TRADE & INDUSTRIAL POLICY STRATEGIES

POLICY BRIEF: 9/2022

Waste pickers and the proposed scrap metal regulations

OVERVIEW

Concerns have arisen around the impact on waste pickers of recently gazetted draft regulations to limit the theft of metal from infrastructure by improving oversight over scrap dealers. An initial phase would ban exports of scrap for six months, followed by the implementation of new regulations imposing stricter rules on dealers, including requiring them to track identification on suppliers and to pay only through electronic mechanisms.

In evaluating the impact of the new regulations, it is important to be clear about the number of people who depend on waste picking and how much they rely on metal. Data from official labour force surveys show that between 35 000 and 40 000 people work primarily as informal garbage collectors, which equates to waste pickers. Rough estimates suggest that metal, mostly beverage cans, contributes around 15% of their monthly income. That translates to an average of R350 to R400 a month.

Waste pickers' total revenue from metal is estimated at around R350 million for 2020. These earnings equalled just 1,2% of total scrap metal sales in South Africa, compared to the cost to society of cable theft, which runs easily into the tens of billions of rand.

Two measures would substantially reduce the cost of the new regulations to waste pickers. In the first phase, excluding beverage cans from restrictions on scrap metal exports would eliminate most of their potential loss of income. In the second phase, the state could assist waste pickers to obtain formal identification where needed so as to comply with more stringent requirements for scrap transactions. It could also help develop models to facilitate waste pickers' use of electronic payment systems after the regulations ban cash sales.

PROBLEM STATEMENT

To prevent large-scale theft of scrap metal, especially copper, requires systems to track sellers of second-hand metal. The current proposals would ban scrap exports outright for a limited period while stricter registration of sellers and electronic payments systems are phased in. Some observers have voiced concerns around the impact of these measures on waste pickers. In the event, these views consistently over-state both the number of waste pickers and the share of metal in their income. In practice, the cost to society of cable theft outweighs waste pickers' total revenue from metal by several orders of magnitude. That said, various easily affordable measures would go far to mitigate the impact on waste pickers.

This study reviews the available information on the number of waste pickers, their income from metal, and their race, gender, education and location. On that basis, the conclusions compare the cost of the proposed new restrictions on scrap metal trade for waste pickers to the potential social benefits of limiting cable theft. They then indicate affordable and practical strategies to minimise the cost of the new regulations to waste pickers.

