell on the open market. WasteBuy could also find that baling materials, regardless of the source of the baler, does not result in an increase in the prices offered to it for recyclable materials.

According to the centre manager, the lack of a baler was the reason that WasteBuy sold recyclables to buy-back centres that have a baler (Private sector waste manager 5, Interview 46 of 2017). She disclosed that:

“[P]art of the problem is that we don't have a baler....that's why we [sell] to [Remakery], those guys...are taking our K4⁶⁵ because they had promised to supply us with a baler but that hasn't materialised as of yet, but yeah the plan was to bale and then that way you know we sell in bulk but as for now we just collecting as is and we sell,” (Private sector waste manager 5, Interview 46 of 2017).

⁶⁵ K4 is the description given to cardboard in the South African waste management economy.

However, the WasteBuy CEO was of the view that their business model mitigated the challenges the company may have faced:

“From all the really successful guys, what you learn is that it is better to have 10,000 small units producing at a 75 – 95 per cent efficiency ratio than to be having 20 massive assets that are more than a liability and only functioning at like 70 per cent efficiency because their overheads are just so damn big. Ok, plus the bigger you are, the more susceptible you are to economic influences. So essentially like petrol prices, diesel prices, labour prices, I could keep going on and on. The more you empower people, the smaller more dense sort of arrangement you have. Firstly, your market penetration goes through the roof because you service a very small area....So, we managed to create high density, high market penetration businesses that were utterly viable on their two feet and those are the kind of projects that we do. So we work in high density, low income, impoverished areas. (whispering) We don't work in the big areas. It's not our thing,” (Private sector waste manager 3, Interview 20 of 2017).

WasteBuy has the option to reduce the prices it offers to waste pickers. However, accounts from waste pickers interviewed, above, noted that they are aware that other buy-back centres offer them higher prices. It is the respectful attitude and access to basic amenities they enjoy at WasteBuy that offsets this. Whether waste pickers would be willing to accept an even lower price from WasteBuy remains to be seen. Most waste pickers who frequent WasteBuy are homeless or live in very basic conditions. They may each make a calculation about the point at which they are no longer able to accept lower prices from WasteBuy in exchange for amenities such as showers, withdrawing cash from WasteBuy only when needed, and a cup of tea in the morning.

WasteBuy's stated wish to set up programmes to develop waste pickers' skills could be regarded as a measure that fills a gap in the recyclables market, and allows them to continue offering their current prices. They would be offering a service to waste pickers that is not

currently available from other buy-back centres. Some evidence of this intention is seen in waste pickers' acceptance of a lower price for better treatment than they would get at other buy-back centres. However, the low profitability of WasteBuy's business model has resulted in WasteBuy being unable to further their aims to initiate a skills development programme.

The centre manager held the view that another solution was possible:

“I think unless the government does something to support the recycling units and the buy-back centres, I think it's definitely going to die down. Because at the present moment there's this hype...let's try and recycle and...clean the streets but on our own it's very difficult for us to keep our heads above water. We need assistance from the government and unless it is rendered, then I think it will definitely fail,” (Private sector waste manager 5, Interview 46 of 2017).

The point of view that financial support from the government is necessary to keep the buy-back centres and other recycling operations profitable in South Africa was repeated in other conversations and interviews: “Buy-back centres are not financially viable.... They are not economically viable. They need a subsidy for them to be viable. If commodity prices go down and the rand crashes these entities are very susceptible,” (Private sector waste manager 1, Interview 6 of 2016). Later in the interview, the respondent adds, “Converters [such as the one in Kraaifontein in Cape Town] has to be subsidised in order to be viable,” (Private waste management industry association official 1, Interview 1 of 2016).

These snippets demonstrate that waste management professionals across different contexts in South Africa think that a direct government subsidy is required to make a buy-back centre profitable. If this holds true, the Johannesburg operations of WasteBuy remain in a precarious position, with the company unable to achieve their long term plans as the WasteBuy centre manager explains below:

“Initially, the plan was to get those guys off the streets ‘cause we were even planning on getting a flat where the guys will take them off of the streets and put them in some accommodation of some sort so that we change their mindset even the way they think. That was the plan, and we were planning on grooming them. We were planning on having these projects whereby you see this enclosure here (shows me the enclosure). We were planning on having these projects whereby we grow plants and you know, we integrate them and we teach them life skills so that they fit into society. So that was the whole plan of WasteBuy but so far we are facing some challenges. Why? Let me say financial challenges, because we are not making that much money from.... these collectors here,” (Private sector waste manager 5, Interview 46 of 2017).

This last statement creates a paradox of WasteBuy’s operations. The low profitability of the company is influenced by the actions of the very people they wish to develop.

7.4 Waste Pickers’ Economic (Inter)actions

Next, this section concentrates on three things. Firstly, the section examines waste pickers and their actions through an analysis of their motivations for engaging in the action of recycling. Secondly, the section scrutinises waste pickers’ consciousness of the legal dimensions of that engagement using concepts provided by Ewick and Silbey in Chapter 2. Thirdly, the section evaluates waste pickers’ actions in relation to the sustainable development rationality that has influenced the shape of the waste management econolegal regime. It finds that waste pickers are motivated to recycle informally for their survival. Waste pickers’ legal consciousness is “Against the Law” because their economic activities are carried out in contravention of the law. Their actions operate within an econolegal regime organised according to the principles of sustainable development, but are not driven by them.

7.4.1 Motivations

To summarise the argument made in Chapter 2: the motivation for human actions may be classified into four ‘ideal’ types: belief, traditional, affective and instrumental (Kalberg 1980, 1161-3; Perry-Kessaris 2015, 60). Human actions are also shaped by regimes, which in turn

‘institutionalise’ rationalities (Kalberg 1980, 1163). Regimes connect rationalities to actions by providing the setting in which they both operate and exert influence on each other. When engaging in recycling, are waste pickers’ motivated by an intention to continue a custom (traditional); by a value-system such as religious beliefs (belief); by a sentiment (affective); or by an intention to achieve a specific purpose (instrumental) (Kalberg 1980, 1161-1162; Perry-Kessaris 2015, 60)?

Waste pickers who sell to WasteBuy do not relate their work to a family tradition or say it has been driven by a belief system. Kidogo did mention that he does this work to avoid being a burden to his grandmother, which could be related to emotions such as the love and respect he has for her (Waste picker 4, Interview 29 of 2017). His motivation could be classified as affective, but underlying this is his calculation that waste picking is a means to ensure his survival (Kalberg 1980, 1161). This calculation, or what Kalberg describes as a “mental process”, aligns waste picking with an instrumental action that serves a purpose – achieving survival (Kalberg 1980, 1161; Perry-Kessaris 2015, 60).

Survival is one of three major themes that arise in the statements waste pickers give for their reasons for entering the market for recycling in Johannesburg. George said that waste picking is, “...better than sleeping with...nothing. Sometimes what I earn there I can buy things like food, clothing and stuff,” (Waste picker 9, Interview 34 of 2017). Mickey said that waste picking,

“means a lot because you know, without it I can’t survive,” and that “[I]t’s just that by now I’m still struggling because I don’t have even a place to sleep. I’m still on the street that’s why I’m doing this but this is not what I like to do,” (Waste picker 14, Interview 39 of 2017).

Jason started waste picking after moving from another city because,

“I don’t know no one. I don’t have any relatives. I’m on my own.” For him, “...it’s everything that I have, because I survive on it. If it’s raining I can afford to stay in the shelters. I have my three meals a day. [Everything] in between I would like to have, I can afford to have,” (Waste picker 15, Interview 40 of 2017).

Thabi said that he does waste picking, “...[B]ecause ...it make[s] me eat...[and] have money to do things that I like,” (Waste picker 16, Interview 41 of 2017). For him, “[T]his job is no future...[because] you get a small money to eat you see,” (Waste picker 16, Interview 41 of 2017).

The second theme is of loss of a previous job or to supplement a current one. Hastings shared that, “...[M]y job is cleaning the site. I clean the building,” and that it does not generate enough money to earn a living, “[T]hat’s why I come here... [to have] something to survive, to put food on the table,” (Waste picker 2, Interview 27 of 2017). Unlike the waste pickers who come every day, Hastings comes only twice a month to supplement his income.

Mark shared that one day in his old job,

“I ...talk to management and we don’t have any much choice to park cars because there was [a] parking [attendant]”, which then led him to waste picking as, “...rubble, like plastics and golden containers and those things...I collect things to get my money....I just get it sold here take my money then I go and buy my food and things,” (Waste picker 8, Interview 33 of 2017).

Issa does waste picking because, “Aye before, you know my sister, sometimes we get jobs, sometimes we don’t get jobs,” (Waste picker 10, Interview 35 of 2017). Kidogo shared that in his previous job, cleaning “windows is not an every day job and sometimes you don’t work the whole day so at least you collect this, the little bit that you get you can...” earn a living and that waste picking is “just to survive,” (Waste picker 4, Interview 29 of 2017). The situation at home also was an added factor. His grandmother’s position as the sole provider at home put further pressure on him. He said,

“[S]he’s taking care of my siblings at home and she earns a grant and the money she earns is small money, so she cannot afford to take care of all of us. It’s one of the reasons I came here. So she doesn’t have to worry about me,” (Waste picker 4, Interview 29 of 2017).

