



THE IMPACT OF THE RECYCLING INDUSTRY ON POVERTY LEVELS IN SOUTH AFRICA'S INFORMAL ECONOMY: A CASE STUDY OF WASTE PICKERS IN PRETORIA

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1. Introduction

‘Trilemma’ of widespread inequality, poverty and unemployment (May, 2016)

Poverty headcounts	2006	2009	2011
Percentage of the population that is poor	57.2%	56.8%	45.5%
Number of poor persons (millions)	27.1	27.8	23.0
Percentage of the population living in extreme poverty	26.6%	32.4%	20.2%
Number of extremely poor persons (millions)	12.6	15.8	10.2

StatsSA (2014)

- Many desperate, low-skilled and unskilled people in South Africa forced into the informal economy
- Car guarding, day labouring, small-scale retailing as well as waste picking
- Hierarchy of role players in the recycling industry

<p>Highest value</p>  <p>Lowest value</p>	Manufacturing industries
	Brokers, wholesalers, other processors
	Buy-back centres, craftsmen, middlemen
	Informal waste collectors with own transport (hawkers)
	Individual, informal waste pickers

2. Aim of the paper

To determine the impact of informal recycling on the poverty levels of street waste pickers in South Africa, using Pretoria (the capital city) as a case study

Two interdependent elements:

- a) Establish a socio-economic profile of street waste pickers in Pretoria
- b) Determine the impact of their informal activities on their poverty position

3. Contextualisation

- **2013:** 8.24% of all recovered paper in South Africa was exported (calculated from PRASA, 2014)
- **2013:** 8.7% of all recyclable paper in South Africa was exported
- **2014:** 10% of recycled plastic was exported
- Studying how informal recycling impacts the poverty levels of street waste pickers in South Africa is fundamental to gaining an understanding of the value chain underpinning the recycling industry

3. Contextualisation (contd)

- Most respondents collect a mixture of recyclable waste, such as bottles, paper and tins
- Depends on proximity of buy-back centres and prices (Langenhoven and Dyssel, 2007; McLean, 2000)
- *“I collect tins, bottles, papers and plastics. I walk around the shopping centres and the nearest taverns picking them up. Before I can sell, I must make sure that I have collected at least 30 bags of the recyclables.”*
- *“I find them at taxi ranks and on the streets.”*
- *“I have arranged with owners of the shebeens (drinking places) that every morning I will come and collect tins and bottles. Other recyclable waste I get it on the streets at the taxi ranks and in the rubbish bins.”*

4. The research methodology

- Desktop research/literature review
- Qualitative research: Social Work students (2009)
- Quantitative research — Pretoria (2010)
- One fieldworker (pilot) —143 questionnaires
- Preparation for a quantitative national study
- Fieldwork in 2012

Country of origin	South Africa	100%
Province of origin	Gauteng	3%
	Limpopo	63%
	Mpumalanga	20%
	KwaZulu-Natal	9%
Gender	Male	97.2%
	Female	2.8%
Race	African	100%
Language	Sepedi	43%
	IsiNdebele	20%
	Xitsonga	14%
	IsiZulu	11%

Age	20 to 30	6%
	31 to 40	22%
	41 to 50	49%
	51 to 60	23%
Education	Some primary schooling	63%
	Completed primary schooling	13%
	Some secondary schooling	23%
	Completed secondary schooling	1%
Marital status	Never married/single	33%
	Married	47%
	Separated/divorced	18%
	Widowed	2%

Dependants	Average	4%
	No dependants	14%
	9 dependants	1%
Living conditions	Living with their family	4%
	Backyard rooms	4%
	In the veld or under bushes	15%
	On the street	69%
	Backyard shacks	4%
	Men's hostels in the townships	4%

5. Some qualitative data

- **Trolleys:** *“Made it”, “Bought it”, “Stole it”*
- **Working conditions:** Heavy trolleys, body pains, harassment, physical attacks
- **Personal possessions:** Clothes, shoes, cell phones, radios, electronic items
- **Where they sleep:** Some at home but mostly on the streets, under the bridges and in the bushes (*“anywhere safe”*). Also *“Deserted house”*, *“In front of shops”*
- **Where they access water and toilet facilities:** Garages, shops, streams, depot premises
- **Food:** Self purchases, donations from churches and scraps from dustbins