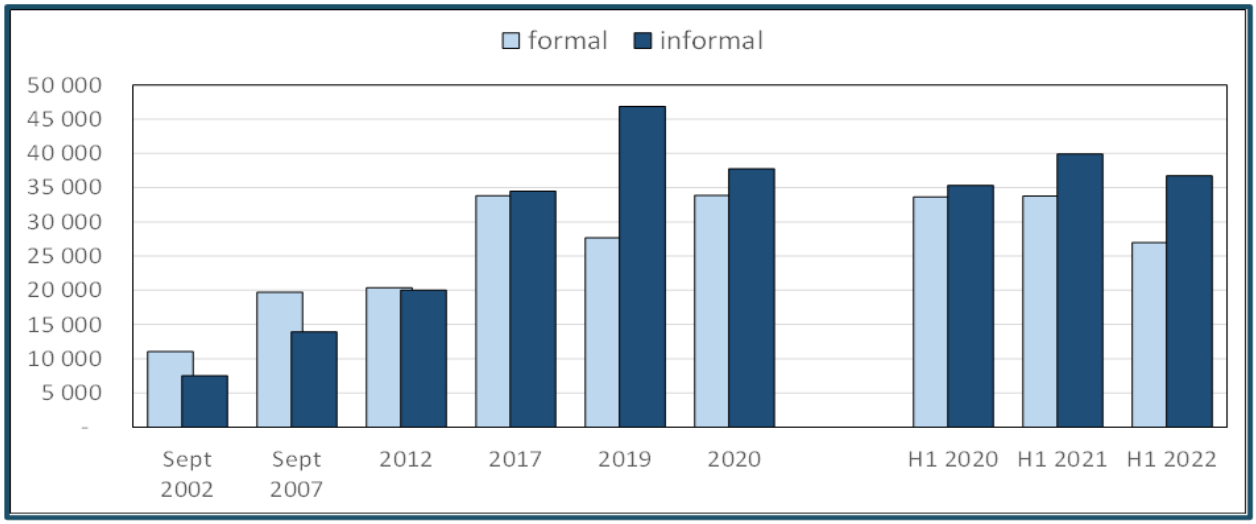
NUMBERS

Statistics South Africa's Labour Market Dynamics databases (which average the Quarterly Labour Force Surveys for each year) provide data on informal garbage collectors as an occupation. Graph 1 (see page 2) shows the number of informal and formal garbage collectors found in the surveys over time. The majority of informal garbage collectors are self-employed and, in terms of industry, fall under retail rather than recycling. This finding suggests that informal garbage collectors equate to waste pickers who sell what they find to recycling companies and scrap yards. In contrast, formal garbage collectors are almost all employed in community services, reflecting their role in waste removal for municipalities. The surveys' figures for employment by industry finds that only between 3 000 and 10 000 informal workers are engaged in recycling. These numbers are very small, and fewer than a thousand of the informal workers listed as employed in recycling are garbage collectors.

info@tips.org.za
+27 12 433 9340
www.tips.org.za

Policy Brief by
Neva Makegtla
TIPS Senior Economist

Graph 1. Number of informal and formal garbage collectors, every five years from 2002 to 2017, in 2019 and 2020, and in the first half of 2020, 2021 and 2022



Source: Calculated from Statistic South Africa. September Labour Force Survey for 2002 and 2007; Labour Market Dynamics for 2012 to 2020; and Quarterly Labour Force Surveys for the first and second quarters, 2020 to 2022. Electronic databases. Downloaded from Nesstar facility at www.statssa.gov.za in October 2022.

Various factors make it hard to specify the number of informal waste pickers with much more precision.

- The figures for garbage collectors since 2017 have been fairly stable, which indicates that the order of magnitude is probably accurate. That said, in most years the number of informal garbage collectors is just below the threshold for significance for the labour force surveys. The analysis of subgroups within garbage collectors, as undertaken in the section on Waste Pickers Characteristics on page 4, should be considered only indicative.
- Many people collect waste for recycling, especially cans and bottles, without actually seeing it as some kind of employment. The labour force surveys cover around 30 000 households a year. They count any income-generating work by adults, however short in duration, as employment. Still, respondents might not report casual recycling of cans. Furthermore, the survey would not pick up on income generated from the sale of waste by schools and community groups to raise funds collectively or to clean up the neighbourhood.
- The vast majority of waste pickers are informal and self-employed, so they cannot be tracked through company or tax data. The Department of Forestry, Fisheries and the Environment (DFFE) registered waste pickers who applied for relief during the COVID-19 pandemic. As of February 2022, however, only 13 774 people had applied, of which the department actually paid 10 678. (DFFE 2022:1)
- Some municipalities register waste pickers, but most do not. In 2020, the DFFE and the Department of Science and Innovation published broad guidelines for municipal registration of waste pickers (DFFE and DSI 2020). There has been no published evaluation of progress in implementation. In February 2022, the portfolio committee for the department received five metros' progress reports on their waste disposal operations. Two had programmes to support waste pickers through buy-back facilities for plastic and co-ops, but none reported a registration system. (PMG 2022)
- Any programme to register waste pickers would have to manage considerable churn. According to the 2020 Labour Market Dynamics database, around three quarters of informal garbage collectors started work less than five years ago. As a rule, however, registration systems record new applications but not exits.
- Recyclers often provide figures on the number of waste pickers without giving any source. Collect-a-Can says that "an estimated 100 000 collectors are creating an income or substituting a low income at any given time". (Collect-a-Can n.d.) It does not, however, explain how it arrived at that figure. It may include school children who return cans as part of school campaigns. Similarly, Plastics SA says that recycling plastic provided income for 58 200 waste pickers in 2019, and 52 100 in 2020. It does not say how it arrived at those figures. (Plastics SA 2019:9; 2021:10)