The third theme is to turn away from a life of crime. Thandiso got into waste picking because, “It’s just that when you don’t have anything to do. It’s the only way to earn a little bit of money to avoid many things like crime,” (Waste picker 5, Interview 30 of 2017). Zwele mentioned,

“I told myself, hey, this thing that makes me to go to jail, I do not want to do them again because.... I take other people’s stuffs, after they are crying.... So, I, maybe like recycling. You don’t hurt someone. You see,” (Waste picker 3, Interview 28 of 2017).

George added, “I would say it’s useless just staying at home doing nothing and less of crime,” (Waste picker 9, Interview 34 of 2017). Only one waste picker, Vuyelwa, said that he does waste picking in order to look after his extended family. He later on disclosed that he did not have his basic needs met. He said,

“...[I] realised that I can put food on my table. I can even look after...some extended family. Now I respect my job. It’s more like cleaning the city or the town...I’m staying on the street, I’m still trying to organise. I can promise that if it all goes well maybe by Friday I could be having a small room,” (Waste picker 19, Interview 44 of 2017).

I would classify his motivation as one of survival since his basic needs are yet to be met.

The data implies that individuals engage in waste picking because they wish to supplement their income, have an income to ensure their basic survival, or to turn away from a life of crime against a backdrop of homelessness. My personal observations and interviews with waste pickers, municipality and WasteBuy personnel imply that survival is at the base of these reasons especially since most waste pickers are unable to meet all of their basic personal needs, including secure accommodation.

In my examination of the data, I note that almost all waste pickers who sell to WasteBuy report living on the street, in a squatter's flat, or in a shelter, either occasionally or long term (Fieldwork notes and Interviews 2017). This indicates that their general earnings are not enough to enable them to pay for secure accommodation. This fact is underlined by the WasteBuy centre manager's assertion that, "...initially the plan was to get those guys off the streets," (Private sector waste manager 5, Interview 46 of 2017). This situation has been recognised by the municipal official I interviewed, who said that, "...some of them...they don't have place to stay," (Senior waste management municipal official 1, Interview 2 of 2016).

7.4.2 Legal Consciousness

An examination of the legal consciousness of waste pickers in the process of recycling facilitates an understanding of how they see their actions in relation to the econolegal regime in which they operate. To revisit the discussion in Chapter 2, legal consciousness is concerned with the relationship between law and those who are affected by it (Halliday and Morgan 2013, 2; Sarat 1990, 346; Silbey 2005, 323). Ewick and Silbey identify three forms of legal consciousness, which will be applied to how waste pickers view their actions in the waste management industry here: "Before the Law", "Against the Law", and "With the Law" (1998, 47-49). Actors whose actions are classified as "With the Law" use the law tactically, to achieve their own purpose (Ewick and Silbey 1998, 48). Those actors who are "Against the Law" demonstrate their defiance of the law through small acts of resistance (Ewick and Silbey 1998, 48-49), whereas actors who stand "Before the Law" see it as unchanging and static (Ewick and Silbey 1998, 47).

Waste pickers' view that selling recyclables without a permit takes them away from a life of crime reveals that they are unaware of the operation of waste management law in their economic activities. They may not be considered as "Before the Law" because they have not expressed any awareness of waste management law or how it operates in their lives. It would

be difficult to argue that they are “With the Law” because their lack of awareness of the law entails precludes them from using it tactically to achieve their own ends (Ewick and Silbey 1998, 48). Their actions might be considered “Against the Law” because they defy the law by waste-picking without a permit (Ewick and Silbey 1998, 48-49). However, there is no deliberate attempt to defy the law through omissions or acts of resistance (Ewick and Silbey 1998, 48-49). Their defiance is intertwined with the way in which legal rules regarding permits are translated by WasteBuy and the municipality.

Street-based waste pickers in Johannesburg generally see waste picking as something that would not cause them to be arrested or jailed as a result. Waste pickers see the law intervening in their activities in no stronger terms than occasional harassment from police (Fieldwork notes and Interviews 2017). Waste pickers also see recycling as something to be rewarded financially by the regime, reflected in the earnings they gain through selling recyclables to WasteBuy and other buy-back centres. The disassociation of waste picking from a life of crime also reinforces the discussion in section 7.2.3 on the translation of legal rules and the legality of waste picking as currently practiced. Municipal authorities in Johannesburg allow street-based waste pickers to operate without permits and without attracting a fine in a way that they would not with more ‘formal’ entities (Senior waste management municipal official 1, Interview 2 of 2016). The municipality is clear that it does not presume that waste pickers know all the rules that affect them, a motivational factor for their “project where we are trying to register all of the waste pickers under the city of Johannesburg,[in which] the main aim is to say we want to know how many are there. So we have a database where we are registering them” (Senior waste management municipal official 1, Interview 2 of 2016).

7.4.3 Actions and the sustainable development rationality

So far, the chapter has related waste picker actions to the regime and field in which they operate, classified their motivations according to that found in the ESL framework, and

clarified where waste pickers sit in Ewick and Silbey's categories of legal consciousness. Now it seeks to complete its tour through the ESL framework by connecting waste pickers actions and motivations at the micro-level to the meta-level sustainable development rationality. This requires revisiting the framework for analysing levels of society – at the meta-level of rationalities; the macro-level of regimes; the meso-level of interactions; and the micro-level of actions – to identify the links among them (see Frerichs 2011; Perry-Kessarais, 2015). At the meta-level, sustainable development has been identified as the 'formal rationality' that has influenced the shape of the macro-level econolegal regime. Laws and policies comprise the econolegal regime governing the waste management field of struggles in South Africa. It contains the field in which waste pickers' motivations for (inter)actions that lead to their survival in this economy are articulated.

The data shows that street-based waste pickers who sell to WasteBuy in Johannesburg are motivated to achieve their survival through the instrumental action of waste-picking. They do not suggest that this will lead to either the social or economic development pillars of sustainable development. In addition, the intentions of WasteBuy to assist waste pickers to develop socially and economically involves skills training in activities unrelated to waste picking. The econolegal structure provided by WasteBuy, which results in minimal earnings for those who sell recyclables to them, does not promote waste pickers to achieve sustainable development through waste picking.

From my personal observations and interviews conducted at WasteBuy during February – March 2017, it is debateable whether sustainable development as a formal rationality exerts an influence on waste pickers' motivations to achieve survival through their economic activity. Waste pickers are not motivated to achieve sustainable development directly. However, their low earnings means that they are precluded from enjoying the basic conditions that would enable them to consider and avail themselves of opportunities to improve their social and

economic standing in the medium to long term. Their low earnings are also somewhat tied to WasteBuy's economic position, discussed in section 7.3, which restricts the company's ability to offer waste pickers skills development opportunities. Sustainable development as a rationality shapes the regulations that govern the waste management econolegal regime. Sustainable development inspires the business model that WasteBuy uses to operate within this regime. But, sustainable development is unable to extend an influence to the lowest level of South African society in a meaningfully explicit way.

7.5 Summary

This chapter started out seeking to explore how sustainable development as the formal rationality that shapes the econolegal regime that governs waste management appears in the lives of waste pickers. Firstly, it examined how waste management laws inspired by the formal rationality sustainable development are complied with and translated by waste management actors in Johannesburg. It found that the municipality has adopted a permissive attitude towards waste picker non-compliance with waste management regulations, which has resulted in this being widespread practice. Waste picker non-compliance with waste management law is intertwined with their lack of awareness of their legal obligations, which arises out of a failure of other actors to translate these rules for them for practical purposes. Secondly, the chapter investigated WasteBuy as an economic field in which waste pickers conduct economic transactions by drawing on Bourdieu's field of struggles concept. The chapter paid attention to the role of pricing and profitability in the ability of WasteBuy to improve waste pickers' conditions, and the actions that WasteBuy takes to mitigate its failure to do so. WasteBuy sought to develop waste pickers economically and socially while making a profit from their activities. These intentions do not result in substantially improved social or economic conditions for waste pickers, which means that waste pickers are unable to access to the promise of sustainable development. Next, the chapter analysed the motivations behind waste

picker actions, with a view to understanding the legal consciousness associated with the actions, and the relationship between these actions and sustainable development. Waste pickers are motivated, not by the formal rationality sustainable development, as is the case of WasteBuy, but by the need to ensure their basic, personal survival.

