

Statistics on Waste Pickers: A Case Studies Guide

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| A waste picker in Pune, India. Credit: Julian Luckham

Background and Summary

This report draws on the experiences and efforts of organizations of waste pickers to develop and make data on them available to policymakers and others. It describes the data collection projects in three cities and one country – Bogotá, Colombia; Pune, India; New York City, USA; and South Africa. Key points include:

- The 1990s marked a watershed for the recognition of waste pickers as workers. The conceptual transition led to a focus on the numerical strength of waste pickers and the quantification of their contribution to the economy.
- The data collection efforts were undertaken to mobilize waste pickers and to produce data to be used to plan activities and programmes, to build waste picker organizations, to integrate these organizations within solid waste management systems, and to defend against threats to waste pickers' livelihoods.
- Organizations of waste pickers had a collaborative role in all phases of the data collection process; their efforts are examples of citizen data – the direct involvement of people or their organizations in the multiple stages of producing the data that describe and affect them.
- In all four examples in this report, data on waste pickers brought visibility to this group of workers. In several cases, the visibility extended to identifying workers eligible for social protection from the government and to target outreach to waste pickers to support the formation or strengthening of a waste picker organization.
- Although the context, history and the data collection efforts are very different, it is possible to draw out a set of practical guidelines to assist others in collecting data on waste pickers.

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Overview

Introduction

The 1990s marked a watershed for the recognition of waste pickers as workers. Trade unions and cooperatives of waste pickers as well as independent waste pickers – all of whom had been marginalized, discriminated against and persecuted by municipal authorities – began to assert their identity as workers and demand recognition. Fledgling organizations of waste pickers in different parts of the world articulated their position on the environmental contributions of waste pickers to materials recovery and recycling as the basis for their recognition as economically productive workers. Support for this new recognition was provided by the International Conference on Environment and Development in 1992 and the Rio Declaration, which put sustainable development on the global agenda. These developments mark a distinct conceptual shift from the popular perception of waste pickers as “scavengers” and “rag pickers” who needed to be trained and “rehabilitated”.¹ Rather, in the new view, waste pickers are integral constituents of the materials supply chain. More broadly, waste pickers are working to create a formally planned recycling system that values and improves their role, builds on the strengths of their existing system for collecting and reclaiming materials, and includes waste pickers as key partners in its design, implementation, evaluation and revision. In summary, waste picker integration is a system that has the political, economic, social, legal and environmental integration of waste pickers at its core.²

The conceptual transition led to a focus on the numerical strength of waste pickers and the quantification of their contribution to the economy. In working with materials sourced largely from municipal solid waste and landfills, waste pickers need to be recognized as an essential part of the municipal solid waste collection chain.

This report draws on the experiences of organizations of waste pickers from different parts of the world and their efforts to develop and make data on them available to policymakers and others. Waste picker organizations have been at the forefront in places



*A waste picker in New York City.
Credit: Carlos Rivera*

where enumeration or registration have occurred, whether through pushing the city or state to endorse their own collection of data, supporting the city in carrying out an enumeration, or using existing legislation as a rallying point for mobilization and registration. In Pune and New York City, waste picker groups are holders of the data. The involvement of waste pickers in these efforts helps to build trust among workers and is important in the collection and use of the data.

The specific purposes for undertaking a data collection effort have included mobilizing and organizing waste pickers and producing data to be used to plan activities and programmes, to build waste picker organizations, and to integrate these organizations within solid waste management systems as well as to defend against threats to their livelihoods. Available and accessible data are useful tools to advocate for a just transition for waste pickers, whose livelihoods

¹ Shramshakti. 1987. Report of the National Commission on Self-Employed Women and Women in the Informal Sector, Government of India. p.71.

² Department of Environment, Forestry and Fisheries and Department of Science and Innovation. 2020. Waste Picker Pntegration Guideline for South Africa: Building the Recycling Economy and Improving Livelihoods through Integration of the Informal Sector. DEFF and DST: Pretoria. p.27.