The most commonly cited estimate for the number of waste pickers, at between 60 000 and 90 000, has very unclear origins. It originated in a 2014 report (no longer available online), by the then Department of Environmental Affairs. The report's finding has been widely cited, but the authors relying on it do not provide a detailed explanation of how the original report arrived at the figure. Nor do they indicate what might have changed since 2014. (See DEA 2018:59; DFFE and DSI 2020:10; Muringa 2021:80)

In the event, the estimate appears to rely on the contention that there are two to three times as many informal as formal garbage collectors. The basis for that presumed ratio is unclear. (Godfrey 2021:3)

The 2020 Labour Market Dynamics database found almost as many formal as informal garbage collectors. It also found around 20 000 formal workers in recycling, of whom only 20% were garbage collectors.

In contrast, it found a statistically insignificant number of informal recyclers, and almost no informal garbage collectors employed in the recycling industry.

Godfrey and Oelofse posit that there may be up to 215 000 waste pickers in South Africa. (Godfrey and Oelofse 2017) They calculate this figure based on a 2013 academic paper that amalgamates separate studies from various cities in the global South. On this basis, the paper calculated that on average (apparently unweighted) some 0,6% of the urban population was engaged in waste picking. In the event, for the four disparate African cities included in the analysis – Cairo, Lusaka, Dar es Salaam and Addis Ababa – the figure for waste picker employment was much lower. It ranged from 0,02% of the population in Dar es Salaam to 0,48% in Cairo. (Linzer and Lange 2013:74) The paper does not provide adequate evidence for some kind of global norm for waste picker employment, or any basis to argue that South Africa conforms to it.

In sum, it appears the most reliable available figures for waste pickers derive from the official labour force surveys. They indicate that the order of magnitude for employment currently is between 35 000 and 40 000. That figure does not include casual collectors, such as schoolchildren or community clean-up efforts. Higher figures for employment in waste picking appear to have only a very weak evidential basis.

WASTE PICKERS' INCOME FROM SCRAP METAL

Various smaller qualitative studies and the labour force surveys estimate waste pickers' incomes. They align roughly around a median income of R2 500 a month in 2020. The share of that income derived from metals is harder to determine. The only published estimate suggests that it comes to 15% of the total, or between R350 and R400 a month. Most of that income is from steel and aluminium beverage cans.

In 2020, the Labour Market Dynamics database found that the median income for informal self-employed garbage collectors was R2 426, around the same in real terms as three years earlier. The average was substantially higher, at R4 533. The large difference between the median and the average points to the wide range in individuals' reported monthly income, stretching from only R150 to an extremely small number who claimed to earn well over R10 000. In addition, 15% of informal garbage collectors were paid employees. The number of waged workers reporting their income was, however, too small to calculate a meaningful median or average.

Qualitative studies find broadly similar figures for waste picker earnings. A survey of close to 900 waste pickers in 13 cities in 2011/12 found a median income of R1 000 a month – around R2 000 in 2022 rand. Earnings varied heavily, however, from day to day as well as by location and individual. (Viljoen et al. 2018:4) They depended largely on the type of waste found as well as the price paid for it, with big variations between metal, plastic and paper. (Viljoen et al. 2018:8) A smaller study of waste pickers in towns in the Karoo, rather predictably, found lower incomes. (Schenck *et al.* 2021)