The evidence suggests that achieving the social and economic pillars of sustainable development within the framework of WasteBuy is not without challenge. Secondly, WasteBuy operates with low profit margins, which is under constant threat because of the delicate economic dynamics at play. The business itself needs to be sustainable in order to achieve enough economic growth that will support its aims. By the end of the fieldwork period, WasteBuy's sustainability as a business was uncertain, which means that it faces problems to achieve the economic growth pillar. Thirdly, the lack of economic sustainability affects WasteBuy's ability to achieve the social development pillar. This relates to WasteBuy's stated aims to improve waste pickers' conditions. The company desired to improve the skills of waste pickers while at the same time profiting from waste pickers' labour.

Waste management professionals saw the profitability issue facing buy-back centres as one that requires government intervention. I interpret this to mean that the buy-back centre business model carries with it financial risks which can only be reduced or avoided through a government subsidy. If and when WasteBuy is able to achieve the economic and social pillars as set out in s.24 of the Constitution, questions remain. The possibility exists that successful efforts to remove waste pickers from the WasteBuy supply chain through the provision of skills development may negatively affect WasteBuy in the long term unless it adapts its business model.

Waste pickers' lack of awareness about their legal obligations and the opportunities available to them, and their dire economic conditions entrenches a situation whereby it is difficult for

them to work towards sustainable development. The possibility that the integration principle of sustainable development can be harnessed to create economic and social development for waste pickers is dependent on a plethora of factors that do not exist in the WasteBuy example. The result is that the example of WasteBuy in the South African waste management economy disrupts the narrative of sustainable development as the international legal concept capable of creating change in the lives of the most vulnerable.

VIGNETTE 8: THE FUTURE

Circa April 2017

By the end of the fieldwork period in April 2017, the recyclable bottle in South Africa was facing some pressure. First, the bottle was subject of the government call to the private sector for IndWMP proposals for the paper and packaging waste streams. Many in the private sector were worried that this new government initiative could result in loss of private sector control over the market, and ultimately more taxation.

Many I had interviewed from the formalised private sector also told me that China was a key export market for recyclable bottles. However, now that China had announced that it would ban the importation of many waste streams from the beginning of 2018, some were getting worried. This development could have serious consequences for recycled material exporters in South Africa that regularly sold materials including plastic bottles there.

One private sector official expected the price of recyclable bottles in South Africa to plummet because more bottles were expected to stay on the local market in the absence of the Chinese export market being able to absorb the material. It could mean less profits in the short term, and the pressure to find new export markets for plastic bottles. From a consumer point of view this could be a positive development if it translated into cheaper prices for commodities that consist of plastic bottles. For waste pickers, it could mean that they would enjoy sustained, less financial rewards for their daily toils. For private companies, the place of the bottle as a vehicle for profit making had become uncertain.

In this scenario, the story of recycling as a vehicle of environmental protection and sustainable development is jettisoned for a story about profits and survival. Or was it ever? In the words of one private sector official, “I am not a greenie. I am not a tree hugger,” (Private sector waste manager 1, Interview 6 of 2016); and another, “Nobody is doing recycling for the sake of the

environment. If they tell you that, they are talking rubbish,” (Private waste management industry association official 1, Interview 1 of 2016).

8 CONCLUSION: THE WIDER RELATIONSHIPS

8.1 Introduction

Chapter 7, the second empirical chapter, exposed the factors that complicate the operation of sustainable development at the local level. Its main finding is that sustainable development is difficult to attain for waste pickers who work in circumstances that are not conducive to the improvement of social and economic conditions. It builds on the finding in Chapter 6 that the market-fixing ideas that underpin the waste management econolegal regime make it difficult to achieve sustainable development. This thesis makes three major conclusions. Firstly, the study reveals that state actors with low capital accept international ideas such as sustainable development in order to legitimise themselves among both state and non-state actors in international fora. Secondly, the study reveals that sustainable development arrives in the local context with a market logic that is hard to detect but which is limited in its capacity to deliver the promises of sustainable development for those in most need. Thirdly, the study reveals that sustainable development privileges the formalisation of waste picker economic activities, which has so far been largely unsuccessful in the context of South Africa.

The thesis offers a systematic analysis using ESL to emphasise the conditions that are connected to the arrival of sustainable development in a Global South country. This thesis has been a journey to understand the various factors that comprise and complicate the relationship between waste pickers in South Africa, and sustainable development, a rationality that has shaped the waste management economy. More specifically, the thesis excavates the dynamics of the organisation and working of sustainable development as an international legal concept in the lives of waste pickers in South Africa.

The main aim of this chapter is to synthesize the arguments developed in each previous chapter to answer the research questions introduced in Chapter 1. It arrives at conclusions about sustainable development as an international legal idea and its significance to the economic lives

of the most vulnerable in the South African waste management economy. This allows the thesis to reach wider conclusions both relating to scholarship and to practice, about the relationship between international law and concepts, and their relationship to state and non-state actors.

The thesis makes two major contributions to the scholarship of law. The first, conceptual contribution, is the ESL framework developed in Chapter 2 to analyse the economic and legal aspects of the meta-, macro-, meso- and micro-levels of the society in which South African waste pickers conduct their economic relationships. The second, empirical contribution, comprises the case studies in Chapter 6 and Chapter 7. Chapter 6 analyses the failure of one waste management policy to reveal the shortcomings of sustainable development when fixed to a market-fixing public governance framework. Chapter 7, on waste pickers in Johannesburg who are entangled in a web of national and international laws and policies, reveals how the shortcomings of sustainable development operate in the private sector.

The thesis, in this chapter, also makes a contribution to the practice of sustainable development and waste management policy for both national and international state and non-state actors. At the international level, the contribution of the thesis comes in the form of three observations. Firstly, this study uncovers the structural problems caused by the silent market-fixing ideas that accompany sustainable development to the South African waste management economy. Secondly, the study reveals that South Africa integrates sustainable development into its national regime in a desire to be accepted within the international community of nations, despite the negative outcomes for its most economically vulnerable waste management actors. Thirdly, the study reveals reasons for the failure of waste picker formalisation programmes in South Africa, a policy approach promoted within the SDGs.

Regarding the issue of policy making practice at the local level, this chapter analyses how international law and policy are experienced from 'below'. Firstly, this entails a discussion of

the benefits of formalisation to waste pickers and to the wider waste management economy; and efforts that can be made to reduce barriers to formalisation. Secondly, the chapter responds to the IndWMP policy making failures observed in Chapter 6. This response includes an analysis of the merits of a market-shaping policy in the context of waste management and sustainable development. Finally, the chapter offers four policy recommendations in total for how to increase the number of waste pickers that are formalised; and how to make waste management policies, like IndWMPs, more effective. The findings and recommendations could be applied to other local economies with similar relationships to international law such as mining, discussed in Chapter 3.

This chapter consists of several sections. Section 8.2, on scholarly contributions, is divided into three parts. In the first part, it reiterates the conceptual contribution of the thesis as the ESL framework that forms the basis of its analysis. In the second part, it outlines the empirical contribution of the thesis in the form of a case study of national policy making failure in the waste tyre industry; and a case study of waste pickers' economic interactions at one buy-back centre in Johannesburg. In the third part, it addresses the first five research sub-questions outlined in Chapter 1 by offering a response based on a consolidation of the analysis found in each substantive chapter of the thesis.

The chapter builds on these arguments in the section 8.3 by showing how the findings have practical application at the international level in the broader context of the relationship between international ideas and local economies. This involves a lengthy deliberation of the sixth research sub-question. The analysis takes the form of a discussion of the conclusions arrived at about the relationship between sustainable development as an international legal rationality and how it operationalises itself in the lives of waste pickers in South Africa. First, the research exposes the structural problems caused by the silent market logic that accompanies sustainable development to the South African waste management regime. Secondly, the research shows

that the legitimacy which South Africa has sought in the international community has come at the expense of waste pickers' socio-economic position. Thirdly, the research illuminates the failure of efforts to formalise waste pickers in the context of the international dimensions of sustainable development.

The next section, 8.4, focuses on how the thesis findings can be applied at the national level to the work of policymakers grappling with how to make formalisation programmes and IndWMPs more effective. It offers further analysis of these problems, and ends by suggesting policy recommendations for how formalisation and IndWMPs can be made more effective. The thesis ends with two final sections. Section 8.5 proposes three areas for future research that would expand on and enhance the findings within this thesis. This is followed by final remarks at section 8.6.

The intention is to recognise that sustainable development is incorporated into a framework of international governance that operationalises itself between states, and between state and non-state actors. The dynamics observed between South African waste management state and non-state actors can offer lessons on how to integrate international ideas into local policy making processes involving those with capricious economic lives like waste pickers. It shows how sustainable development has been chosen as a point of focus, and offers reasons for its adoption by South Africa. After demonstrating how it has been interwoven into the econolegal regime that governs waste management, the thesis then identifies how the various components of the sustainable development logic are deployed in the policy making sphere. To complement this analysis, the thesis evaluates observations of how sustainable development is articulated in everyday economic interactions in the waste management economy. The aim is to expose the problematic nature of the silent logic of sustainable development, and of the persistent socio-economic conditions that complicate its success. The rationality of sustainable development is ill-equipped to meaningfully alter difficult socio-economic conditions. The example of this

thesis shows that sustainable development has not yet proven to be an effective tool of societal transformation in South Africa.