Box 1: Definitions of Waste Pickers:

Colombia: A person who habitually performs the activities of recovery, collection, transportation, or classification of solid waste for its subsequent reincorporation into the productive economic cycle as raw material and who derives one's own and the family's livelihood from this activity.^a They reside in properties in areas classified as low-income. The poverty status of the waste picker will be established by the district administration, according to its social policy and the applicable regulations.

South Africa: Someone who collects reusable and recyclable materials from residential and commercial waste bins, landfill sites and open spaces in order to revalue them and generate an income.^b

Pune, India: A person or groups of persons informally engaged in collection and recovery of reusable and recyclable solid waste from the streets and bins as well as from material recovery facilities, processing and waste-disposal facilities – for sale to recyclers directly or through intermediaries to earn their livelihood.^c

New York City: Canners is the term generally used in New York City and other parts of the USA to refer to persons who collect and redeem deposit-marked bottles and cans that others have discarded (as opposed to redeeming materials from personal consumption).

The International Alliance of Waste Pickers:

- Individuals involved in the collection, segregation, sorting, and sale of recyclables (paper, plastic, metal, glass, etc.) in an informal or semi-formal capacity as own-account workers.
- Itinerant waste pickers, informal/semi-formal waste collectors engaged in transporting, sorting, and selling recyclables, informal workers engaged in transporting or sorting within the informal or semi-formal sorting/recovery/recycling sector, or any of the above who are integrated into municipal waste management systems and continue to sort and sell recyclables.
- Former recyclers who occupy new roles in their recycling organizations in environmental promotion, caregiving, health or gender programmes, etc.

The **International Standard Classification of Occupations (ISCO)** provides an important context for defining waste pickers. It considers waste pickers in the major group of Elementary Occupations,^d with Refuse Sorters as a minor group. Refuse sorters are defined as those who identify, collect and sort discarded items suitable for recycling at dump sites and recycling enterprises or in buildings, streets and other public places. Tasks include: (1) searching through refuse and collecting items for recycling from dump sites, domestic, commercial and industrial premises or from public places such as streets; (2) sorting cardboard, paper, glass, plastic, aluminum or other recyclable materials by type; (3) placing recyclable items and materials in designated compartments and containers for storage or transportation; (4) identifying and setting aside items of furniture, equipment, machinery or components that are suitable for repair or re-use; (5) transporting recyclable items by hand or using non-motorized vehicles; (6) selling recyclable or reusable materials.^e

^a Ministerio de Vivienda, Ciudad y Territorio (MINVIENDA) Colombia Decree 596 and its regulatory resolution 276 of 2016.

^b Department of Environment, Forestry and Fisheries and Department of Science and Innovation. 2020. Waste Picker Integration Guideline for South Africa: Building the Recycling Economy and Improving Livelihoods through Integration of the Informal Sector. DEFF and DST: Pretoria.

^c Solid Waste Management Rules, 2016. Ministry of Environment, Forest and Climate Change, Government of India.

^d Elementary occupations involve the performance of simple and routine tasks that may require the use of handheld tools and considerable physical effort.

^e <https://ilostat.ilo.org/resources/concepts-and-definitions/classification-occupation/>.

often are threatened by privatization of solid waste management and recycling systems.

The data collection efforts described in this brief are an example of citizen-generated data – a data source increasingly recognized by official statistics. Citizen data refers to the direct involvement of people or their organizations in any of the multiple stages of producing the data that describe and affect them. It is an especially important data source for groups that are not well measured in the standard data collection instruments of national statistical offices, as is the case for waste pickers.

The data collection projects on waste pickers in three cities and one country – Bogotá, Colombia; Pune, India; New York City, USA; and South Africa – are described in this report. Although the context, history and the data collection efforts are very different, it is possible to draw out a set of practical guidelines to assist others in collecting data on waste pickers.