The only available study on waste picker earnings by type of material estimates that, on average, metal contributes around 15% of their average income. The figure derives from Godfrey (2021), but requires some rather heroic assumptions.[1] Godfrey's first step was to estimate how much paper, plastic and metal waste pickers collected, based on recyclers' reports of the total collected and the share sold by waste pickers. In 2014, recyclers estimated that waste pickers supplied 30% to 40% of reclaimed metal, 85% of PET plastic (mostly bottles) and 17% of other plastic, and virtually all paper. (Godfrey 2021:3) Godfrey uses the higher 40% estimate for the share of waste pickers in total metal collection. The second step was to multiply the estimated weight of collected material by the relevant price per kilogram. Since the prices vary substantially, the calculation used a maximum and a minimum, then determined an unweighted average. For metal, Godfrey reported a price range of R3 to R14 per kilogram. (Godfrey 2021:5) Who Owns Whom, however, found that the price for scrap metal was only R9 before the COVID-19 lockdown. (Who Owns Whom 2021:17) Using the higher price cited by Godfrey, metal contributed an average of 16% to waste pickers' income; with the Who Owns Whom pre-COVID price, it was 14%.

Labour Market Dynamics figures indicate that waste pickers' incomes in 2020 lagged significantly behind the rest of the informal sector. Informal workers accounted for 20% of total employment in South Africa, with 1,7 million self-employed and employers and a million employees. The median monthly earnings reported for informal entrepreneurs outside of garbage collection was R3 500; for wage workers, it was R2 600, compared to R5 000 for formal employees outside of garbage collection, and R8 000 for formal business owners. Formal garbage collectors earned median monthly pay of R3 200 – well below the rest of employees in the formal sector.

Overall, metal collection contributed a small but still significant share of waste pickers' income. The bulk derived from metal beverage cans, where systems for collection were developed and formalised. Collect-a-Can, owned by ArcelorMittal South Africa and Nampak, claims that around three quarters of all cans were recycled in the early 2020s. (Collect-a-Can n.d.) Still, waste pickers earned less than most other informal workers, as well as facing uncertain incomes and stigma due to the nature of their work. (Schenck et al. 2021). The income going to waste pickers from recycled metal is very small compared both to the cost of metal theft to the South African economy and

[1] *In this context, Godfrey uses the 60 000 to 90 000 figure for the number of waste pickers which, as discussed, is an overstatement. She also contends, without providing evidence, that the figure for waste pickers' share in recycled metal is low, so she uses the higher figure in the range. (Godfrey 2021:3)*

to the value of recycled metal. Using Godfrey's estimate for the share of garbage collectors' income from metal and their total earnings from Labour Market Dynamics, the value of metal collected by waste pickers came to around R350 million in 2020. According to the Metal Recyclers Association, in 2020 sales of recycled metal totalled R2,5 billion. Waste pickers got around 1,2% of that total.

WASTE PICKERS' CHARACTERISTICS

Waste pickers were more likely than other informal workers to have limited education and to be black men. They were older than most informal workers, and more concentrated in metro areas. The figures for location and education in this section are an average of Labour Market Dynamics data for 2018 to 2020; the demographic data are for 2020 alone.

Education: 80% of informal garbage collectors did not have matric. That compared to 65% of other informal workers and under 40% of formal workers.

Race, gender, age: 90% of informal garbage collectors were African, and virtually all the rest were Coloured. That aligned with the rest of the informal sector, but in the formal sector only 70% of workers were African, 15% were Coloured or Asian, and 15% were white. Twenty-five percent of informal garbage collectors were women, compared to 35% of other informal workers, over 40% of formal workers, and 75% of domestic workers. The median age for informal garbage collectors was 41, compared to 39 for both formal and informal workers in the rest of the economy.

Nationality: There are no data on the nationality of informal garbage collectors. Case studies suggest that, at least in Gauteng, a disproportionate number are foreign born.

Location: Almost 75% of informal garbage collectors worked in metro areas, compared to 40% of other informal workers and 50% of formal workers.