8.2 Value of this study to scholarship

This section starts off by summarising the conceptual contributions of this thesis, found in Chapter 2, to the fields of ESL, environmental law and international sustainable development law. This is followed by a summary of the ideas in Chapters 3, 4 and 5 that provide the context for the empirical analysis of policy making and policymakers in Chapter 6, and of waste pickers and a buy-back centre in Chapter 7. Finally, the section responds to the first five research sub-questions from Chapter 1 by relying on an analysis of the findings from each substantive chapter.

8.2.1 Conceptual contribution

The first major contribution made by this thesis to the scholarship of law is the conceptual contribution of the ESL framework. Developed in Chapter 2, ESL helps to analyse the economic and legal aspects of the meta-, macro-, meso- and micro- levels of the society in which South African waste pickers conduct their economic relationships. Chapter 2 introduced the rationale for using an ESL approach to investigate the relationship between sustainable development as an international legal concept and waste pickers in the local setting in South Africa. It reviewed some of the alternative approaches that could be used to analyse the subject matter of the thesis. This led to the conclusion that ESL is most apt approach for this project because it is designed to analyse the intricate web of the international, national and local facets of the relationship between sustainable development and waste pickers. It found that the ESL meta-, macro-, meso- and micro-level analysis of the waste management economy reveals that sustainable development is used to gain South Africa acceptance in international law with little benefit to waste pickers.

Chapter 3 took an ESL approach to consider the sustainable development literature and built the case for a study that focuses on waste pickers. The chapter used the language of ESL to compare the situation of waste pickers with that of ASM miners to show that sustainable development literature is capable to accommodate a study of waste pickers. ASM miners and waste pickers face similar issues such as criminalisation, formalisation, hazardous working conditions and lack of access to training. Waste pickers, who collect most of what is recycled in South Africa and operate largely on an informal basis, are vulnerable to the actions of the more powerful actors operating within an econolegal regime focused on achieving sustainable development. Like ASM miners, waste pickers have been the subject of sustainable-development-inspired formalisation programmes with limited success. Despite many years of this regime being in place, the waste pickers in the WasteBuy case study have not enjoyed any improvement in their economic or social conditions.

Chapter 3 then examined the various approaches to informality, and formalisation and chose to adopt the legalist approach to informal waste management activities. The legalist approach recognises both the importance and the power of law to reduce barriers to waste picker formalisation (Chen 2012, 5; see de Soto 1989, 131-187 for a discussion). The chapter maintains that the sustainable development literature is enriched by a study of waste pickers because of the important contribution that waste pickers make to the waste management economy.

Chapter 4 explored why sustainable development, as a rationality within the ESL framework, moved from the fora of international law to the local context in which it affects the lives of waste pickers in the South African waste management economy. Chapter 4 supported the contention that South Africa adopted sustainable development as the rationality to shape its waste management economy in order to legitimise itself among state and non-state actors in the international regime. It explained that South Africa has low capital relative to more

industrialised economies making it more receptive to concepts enshrined in international law, such as sustainable development. The integration element of sustainable development has been incorporated into the Constitution as part of South Africa's programme to transform its society into a democratic, liberal one at the expense of waste pickers.

Chapter 5 outlined how sustainable development was integrated into the econolegal regime that governs South African waste management through an examination of how it has been embedded in laws promulgated by different levels of government. The chapter discussed the environmental laws governing waste picking which are aimed at achieving sustainable development at national level, and the Gauteng province level, and at the local government level in Johannesburg. It recognised the South African tradition of and faith in using the law as a tool to define and regulate social norms. It concluded that this South African tradition has enabled the country to integrate sustainable development into the econolegal regime that governs the management of waste.

8.2.2 Empirical contribution

The second major contribution, an empirical one, is found in the case studies of a failed policy making exercise in Chapter 6, and in Chapter 7, of waste pickers who sell materials at one buy-back centre in Johannesburg. Chapters 6 and 7 use the conceptual and normative ideas discussed in the previous 4 chapters as a basis of their analysis. Chapter 6 focused on the process of econolegal policy making for sustainable development in the context of the waste management economy. The chapter analysed sustainable development and waste management policies developed by national government and found that they are based primarily on market-fixing ideas. Chapter 6 used a case study of the operation of one policy, concerning waste tyres, to demonstrate that market-fixing ideas, which are focused on fixing market failures, can work to perpetuate them. Furthermore, the conflicting motivations, habitus and capital of waste management actors work to complicate the policy making process. Chapter 6 concluded that

sustainable development policy fails in the South African waste management economic context because the associated market-fixing ideas do not create an econolegal regime responsive to changing economic conditions. The failures observed in the South African waste management economy are underpinned by market-fixing ideas have made it impossible to achieve the promise of sustainable development to improve social and economic conditions for waste pickers.

Chapter 7 illustrated the failure of the market to improve the material conditions of South African waste pickers through a case study of economic transactions at one buy-back centre in Johannesburg. The chapter explored the economic relationships among actors in the WasteBuy economic field, to advance the idea that sustainable development prefers everyone to have the same set of skills. Where this is not possible, as is the case with waste pickers compared to other waste management economic actors, sustainable development does not encourage a skills upgrade. To do so would slow down the recycled materials supply chain. The negative effect of these market signals on waste pickers is compounded by waste pickers' interest in the market being driven by survival as opposed to the economic rent seeking associated with the market-fixing ideas associated with sustainable development.

8.2.3 Response to research questions

This sub-section moves towards an answer the main research question, by first answering the first five sub-questions in the order they appeared in Chapter 1.

The first sub-question to be addressed was, “How can the operation of sustainable development at a local level be conceptualised using ESL methods and concepts; and what are the potential benefits and risks?” The ESL approach facilitates a combination of a broad number of empirical and conceptual research methods and analysis. The ESL framework allowed for concepts drawn from economics, law and sociology to investigate the relationship among the rationality, regime, and (inter)actions involved in the operation of an international idea in the local context.

ESL permitted the use of ethnographically-inspired methods to generate empirical data on the experience of a group invisible to the sustainable development literature. I did this with the risk that the data gathering exercise would not be fruitful in a country where I had few contacts and to which I had not been before. The benefits of using an ESL approach was the resultant outcome: a holistic, systematic and textured study of how sustainable development in the local context fails to deliver what it promises for the very vulnerable.

The second sub-question was, “What is the nexus between the historical and contemporary economic and legal context within which the concept of sustainable development and the reality of waste management in South Africa meet and operate?” South Africa is country previously colonised by both the English and the Dutch, which has endowed it with a legal system drawn from common law, civil law and traditional legal sources. Against this backdrop, the legacies of apartheid persist, with 71 per cent of the assets being owned by just 10 per cent of the population, largely along racial lines (Sulla and Zikhali 2018, 51). Although it is the most industrialised country in sub-Saharan Africa, nearly half of the country lives in poverty, with the bottom 60 per cent owning only 7 per cent of the wealth (Sulla and Zikhali 2018, 51). A report by the World Bank calls it the most unequal society on Earth (Sulla and Zikhali 2018, 42). This situation makes it difficult for sustainable development to be achieved in the country because economic and social development and environmental protection for some does not necessarily translate for all. Many Black communities, especially the townships in which many waste pickers dwell, are sites of environmental pollution and grinding poverty (Worden 2012, 66).

The third question considered is in two parts, “How does the concept of sustainable development operate within and shape the regime governing the waste management economy in South Africa at national, provincial and local government levels? How did it become the dominant rationality to shape the waste management economy?” A survey of relevant South

African law and policy revealed that sustainable development is the aim or objective of many of those that govern the waste management regime. Most notably, sustainable development is guaranteed in the Bill of Rights of the Constitution and exists in the preambles and clauses detailing the aims and objectives of Acts that regulate environmental and waste management issues at national, provincial and local government levels.

Law-making practices in the newly-democratic South Africa coincided with the groundswell around environmental discourses in international law, such that a working international definition for sustainable development existed by 1991 when Nelson Mandela was released from prison. At this time, the idea of sustainable development was beginning to influence both international and national initiatives and interpretations of how to address questions of environmental protection, intra- and intergenerational equity and sustainable use. The thesis advances the idea that new democratic priorities of South Africa caused it to adopt sustainable development in its national laws for a few reasons. South Africa embarked on a programme of societal transformation and transformational constitutionalism to rebalance wealth and opportunity in society, which could theoretically be achieved through sustainable development. It is likely that by accepting sustainable development the country sought to legitimise itself within the international community of nations after years of isolation due to apartheid. South Africa acquiesced to this process because of its low political capital relative to other countries.

The fourth question asked was, “How do waste management actors co-construct the shape of the waste management economy in South Africa?” The case study that examined policy making practices demonstrated that the waste management economy has been designed to encourage limited collaboration among stakeholders. The process of co-constructing the waste management economy was done with much difficulty because government and private sector actors have conflicting capital, habitus and motivations in an environment that has thus far excluded waste pickers, making them rule-takers. This form of policy making reveals the

structural issues that arise owing to the market-fixing logic which accompanies sustainable development into the local context.