Concepts and Definitions

Although informal waste recycling has existed for a long time, the identification of waste pickers as a category of worker for measurement and policy is more recent. Definitions used in the data projects in this report, as well as that of the International Alliance of Waste Pickers (IAWP), and the relevant category in the International Standard Classification of Occupations (ISCO), are shown in box 1. Although there are differences in what is included in the definitions, there is a common set of work activities across all.

The IAWP definition was developed through participatory discussions among workers engaged in waste picking from different parts of the world. Notwithstanding the variations in Solid Waste Management systems and practices across the world, these workers have identified the commonality defining their work and outlined it in the definition. The IAWP defines this common set of activities as the following: waste pickers are individuals involved in the collection, segregation, sorting, and sale of recyclables (paper, plastic, metal, glass, etc.). The IAWP and the India definition add another important element in identifying waste pickers – informality. Specifically, these activities may be performed by workers employed by municipal authorities or businesses who may have social protection through their employer and thus are considered formal, or they

may be persons with no social protection who are informal and should be identified as waste pickers. The basic definition for waste pickers is: Informal workers involved in the collection, segregation, sorting, and sale of recyclables (paper, plastic, metal, glass, etc.).

Additional items are included in some of the definitions. For example, the IAWP broadens the scope to identify the whole sector of waste picking, specifically including former recyclers who occupy new, sometimes formal or semi-formal roles in their organizations, in environmental promotion, caregiving, health programmes, gender programmes, systems operation, etc. Colombia includes key criteria for policy: whether family income is derived from waste picking and whether the waste picker lives in a low-income area. Although additional items may be included, a definition with a core set of activities is important to facilitate consistency in the numbers of waste pickers across the different sites.

The definition adopted by the International Alliance of Waste Pickers (IAWP) is all encompassing. It also includes “former recyclers” engaged in types of work related to the overall municipal waste management system. The transition to newer roles in waste handling and management – such as door-to-door collection, composting, and biogas plants – is the outcome of the struggle and advocacy for integration by waste picker groups. Therefore, these categories of waste workers, usually former waste pickers, are also included in the definition of the IAWP. Any or all of the worker groups may be included in a data project. However, it is useful to maintain distinct categories as the nature, terms and conditions of work, and the ways of reaching each type, are likely to be different.

Types of Waste Pickers

The types of waste pickers considered are location-specific and a critical aspect of any enumeration process. For example, in New York City, data collection focuses on only itinerant waste pickers, specifically can and bottle waste pickers who redeem bottles through the deposit return system. The subcategories of waste pickers can be defined on the basis of their primary source of recyclable materials and may include the following: **Landfill waste pickers** (recover from landfills); **itinerant waste pickers** (recover from the streets, municipal skips, commercial and industrial areas); **itinerant waste buyers** (buy small quantities of recyclable materials from households, shop, offices); **door-to-door waste collectors** (provide a collection

service for organic and recyclable materials or only recyclable materials).

Approaches to Developing Data on Waste Pickers

Enumeration

The term “enumeration” is often used interchangeably with census. In a census, generally only a few items of information are collected such as names, sex and age. This information is not only valuable as a description of waste pickers, but it also ensures there is no duplication in counting waste pickers. In some cases (for example at dumpsites) a code may be assigned to each individual worker enumerated to ensure they are not counted again.

Additional information may be collected beyond names and locations of work or residence. For example, in Bogotá, information is collected on the waste picker’s family and earnings.

Mapping

Mapping is the term used to describe the process of locating waste picker clusters within specific geographic locations, such as dumpsites or high-waste generation areas. The basis of mapping may be the area where the waste pickers work, buy-back centres where they sell scrap, or slum pockets and streets where they reside. Mapping often also involves identifying the different types of waste pickers, such as itinerant waste pickers at streets or dumpsites, waste collectors, waste buyers, etc. Mapping can be done using GIS tools.

Registration

Registration refers to an official list containing the names of waste pickers; the list is developed and stored by the local urban, state or national government, or by an organization of waste pickers. In submitting their name, the consent of the waste picker, either in writing or verbally, is required. Registration almost always involves photographing the waste picker and maintaining the photograph as a soft/hard record.