POLICY IMPLICATIONS

The income waste pickers earn from the sale of metal is tiny compared to the economic and social cost of cable theft, which runs into tens of billions. It is also a small sliver of all earnings from scrap metal sales. That said, waste pickers mostly sell steel and aluminium cans, rather than cable or other metal from construction or infrastructure sites. By extension, excluding beverage cans from measures to restrict scrap exports would mean their only cost would be compliance with rules that ban cash sales and require sellers to provide identification.

It would be fairly easy and inexpensive to minimise the cost of compliance with the new regulations for waste pickers. In particular, government departments and municipalities should set aside resources to enable waste pickers to get identification and use electronic payment systems. A problem is that, at least in Gauteng, reports suggest that many waste pickers are foreign born, and may not have legal resident status.

REFERENCES

Collect-a-Can. n.d. FAQ. Accessed at https://www.collectacan.co.za/ in October 2022.

DEA. 2018. South Africa: State of Waste Report. Department of Environmental Affairs. Accessed at http://sawic.environment.gov.za/documents/8635.pdf in October 2022.

DFFE. 2022. Waste Pickers Support Programme Update from Central Coordination Team Distribution of Covid Relief (R945) Update on Payment. Presentation to Portfolio Committee. 10 February 2020. Accessed at https://static.pmg.org.za/APPENDIX_C_Update_on_Waste_Picker_Support_10Feb2022.pdf

DFFE and DSI. 2020. Waste picker Integration Guideline for South Africa: Building the Recycling Economy and Improving Livelihoods through Integration of the Informal Sector. Department of Department of Forestry, Fisheries and the Environment and Department of Science and Innovation.

Godfrey L. 2021. Quantifying economic activity in the informal recycling sector in South Africa. In *South African J. Science. 117(9/10), Art. #8921.* Accessed at https://doi.org/10.17159/sajs.2021/8921.

Godfrey L. and Oelofse S. 2017. Historical Review of Waste Management and Recycling in South Africa. In *Resources, Vol. VI.4, pgs. 11.*

Linzer, R. and Lange, U. 2013. Role and size of informal sector in waste management – a review. In *Waste and Resource Management*. CLXVI.2 Accessed at https://www.icevirtuallibrary.com/doi/abs/10.1680/warm.12.00012

Muringa, T.P. 2021. Challenges and survival strategies of vulnerable groups under Covid-19 induced lockdown: The case of Durban waste pickers. In *J. Inclusive Cities and Built Environment*. UKZN. I.2. Accessed at https://journals.ukzn.ac.za/index.php/JICBE/article/view/2333/1938 in October 2022.

Plastics SA. 2019. National Plastics Recycling Survey. Accessed at https://www.plasticsinfo.co.za/wp-content/uploads/2019/12/Plastics-Recycling-in-SA-July-2018-Executive-Summary-final.pdf.

Plastics SA. 2021. An Analysis of South Africa's Latest Plastics Production and Waste Data. Accessed at https://www.plasticsinfo.co.za/wp-content/uploads/2021/11/Recycling-Survey-2020-Executive-Summary3.pdf in October 2022.

PMG. 2022. Status of Waste Management in South Africa. Portfolio Committee on Forestry, Fisheries and the Environment. Accessed at https://pmg.org.za/committee-meeting/34368/ in October 2022.

Schenck, C.J., Viljoen, JMM. and Blaauw, PF. 2021. Precarious, More Precarious, Most Precarious? The Quality of Life of Waste Pickers in the Karoo. In *Social Work.* LVII.3 Issue 4. Accessed at http://dx.doi.org/10.15270/52-2-949 in October 2022.

Viljoen, K., Blaauw, D. and Schenck, R. 2018. 'Sometimes you don't make enough to buy food': An analysis of South African street waste pickers' income. In *Journal of Economic and Financial Sciences*. August. 11(1), a186.

Who Owns Whom. 2021. Recycling of Waste and Scrap. April 2021. Who Owns Whom. Johannesburg.