Question five was, “How does sustainable development as a concept manifest in the (inter)actions of waste pickers in Johannesburg?” The analysis of waste picker economic relationships points to the conclusion that sustainable development exacerbates the existing inequalities within the waste management economy, and by extension in South African society. This piece of research exposes the silent, market-fixing ideas according to which sustainable development organises itself at the micro-scale. The case study that addresses this question, focused on a buy-back centre in the CBD of Johannesburg, revealed that economic growth and stability must be achieved before the social and environmental pillars of sustainable development can be met. Without the economic viability of the buy-back centre that wishes to ‘develop’ waste pickers being realised, waste pickers cannot enjoy sustainable development.

8.3 Value of this study to international policy making and practice:

The analysis in this section is relevant for international policymakers interested in how waste management and sustainable development are seen from below. The discussion is focused on addressing the sixth and last research sub-question, “What do waste management economy (inter)actions reveal about the relationship between state and non-state actors and international concepts?” The response to this question, rests on the examination of the three main findings of the thesis on the structural problems related to sustainable development; the issue of legitimacy in international law; and the the failure of formalisation.

8.3.1 Structural problems

The arguments made throughout the thesis point to the broader finding that the problems which arise with the implementation of waste management policies that are based on the integration element of sustainable development is structural. The international regime has a structure that can operationalise concepts and rationalities like sustainable development in several ways. This

relates to the varying degrees of normative importance prescribed to sustainable development depending on the context and the international forum as discussed in Chapter 4. In the context of Global South countries such as South Africa, discussed in Chapters 6 and 7, efforts to achieve sustainable development in the waste management economy have led to failures.

This is primarily because sustainable development arrives in the Global South with market-fixing ideas that do not facilitate its effective implementation. The market-fixing ideas which comprise market failure theory to address economic growth, work to prioritise themselves over the other pillars of sustainable development, social development and environmental protection. The market-fixing ideas assume that everyone has the same level of capital, and does not address this because to do so would restrict market activity. This is clearly seen in Chapter 7 where waste pickers who should comply with certain legal requirements are not expected to do so because the bureaucracy involved would restrict market activity. The result is that waste pickers, and similar actors, are not able to adequately avail themselves of opportunities that arise from engaging with local government. This scenario makes it difficult for waste pickers to bargain collectively for better conditions when transacting with other economic actors. In effect, market failure theory makes it difficult for sustainable development to re-orient governance frameworks in a way that improve the lives of the vulnerable. This makes the prospect of social development for vulnerable economic actors like waste pickers subject to market-fixing economic approaches impossible.

The market failure theory that accompanies sustainable development acts to reinforce instead of challenge existing social structures. As Chapter 7 illustrated, sustainable development does not improve livelihoods for the economically vulnerable. At the same time, the hard-to-detect market-fixing ideas work to benefit many formalised private sector actors, who enjoy large profits. Economic growth and profit making is foundational to any programme of sustainable development. However, because the governance structures do not change to accommodate a

form of economic growth that facilitates social development, the sustainable development experiment fails as seen in Chapters 6 and 7.

A lack of social development for waste pickers does not obviate the protection of the environment within a regime aimed at achieving sustainable development. The foundational quality of economic growth to the achievement of all pillars of sustainable development is illustrated in the environmental benefits accrued in the waste management economy. Chapter 7 illustrated that, even though waste pickers do not enjoy social development, the buy-back centre generates enough economic growth to ensure that recycling activity, waste pickers' basic livelihood, continues. The benefits of landfill space reduction still accrue to the South African economy and wider global community even where waste pickers do not enjoy economic or social development, as discussed in Chapter 7. To apply this more broadly, an economy focused on achieving sustainable development may not afford its most vulnerable economic actors social development while being of measurable benefit to the environment.

This principle may operate similarly in Global South and Global North countries. Economic actors within environmental economies with sufficient capital will be able to maintain or even increase their economic position relative to others within the economy. Less powerful actors such as waste pickers and ASM miners will struggle to transcend the barriers that prevent them from progressing. The institutions that provide the architecture to make sustainable development operational may not respond to these dynamics. This is because the market logic that accompanies sustainable development into the local setting prevents a restructure of the governance framework in a way that recognises the adjustments required to facilitate its operation. The ultimate consequence is that sustainable development policy fails and the associated market does not work because the market signals have a particular, negative effect on vulnerable economic actors who are not interested in market logic but organise their activities based on survival.

8.3.2 Legitimacy

Despite the exposure of the structural fault lines of sustainable development in an analysis of economic interactions in a Johannesburg buy-back centre, sustainable development persists in South Africa and other Global South countries due to the legitimacy factor. As discussed in Chapter 4, Global South countries can adopt international ideas such as sustainable development to reassure other states that they are committed to upholding the priorities of the international regime (Halliday and Carruthers 2009, 22). This discussion indicated that the adoption of sustainable development and other ideas by Global South countries serve as important signals to the other states and international organisations concerned with development such as the U.N. and the World Bank. Countries wish to show that by engaging with a global script, such as sustainable development in their national law and policy, that they are willing to acquiesce to and maintain the same international legal obligations as other countries. This is particularly true for developing countries with less political capital and power in the international community of state and non-state actors (Halliday and Carruthers 2009, 21).

The strong impulse of a country to legitimise itself in international law can override any indications of local policy failure linked to the international idea that suggests a change in approach is needed. This perfectly describes the case of sustainable development and waste pickers in the South Africa. Nine years of the implementation of a National Waste Management Strategy based on sustainable development has not resulted in real improvement for waste pickers. The lack of achievement of the economic and social development pillars of sustainable development for waste pickers then reinforces the point made above that policymakers will then prefer to ignore the failures of sustainable development and perpetuate the illusion that it works to maintain international standing.

8.3.3 The failure to formalise

Economists have long recognised the need to include all stakeholders, including informal actors, in both policy-shaping conversations, and the formal economy (see de Soto 1989 and Mazzucato 2016 for a discussion). As discussed in Chapter 3, the formalisation of informal economic activities as a priority for the sustainable development project at the local level has largely been unsuccessful in the South African waste management context (SDG 8, Target 8.3, and Indicator 8.3.1; Godfrey et al 2015, 43; Godfrey et al 2016, 3). Attempts to convert informal waste management activity into formal activity has resulted in the high failure rate of waste picker cooperatives (Godfrey et al 2015, 43; Godfrey et al 2016, 3). Plans to build informal waste management actors' capacity to enter the formal job market are not guaranteed to result in sustainable efforts to do so as exemplified by WasteBuy in Chapter 7. Although waste pickers are recognised as experts at sorting recyclable material, they are not guaranteed to be employed when opportunities arise to carry out a similar function in the formalised waste management economy as conveyed in Vignette 3.

The failure to formalise can be attributable to three directional forces that do not elevate the social and economic circumstances of waste pickers. The first is the desire of informal actors such as waste pickers to remain subject to little or no control from formalised institutional structures economy for a multitude of reasons as discussed in Chapters 3 and 7. The second is the failure of formal institutions at national and international level to understand how to design processes that meaningfully include waste pickers as discussed in Chapters 3 and 6. The third relates to the practice of the imposition of a governance system crafted by (colonial) elites on actors in an informal system that operates different and potentially oppositional rationalities, language and processes as discussed in Chapter 3. These factors, in their failure to formalise waste pickers' activities, contribute to the maintenance of the societal status quo in South African waste management economic relationships.

8.4 Value of this study to South African policy making and practice

This section turns to how the analysis in previous chapters can be applied in the normative sense to South Africa, i.e., in the policy making space. The focus is on how to resolve some of the policy issues created by the introduction of international ideas at the local level. This section addresses two issues – the formalisation of waste pickers and how to make IndWMPs more effective – with which policymakers continue to grapple by first discussing these and then putting forward options for policymakers to consider. The first is that the route to the formalisation of waste pickers on a sustainable basis is linked to questions of inclusion. The second is that an approach to waste management policy making based on market-shaping ideas needs to include all stakeholders – waste pickers, formal private sector actors and government policymakers – in a substantial way. It shows the value of the international and national interrelationships discussed in thesis to South African policymakers who continue to contend with how to make formalisation policies and IndWMPs more effective.

8.4.1 The challenge of formalisation

This section discusses possibilities for the governance of waste pickers within the formal waste management econolegal framework. The aim is to arrive at a solution for the problems which arise due to formalisation. More specifically, the focus is on how economic interactions involving informal actors such as waste pickers can be facilitated in a manner that promotes sustainable development and maximises the possibility that their work is regarded as legal. The discussion is concerned with how formalisation can address issues related to waste pickers' informality. The process of formalisation has exposed some of the intricacies of the relationship between sustainable development, waste pickers, and the law.