Survey

A survey questionnaire is administered when additional information other than the identification of the waste picker and basic information on work activities is required. The questionnaire may request information on the waste picker’s family and characteristics, including number of family members,

ethnicity, earnings, hours worked, housing status and household income. In the New York City case described in this report, the survey approach was adopted because the purpose was not to determine the number of waste pickers in the city or to provide specific government benefits for waste pickers, but to understand the characteristics of and the situation of those working as canners.

The Purpose of and Approaches to Developing Data

In all four examples in this report, data on waste pickers were needed to bring visibility to this group of workers. In several cases, the visibility extended to identifying workers eligible for social protection from the government and to target outreach to waste pickers to support the formation or strengthening of a waste picker organization. These general aims are reflected in the data collection strategy selected as well as in the specific data items collected in each of the projects.

Pune, India: One of the earliest efforts to enumerate and map waste pickers began around 1992 in Pune, the second-largest city in the state of Maharashtra, in west India. At the time, as in many parts of the world, the occupation was criminalized and a subject of police scrutiny. The enumeration process led to the formal constitution of the Kagad Kach Patra Kashtakari Panchayat (KKPKP) trade union of waste pickers. The process was driven by the need to reach out to every waste picker in the city to mobilize them to become active union members. As a union member, a waste picker was called to participate in the struggle for the right to secure livelihoods and dignity and recognition as workers.

The data collected enabled the municipal government to fulfill the union’s first demand, that of issuing identity cards to waste pickers. In 1996, the Pune Municipal Corporation (PMC) became the first municipal corporation in India to endorse the identity cards issued to waste picker members of the KKPKP. The municipal governments neither initiated the process, nor had the interest or capacity to maintain the data in-house.

Since the initial enumeration in Pune was driven by the intent to unionize waste pickers, the data collected included the personal characteristics of the waste picker as well as the characteristics of their work, family and housing. In addition, information



Waste pickers at the Boitshepi landfill near Johannesburg.
Credit: Jonathan Torgovnik/Getty Images Reportage

was requested on the reasons for migration into the city and the rationale for choosing waste picking over other forms of work.

Bogotá, Colombia: Although a series of Constitutional Court rulings from 1995 alluded to waste pickers, it was not until 2002 that the Court recognized waste pickers as providers of public recycling services and allowed them to receive fair remuneration. Nearly a decade passed before, in 2010, the Constitutional Order mandated the Bogotá District to undertake a census. To provide payments to waste pickers, data were collected not only on the numbers of workers but also on the characteristics of their work (time spent on each activity, income, materials, frequency and place of sale) and the characteristics of their housing and families. This included marital status, education levels, access to social security, type of housing, and family constellation.

South Africa: In 2021 South Africa began to develop a registration system to enumerate waste pickers. It was prompted by the Waste Picker Integration Guideline for South Africa (2020), which required municipalities to integrate waste pickers. The Guideline also required industries to implement Extended Producer Responsibility obligations by paying waste pickers a service fee. Moreover, the COVID-19 pandemic created an urgent need for a system of registering waste pickers so that the government could provide them with income support, personal protective equipment and food relief. Together, these factors triggered

the development of the South Africa Waste Picker Registration System (SAWPRS).

The South Africa registration process collected individual and demographic details such as name, age, race, sex as well as work-related information, including municipality, year of starting work, location of work (at a landfill or on the streets/public spaces), location/address of sorting, method of receiving income, contact information and the site of registration.

New York City: In New York City, a non-profit organization, Sure We Can, conducted a survey of waste pickers (canners), in collaboration with the Alliance of Independent Recyclers, an organization of New York canners. The aim of the study was to develop information on canners to bring visibility to the sector and as an input to the dialogue and collaboration with government officials to improve conditions for canners. It also served as a way to initiate contact with canners as a basis for organizing these workers in the city. Unlike the other efforts, the New York survey did not aim to identify the numbers of waste pickers in the city. Rather, the focus was on characteristics of the waste pickers, housing, can/bottle redemption practices, earnings, working conditions, access to social protection, health and illustrative stories.