5. Some qualitative data (cont)

- **Perceptions of the public:** From ‘scornful’ and ‘indifferent’ to ‘sympathetic’, e.g. *“They give us food and money”*
- **Perceptions of the buy-back centres:** Mostly positive. *“We bring the business”*
 - *“.....they treat me as an angel because I am their customer”*
 - *“.. they know we are in business with them and if they do not respect us, they will lose us”*
- **Health and safety:** Both negative and positive factors.
 - Vulnerable to traffic, e.g. *“being hit by a car”*
 - *“I get lots of exercise so I do not become very old. It strengthens my knees!”*

5. Some qualitative data (cont)

- **Family life:** Those that do not stay at home seldom go home
- **No group support:** Everyone for him/herself
- *“Recycling offers unskilled, unemployed people the opportunity to access some income”*

6. Income from the recycling

- 88 respondents earned ZAR 0.50/kg for boxes (median); highest was ZAR 0.70/kg for boxes, earned by 15 respondents
- 29 respondents earned ZAR 1.20/kg for white paper (median); highest was ZAR 2.50/kg for white paper, earned by only 1 respondent
- Plastic bottles ranged from ZAR 0.95/kg to ZAR 2.80/kg
- Iron fetched highest prices: ZAR 30/kg

7. Income from recycling vs. poverty

	ZAR	USD	Euro
Last week	614.94	83.87	65.03
Good week	1142.16	155.77	120.78
Bad week	448.63	61.18	47.44
Last week + child grant	746.23	101.77	78.91
Good week + child grant	1273.45	173.67	134.66
Bad week + child grant	579.93	79.09	61.33

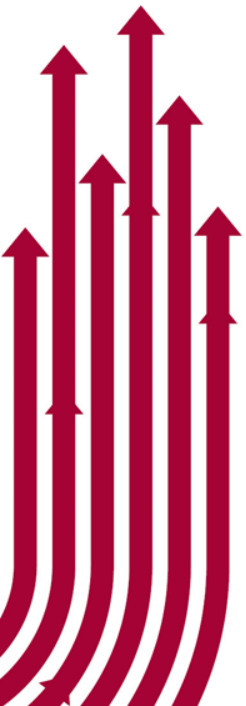
	Poverty threshold (weekly income)			
	Lower bound StatsSA ZAR 484.66 (USD 66.10; Euro 51.25)	Lower bound SALDRU ZAR 516.58 (USD 70.45; Euro 54.63)	Upper bound StatsSA ZAR 753.59 (USD 102.77; Euro 79.69)	Upper bound SALDRU ZAR 1008.01 (USD 137.47; Euro 106.59)
	Percentage below poverty (2010) (supporting only him/herself from recycle income)			
All (last week)	52	53	70	92
All (good week)	1	1	1	36
All (bad week)	91	91	92	98
	Percentage below poverty (2010) (recycler + dependants, recycle income + grant)			
All (last week)	88	88	94	96
All (good week)	81	81	90	91
All (bad week)	97	97	100	100

	DEPENDENT VARIABLE			
	GOODWEEK		LASTWEEK	
	Coefficient	Probability	Coefficient	Probability
CONSTANT	***204.22	0.0020	***123.89	0.0009
AGE	6.25	0.2213	-0.58	0.8775
SCHOOL	***13.50	0.0000	***9.21	0.0000
HOURS	-17.93	0.4029	-6.50	0.4733
YEARS	*-5.95	0.0773	***-8.98	0.0003
PAPERPLASTIC	**55.81	0.0388	***49.20	0.0040
GLASSMIX	***155.58	0.0000	***137.12	0.0000
METALMIX	*119.67	0.0822	***150.42	0.0000
Observations	139		139	
Adjusted R²	0.1144		0.2531	

8. Conclusions and recommendations

- Forced into the informal economy by a combination of local and global forces
- Potential to lift people out of poverty
- Average of 4 dependants; likely to remain in a poverty trap
- Low education and skills levels; little chance of joining the formal sector
- Sense of self-reliance = part of the 'agency' component of Sen's capability approach
- Buy-back centres, municipalities and waste pickers function in silos: greater synergy needed
- Reduce barriers to allow waste pickers to extract more value higher up the value chain

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