Firstly, this requires a consideration of the benefits of formalisation to waste pickers and as a priority of sustainable development. Secondly, this necessitates a deliberation of problems that have arisen through the drive to formalise waste pickers. The analysis covers the issues that arise due to informality. Informality in the waste management economy brings up the question

of how to include waste pickers in the formal waste management economy. This entails an acknowledgment that informal waste management practices are crucial to the operation of the economy. Formalisation has to be perceived by waste pickers as meaningful to be successful. One solution is to expand the definition of formality to include some existing informal norms with minimal bureaucratic interference in line with the legalist approach (de Soto 1989, 179; Echavarría 2013, 114-115).

Benefits

Formalisation offers waste pickers access to government-backed enterprise development opportunities. But formalisation also reduces waste pickers' ability to enter and exit the waste management economy, and the field research from 2016 and 2017 shows that waste pickers value that flexibility, even where informality might attract harassment from authorities. So, government formalisation efforts, which have included promises of training and support to build a waste management business, have been largely unsuccessful. This exposes the limitations of government to regulate and monitor the actions of those within sector. The struggle to formalise waste pickers' work has been accompanied by a lack of recognition of waste pickers' value to the waste management economy. Formalisation has minimised waste pickers' substantial contributions to the waste management economy in favour of legal compliance, and potentially ignores the fostering of dialogue that could serve to increase waste picker responsiveness to regulatory mechanisms in the long term.

Waste pickers' resistance to government bureaucracy reveals their ability to retain autonomy through a reliance on informal norms at the local level (Ashiagbor 2019, 15). One such norm is the practice of selling recyclable materials to buy-back centres without a permit. National and municipal government laws require waste management businesses to obtain a waste management licence or permit to operate, depending their size and activities. Businesses in possession of a licence or permit are prohibited in law from trading with entities that do not

have the required licence or permit (s.21 (2), s.23 (1) (a), s.34 and s.37 of the Waste Management By Law, Johannesburg 2013). The conditions of the licence or permit requires the holder, at the very least, to monitor and report on volumes of the various materials they handle and store (s.1, Schedule 1, Category A of the Waste Act 2008). However, empirical evidence has revealed that while buy-back centres are likely to comply with the legal requirements necessary to set up their business, they purchase recycled materials from waste pickers who are usually not in possession of a permit. These informal economic transactions, which are a widespread practice, do not attract a penalty for buy-back centres, who are thus unmotivated to assist or encourage waste pickers from whom they regularly purchase recyclable materials to be registered with the municipal authority. The norm, which is technically in breach of the law, has simplified economic relations between two parties – buy-back centres that wish to purchase in-demand recyclable materials, and waste pickers who may not have the resources to comply with the law but who are trying to make a living.

Ultimately, this informal norm facilitates waste pickers to carry out functions crucial to them, society and the wider economy without being formalised. Waste pickers provide a livelihood for themselves; they contribute to environmental sustainability through landfill space reduction; and they support the globalised economy for recycled materials through the supply of valuable commodities. Waste pickers, like many other informal workers, work in a way that is structured, albeit not always within the convention bounds of legal norms (Ashiagbor 2019, 14). The empirical finding that informality in of itself does not reduce the effectiveness of waste picker contributions to the economy would be supported by the work of geographer Roy on informality in the urban landscape (2005 and 2009), and non-governmental organisations that build capacity in the sector such as Women in Informal Employment: Globalising and Organising (WIEGO). Conversely, informal forms of economic activity can be more efficient, and the recognition of waste picker informal norms within a formal framework can result in

policies that create more equitable outcomes for waste pickers (Ashiagbor 2019, 15; de Soto 1989, 179). Thus I adopt a legalist approach to waste picking, which advocates for an expansion of what can be considered formal (Chen 2012, 5-6; see de Soto 1989).

The formalisation of waste picker economic activities is desirable because it would widen access to programmes that build waste picker skills in business management, and health and safety, and potentially facilitate them to bid for waste management contracts. Formalisation would also enable the government to quantify the number of people active in the waste management economy, and the value that they bring to that economy more accurately. However, formalisation en masse may not be practical because most waste pickers value autonomy, and flexibility, and it may lead to the exclusion from the sector of those waste pickers who live in South Africa without legal authorisation. Additionally, there is no guarantee that formalisation will improve waste pickers' working conditions and socio-economic position because of the low prices currently paid for recyclable materials. In fact, formalisation does not guarantee better conditions for those being formalised, much in the same way that the implementation of sustainable development does not guarantee improvement in economic and social conditions for waste pickers (Rittich 2019, 21).

Reducing barriers

Barriers to entry into the formal economy can be addressed through several measures. One way is through the creation of an econolegal regime that reduces the bureaucratic requirements for becoming formalised (de Soto 1989, 182-184; Echavarría 2013, 53). Such a regime should recognise the diverse needs of waste pickers in landfill and street-based settings. Government efforts to devise policy strategies for formalisation would benefit from the input of a wide range of stakeholders who work closely with waste pickers: waste management businesses, civil society organisations, local authorities, and waste pickers themselves. This would ensure that policy reflects the interests of all stakeholders, and can gain the support of waste pickers whose

livelihoods are likely to be directly affected by the decisions taken. This approach would be expected to result in policies that improve waste pickers' access to waste, as well as the national recycling rate, which is currently 38.6 per cent of all recyclable materials that are classified as general waste (DEA 2018, 5).

8.4.2 Improving industry waste management plans

This section revisits the case of REDISA, which raises many questions regarding how waste management policy in South Africa can achieve sustainable development. The analysis is concerned with how to design waste management policies in a way that would increase the likelihood of them being implemented effectively. Those who are charged with carrying out the policy would need to take actions that conform with the policy to ensure that the policy has been fulfilled. The case of REDISA highlights that the first step to evaluating how waste management policy can be more effective, is to catalogue the ways in which a particular policy has been implemented. Next would be to be clear on what parts of the policy have been implemented and what remains to be, and ask why they have not been implemented.

The aim here is to attempt to address the question of how to design waste management policies to ensure their successful operation. Mazzucato provides a framework for understanding how sustainable development can be applied to policy making for waste management. Part of this is underpinned by the understanding that a re-conceptualisation of the role of the state in creating markets would enable the design of policies that facilitate risk and benefit sharing among stakeholders (Mazzucato 2016, 148-149). In direct relevance to industrial policies tied to sustainable development, Mazzucato promotes complementing the market failure theory discussed in Chapters 2 and 6 with market-shaping ideas to devise policies that optimise resource use to construct markets (2016, 140).

Firstly, the section sets out how Mazzucato, an economist who specialises in innovation and public value, conceptualises market-shaping policy at the intersection of public policy,

sustainable development and “complex societal problems” such as waste management. Secondly, it sets out the market-shaping policy options proposed by Mazzucato for how to address public policy issues. Third and lastly, it emphasises the form of multi-stakeholder involvement in public policy making process that Mazzucato proposes, and how the difficulties that may arise if applied in the South African waste management economy can be overcome.

Features of market-shaping policy

To recall the discussion on market-shaping ideas in Chapter 2, a market-shaping strategy has several features which together, represent a distinct approach to policy making. It seeks to achieve dynamic market efficiency – long term changes including the use of resources that advance innovation and investment in new technologies that create new market conditions (Kattel et al 2018, 14). This requires an approach to spending based on meeting a public policy objective, as opposed to a budgetary constraint (Kattel et al 2018, 14, 17). Another key feature is encouraging greater active involvement of the private sector and civil society to create new capabilities in the setting of policy making direction (Kattel et al 2018, 7). Periodic evaluation of the policies by all stakeholders would evaluate the suitability of the created policies to ensure that they remain relevant and produce the desirable outcomes (Kattel et al 2018, 8, 18). The criterion of evaluation is whether the policy tools are producing change in the direction of the policy objective, including indicators that recognise “transformative action” (Kattel et al 2018, 17; Mazzucato 2016, 152). Market-shaping policy making approaches are divergent from market-fixing policy making approaches in their scope and ability to promote innovations that address complex societal challenges (Kattel et al 2018, 3; Mazzucato, 2016, 140).

Complex societal problems and sustainable development

Mazzucato recognises that policymakers aspire to “solve complex problems or challenges” that exist in society, of which waste is considered one (2016, 140; Kattel et al 2018, 7). She is of the view that the approaches used by policymakers to address a complex problem like waste could benefit from the kind of combination of multi-disciplinary innovations which resulted in

“*mission-oriented feats* [such as those] that led to putting humans on the moon” (Mazzucato 2016, 140). She frames waste as a problem that can be solved through a “challenge-led policy framework” such as the SDGs, which have at their centre the achievement of sustainable development (Kattel et al 2018, 3). This suggests firmly that the framework developed by Mazzucato, and that has informed public policy efforts in governments across the world, is designed to connect waste management policy making practice with the pursuit of sustainable development. This confluence makes the framework relevant in this thesis which focuses on how sustainable development operationalises itself in the lives of informal economic actors within the waste management economy of South Africa.

8.4.3 Policy options

Mazzucato proposes four forms of policy making that lead to market transformation, and which all include the involvement of a range of institutions with different functions and capabilities (2016, 144-145). The first type of policy making approach is mission-oriented innovation policy, which is focused on achieving clearly defined technical goals (Mazzucato 2016, 145). The second form is the developmental state, characterised by a network of different levels of state institutions working together to create policies that stimulate new markets focused on innovative products and services (Mazzucato 2016, 147). In the third form, which comes from evolutionary economics, the state builds and supports new institutions which can accommodate a paradigm shift in a particular market which results from new technologies such as green innovations (Mazzucato 2016, 148). The fourth type, which sees the state as the “lead risk-taker and investor in the economy” advances the idea that the state is best placed to invest in new technologies, with the proviso that it receives dividends from commercial entities that successfully harness those technologies (Mazzucato 2016, 148). Given the dynamic working across various levels of government seen in the waste management economy, a developmental state approach to mission-oriented innovation policy may be most appropriate in South Africa. It would permit for localised policy making underpinned by market-shaping economic ideas.

Regardless of the approach taken to policy making, a few recommendations are made specific to the formalisation of waste pickers, and IndWMPs in South Africa.

Policy Recommendation for Formalisation

Policymakers could consider expanding the definition of what is considered formal within the waste management economy to recognise the current, longstanding modes of working participated in by waste pickers (de Soto 1989, 179; Echavarría 2013, 114-115). This measure would be made most effective through the inclusion of waste pickers, and waste picker rights' campaigners in discussions on how to proceed.

Policy Recommendations for IndWMPs

The recommendation for IndWMPs is three-pronged.

Policy Recommendation 1

Pay attention to the economic approaches being used in the creation of policies aimed at achieving sustainable development. South African waste management policy has been underpinned thus far by market-fixing policy, which is best suited to static economic conditions. The dynamic sector requires market-shaping policies, which prioritises a flexible approach to meeting waste management public policy goals.

Policy Recommendation 2

Ensure that all stakeholders including waste pickers are included in the IndWMP policy making process, and generally in order to create policies that reflect the policy requirements of each major stakeholder group. Policymakers should not expect this to be a simple undertaking, as the difficulties acknowledged in the course of creating and operationalising policy uncovered in Chapter 6.

Policy Recommendation 3

Create a robust mechanism for ongoing policy evaluation that has a pathway to adjust policies for efficiency with maximum involvement of stakeholders. This would allow policymakers to manage a 'course correction' when it is indicated as the analysis in Chapters 6 and 7 highlight.

8.5 Areas for future research

This research project has raised three areas for future research.

A historical project

The research project has raised questions about the historical relationship between sustainable development and the market-fixing logic that accompanies it in its movement from the international to the local regime. When did sustainable development become associated with market-failure logic? Does sustainable development always arrive to sites in the Global South with market-fixing logic? Has sustainable development been associated with any other economic rationalities at any point in its historical development? What can be learned from such associations? How can such arrangements inform policy making options within the waste management economy, and more generally?

A project in another country context

The research project has raised questions, from an ESL perspective, of how other countries have managed waste in the context of waste-management-related SDGs. South Africa is an upper-middle-income country with significant economic resources compared to other African countries. In this regard it is unusual because while it can be considered a post-conflict society, its socio-economic structure does not resemble that of many other African countries. Therefore it would be of benefit to the literature to examine how, from an ESL perspective, waste is managed in countries in conflict or with different societal issues and pressures. This may necessitate engagement with other research methods such as the use of waste as a material artefact to engage with study participants.

A formalisation-focused project

Models of how to organise the economy put forward by both Mazzucato (2016, 150; 2020, 425), and de Soto (1989, 131-187), are interested in increasing participation in the formal economy, through policy shaping and economic participation. However, economics does not have the language to make the changes necessary to resolve formalisation. Neither does

doctrinal law. Therefore an ESL approach to understanding how societal dynamics fit into the relationship between law and economics to may offer a solution. This entails a research project focused on creating models of formalisation using the tools provided by ESL.

8.6 Concluding Remarks

This, final section of the chapter and the thesis builds on the preceding analysis to answer the main thesis question, “How does the international legal concept sustainable development operate within the waste management economy in South Africa?” An ESL perspective was used to answer this question because of its versatility to examine and include the various dimensions of the environmental, economic, social and legal aspects of this question. ESL facilitates a holistic and systematic analysis that goes beyond other disciplines. ESL is flexible to accommodate a blend of various analytical concepts in the context of this study with a heavy empirical component. The review of the sustainable development literature found that it ignores waste management and waste pickers. Therefore this study fills a gap in the literature, and provides information that can inform policy options to improve livelihoods. Specifically, waste pickers are often subject to formalisation by government authorities, which is preferred by the sustainable development narrative, but formalisation does not result in the desired outcomes for waste pickers. The sustainable development rationality shows up in the waste management economy in its most legalistic form, the integration element, which is focused on environmental protection, economic growth and social development. South Africa’s choice of this concept from international law helps the country to increase its capital among state and non-state actors, increase its legitimisation deficit among another state actors, and develop its project of societal transformation.

This was made possible because South Africa has a tradition of using the law to regulate social norms. The use of sustainable development in law and policy demonstrates it has value to shape social and economic norms. Current policy states that South Africa aims to achieve sustainable

development, but this is done in a framework based on market failure theory when sustainable development requires market-shaping ideas for policy to be successful. Market-shaping policy is challenging because waste management actors have variant motivations, capital and habitus. The government is motivated by the need to regulate economic and social relations, and uphold the law. Waste pickers, for instance, are motivated to work in waste management for survival. The market failure theory that accompanies sustainable development assumes all waste management actors to have the same motivations and capital but does not seek to redress this when they do not. Private waste management companies have significantly more capital than waste pickers. They are generally motivated by the profit motive, even where they state the desire to achieve sustainable development for waste pickers. Without enough profits, private waste management companies are not able to run programmes to ‘upskill’ waste pickers.

The thesis shows that sustainable development operates in the South African waste management economy through a web of international, national and local government laws and policies that regulate economic, social and legal relations. These laws and policies shape the waste management economy in a way that reinforces already existing social and economic inequalities. The reason for this outcome is largely related to the economic logic that accompanies sustainable development in its movement from the international to the local. Sustainable development operationalises itself by using market failure theory but does not remove the public governance framework that gives oversight to the waste management economy. The market-fixing ideas which comprise market failure theory is more suited to static conditions than the potent relations that exist in the South African waste management economy. South Africa, like many Global South countries, remains wedded to sustainable development in its current form because it helps it to gain political capital, and to legitimise its actions within the international community. The result is a failure of the most vulnerable in the waste management economy to enjoy the promises of sustainable development.

Appendix A: Ethics approval email

Friday, July 24, 2020 at 7:40:49 PM British Summer Time

Subject: Ethical Approval: "Foreign firms and informal waste pickers: competition for legal space in the third world waste business" (0871516)
Date: Friday, 12 August 2016 at 11:14:10 British Summer Time
From: Daiva Nacyte
To: A.Lindner

Attachments: V1 Interview Guide MNE 0871516.docx, V1 Application Form 0871516.pdf, V1 Checklist 0871516.pdf, V1 Consent Form 0871516.docx, V1 Interview Guide MUN 0871516.docx, V1 Interview Guide WP 0871516.docx, V1 PIS 0871516.docx, V1 REAG Research Proposal 0871516.docx

Dear Allison

I am pleased to tell you that your project "Foreign firms and informal waste pickers: competition for legal space in the third world waste business" (0871516) received ethical approval from the Faculty of Social Sciences Research Ethics Advisory Group for Human Participants on 12 August 2016. The attached documents are the final approved versions and should be the only ones used.

Please note that it is essential that you:

1. Comply with the Data Protection Act of 1998
2. Comply throughout the conduct of the study with good research practice standards
3. Refer any amendment of the protocol to the Social Sciences Research Ethics Advisory Group

If you are intending to work unaccompanied with children or with vulnerable adults, you will need to apply for a DBS check (*formerly known as CRB*).

One of the reviewers commented on your research methods and advised that you may want to reflect on them: "Some of the interview questions are a bit too leading - rather than asking whether something is easy or simple for example it's better to couch then in a more neutral fashion, eg how did you find the relationship with xxx. Questions asking for pluses and minuses are balanced so ok."

Please do not hesitate to get in touch if you have any questions.

Best wishes
Daiva

Miss Daiva Nacyte
Administrative Co-ordinator - Faculties Support Office University of Kent, Room 25, The Marlowe Building, Canterbury, CT2 7NR

T: 01227 82(4252) | W: <http://www.kent.ac.uk/fso/>

Appendix B: List of Research Respondents

Government waste management officials

Interview No.	Person	Date
22	Central government waste management middle manager 1	8 th February 2017
57	Senior central government waste management official 1	4 th April 2017
2	Senior municipal waste management official 1	31 st October 2016
3	Senior municipal waste management official 2	1 st November 2016
8	Senior provincial waste management official 1	14 th November 2016
16	Senior municipal waste management official 3	19 th January 2017
49	Senior municipal waste management official 4	7 th March 2017
56	Senior municipal waste management official 5	4 th April 2017
47	Middle-ranking municipal waste management official 1	6 th March 2017
53	REDISA official 1	24 th March 2017

Waste pickers, campaigners and leaders

Interview No.	Person	Date
4	Waste picker leader 1	4 th November 2016
8	Waste picker leader 2	15 th November 2016
21 and 24	Waste picker leader 3	6 th February 2017 + 27 th February 2017
25	Waste picker leader 4	27 th February 2017
5	Waste campaigner 1	7 th November 2016
26	Tito, waste picker 1	28 th February 2017
27	Hastings, waste picker 2	28 th February 2017
28	Zwele, waste picker 3	28 th February 2017
29	Kidogo, waste picker 4	28 th February 2017
30	Thandiso, waste picker 5	28 th February 2017
31	Simon, waste picker 6	28 th February 2017
32	Ndaba, waste picker 7	28 th February 2017
33	Mark, waste picker 8	1 st March 2017
34	George, waste picker 9	1 st March 2017
35	Issa, waste picker 10	1 st March 2017
36	Alfred, waste picker 11	1 st March 2017
37	Gabriel, waste picker 12	1 st March 2017

38	Jack, waste picker 13	1 st March 2017
39	Mickey, waste picker 14	1 st March 2017
40	Jason, waste picker 15	1 st March 2017
41	Thabi, waste picker 16	2 nd March 2017
42	Bongo, waste picker 17	2 nd March 2017
43	Itume, waste picker 18	2 nd March 2017
44	Vuyelwa, waste picker 19	2 nd March 2017
45	Nkosi, waste picker 20	2 nd March 2017

Private waste management officials

Interview No.	Person	Date
6	Private sector waste manager 1	8 th November 2016
12	Private sector waste manager 2	16 th November 2016
20	Private sector waste manager 3	31 st January 2017
23	Private sector waste manager 4	16 th February 2017
46	Private sector waste manager 5	2 nd March 2017
54	Private sector waste manager 6	29 th March 2017
55	Private sector waste manager 7	3 rd April 2017
1	Private waste management industry association official 1	28 th October 2016
51	Private waste management industry association official 2	14 th March 2017
58	Private waste management industry association official 3	5 th April 2017
58	Private waste management industry association official 4	5 th April 2017
59	Private waste management industry association official 5	5 th April 2017

Appendix C: Information Sheet



Information Sheet	
You will be given a copy of this information sheet	
Title of Project: Foreign firms and informal waste pickers: competition for legal space in the third world waste business	
Researcher Name:	Allison Lindner (Ph.D Candidate)
Work Address:	Kent Law School, Eliot College, University of Kent, Canterbury CT2 7NS
Email:	al458@kent.ac.uk
Telephone:	+44 (0)7799444320
<p>We would like to invite _____ to participate as a volunteer to be interviewed in this research project on ___/___/___ (dd/mm/yyyy).</p> <p>Please read the following carefully and feel free to discuss it with others or the researcher if anything is unclear. If you decide not to participate, you will not be disadvantaged in any way.</p> <p>Purpose of the Study This study looks at the privatisation of waste management in South Africa, and its effects on waste pickers.</p> <p>What will happen if you decide to participate in the study? We will decide on a time and place to meet for an interview. Before the interview starts I (the researcher, Allison Lindner) will ask if you agree to be recorded during the interview and give you a consent form to sign. If you prefer, we can make an audio recording of your consent.</p> <p>The interview will last for up to one hour. Your participation will give you a chance to have your views on the South African waste management industry heard by an academic audience.</p> <p>What will happen with the data and results of the study? This study has been ethically reviewed by University of Kent Faculty of Social Science Research Advisory Group and funded by the United Kingdom Economic and Social Research Council.</p> <p>All data will be collected and stored in accordance with the South Africa Protection of Personal Information Act 2013 and the UK Data Protection Act 1998. Your interview will be written down on paper and the mp3 file will be deleted afterwards. All data will be stored safely on a password-protected database for archiving and re-use at the end of the project. Your real name will never be associated with any statements you make.</p> <p>I will use the data to write (1) academic articles and (2) a doctoral thesis, to be made available at the University of Kent. I will also give a seminar on my preliminary findings in late 2017 / early 2018.</p> <p>What if you change your mind? If you change your mind after the interview, you can request that your contribution is removed from the research by contacting me, Allison Lindner, on the above e-mail address or telephone number.</p> <p>What do you do now? If you have any questions or want more information please get in touch with Allison Lindner.</p> <p>Thank you for taking the time to read this and for considering taking part in this project.</p> <p>Sincerely yours,</p> <p><i>Allison Lindner</i></p>	

Appendix D: Interview consent form



CONSENT FORM

Title of project: Foreign firms and informal waste pickers: competition for legal space in the third world waste business

Name of investigator: Allison Lindner

Participant Identification Number for this project:

Please initial box

1. I confirm I have read and understand the information sheet dated... (version...) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. Researcher contact details: 07799444320.

3. I understand that my responses will be anonymised before analysis. I give permission for members of the research team to have access to my anonymised responses. I understand that information I give may be published as an anonymised direct quotation.

4. I agree to take part in the above research project.

5. I agree to have my interview recorded.

Name of participant	Date	Signature

Name of person taking consent <i>(if different from lead researcher)</i>	Date	Signature
<i>To be signed and dated in presence of the participant</i>		

Lead researcher	Date	Signature

Copies: *When completed: 1 for participant; 1 for researcher site file; 1 (original) to be kept in main file*

Appendix E: Indicative interview questions

Interview Guide for Municipal Officials

1. What is a typical work day like for you?
2. What does your role as a municipal official in the waste management sector mean for you?
 - a) Is it simple to grant an environmental licence?
 - b) what role does environmental education have to play in your day to day work?
3. What does your role mean for society?
4. When do you tend to interact with waste pickers?
 - a) Is it simple to grant them an environmental licence?
 - b) how has it been to assist them in organising?
 - c) do you think it is a good idea for all waste pickers to work in a cooperative?
 - d) Do you think the rights that waste pickers have are important?
5. When do you tend to interact with private waste companies?
 - a) is it simple to grant them an environmental licence?
 - b) how has it been to assist them to comply with municipal law?
 - c) How has the 'environmental modernisation' programme been working in the city?
6. Do you think fair prices are paid and received for recycled materials?
7. I want to ask you about how private waste management companies and waste pickers are working together with the municipality.
 - a) What are some of the things that you do well together?
 - b) What would you identify as some of the challenges you face working together?
8. What do you think is the best model for waste management in your city?
9. What do you see as your role in South African society?
10. What do you see as the future for you in this profession?

Interview Guide for MNE officials

1. What is a typical work day like for you?
2. What does your role as a waste manager mean for you?
3. What motivated your company to become engaged in waste management in South Africa?
(only ask if not obvious from company website)
4. When do you tend to interact with the municipality?
 - a) How simple is it to get an environmental license?
 - b) How simple has it been to comply with municipal waste management regulations?
5. What impact has the municipality's 'environmental modernisation' programme had on your company?
 - a) Do you think fair prices are being paid for recycled materials?
 - b) How do commodity prices for paper / metal / plastic affect your company?
6. When do you tend to interact with waste pickers?
 - a) Do you think the rights that waste pickers have are important?
 - b) Do you think it is a good idea for all waste pickers to work in a cooperative?
7. I want to ask you about the experience of your company working together with the municipality and waste pickers.
 - a) What are some of the things that you do well together? (prompt for sustainable development, technical and financial cooperation if not mentioned)
 - b) What are some of the challenges you face working together?
8. What do you see as the future of privatised waste management in South Africa?
9. What do you think is the best model for waste management in this city?
10. What do you see as your company's role in South African society?

Interview Guide for Waste Pickers

1. What do you do everyday?
2. What does your work mean to you? To your family?
3. What does your work mean for society?
 - a) How do you see your role as an environmental educator?
4. When do you tend to interact with the municipality?
 - a) Are they quick? helpful? Fair?
 - b) How simple is it to get an environmental licence from the municipality?
5. As a waste picker, your right to work and to organise is recognised by the government. Are there other rights you would like to have?
Do you think it is a good idea for all waste pickers to have to work in a cooperative?
6. Tell me a bit about your relationship with private companies.
 - a) Do private companies that also collect waste affect your work? How?
 - b) Do private companies that donate their waste to you affect your work? How?
7. Do you receive a fair price for the materials you recycle for your clients?
 - a) Are there any other issues about payment other than fairness you would like to speak about?
8. I would like you to think of yourself, your colleagues, the larger waste management companies and the municipality as the waste management sector.
 - a) What are some of the things you do well together?
 - b) What are some of the challenges you face working together?
9. What do you see as your role in South African society?
10. What do you see as the future for you in this profession?

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