The Operational Process

The different approaches to developing data on waste pickers – enumeration, mapping, registration, questionnaires – are not mutually exclusive and often

are combined. Data are most useful when they are current, so updating is required for whatever approach is selected. Data collection may be updated yearly, as in Pune, or to capture variations due to season, times of crisis – such as the COVID-19 pandemic – or major changes in the solid waste management system. In Bogotá, a census was done initially, but the process of collecting information on waste pickers evolved into the Unified Registry of Waste Pickers. The registry is updated annually and contains comprehensive information on waste pickers and their work.

Focusing on a perfect data collection system is a limiting objective and should be weighed against other priorities and resources. A data collection effort is only valuable if it serves as a tool for the larger waste picker causes of integration for livelihood protection and enhancement and access to social welfare benefits. The amount and detail of the data collected need to be weighed against several factors: the costs of the effort; the possibility that a large set of questions would require a response time that may keep waste pickers from participating; and the risk that it would take so long to complete the data collection and processing that the information may no longer be relevant. For example, Pune has collected extensive information but is struggling to prepare and maintain digital files, given the high costs and skills required. However, access to basic data that can be used by the organization for periodic updates as well as for advocacy purposes was provided.

Data collection has evolved over the last few decades. In Pune and in South Africa, for example, Kobo and GIS mapping are now done on handheld devices. South Africa specifically chose this to ensure that all African nationalities working in the landfills were covered, something that would not have been easy in a municipal registration system. Digital technology facilitates the collection of sufficient information (name, photograph, physical location of work/residence) to make it possible to revisit the same waste pickers at a later time.

A data collection project is expensive. The costs are generally more than a waste picker organization can support on its own. The process of registration as well as its periodic updating have been undertaken by the waste pickers union in Pune, with the cost underwritten through support organizations. In Colombia, funds were provided by the municipal bodies under a constitutional mandate. However, according to the Colombian Superintendent of Public

Services, as of December 2020, only 190 of the 965 municipalities in the country large enough to support waste pickers reported undertaking a waste picker census, despite being mandated to do so. The pilot in South Africa has been carried out through a project supported by PROBLUE (multi-donor trust fund administered by the World Bank).

Involving Waste Pickers

Obtaining the respondents' trust is essential in any data collection effort, but gaining the trust of waste pickers presents special challenges. Waste pickers are generally shunned and criminalized, so it is reasonable that they are suspicious of sharing information about themselves. Often they are cynical about the value of providing information, since surveys by governments and other entities have not yielded returns for them. There is also concern that the data could be used against them, to criminalize or disenfranchise them. However, waste pickers' skepticism and lack of trust can be overcome through their involvement and engagement in mobilizing for the data collection.

It is important that waste pickers take a collaborative role in all phases of the data collection process. For example, in Pune they participated in deciding on the inclusion of regular and irregular workers, seasonal workers and migrants, full-time and part-time workers and on the inclusion or exclusion of municipal workers as well as families and businesses that accumulate and sell their own recyclables. In Pune, waste picker volunteers were able to identify persons who were not eligible for benefits as waste pickers. In South Africa, waste pickers have high levels of literacy and rudimentary digital skills, so they were trained and hired not only as mobilizers and verifiers but for other related work as well. In Bogotá, after the failure of the first census to develop an accurate identification of waste pickers, the collaboration of waste pickers on all further efforts to enumerate and later register waste pickers involved working groups with membership of waste pickers. In New York City, waste pickers/canners were consulted in the survey design, and some canner representatives assisted in surveying the respondents. The questions in the New York survey were informed by a questionnaire developed by canners for an earlier survey conducted by Ground Score Association in Portland, Oregon. Canners also were involved in planning actions based on the survey results.

Tabulating and Use of Data

After collecting data, the next step is to make the information accessible to users. Who has access to and controls the data are important considerations. In Pune, the database of waste pickers is held by the union of waste pickers, the KKP KP, which provides the information to the municipal government as and when required. In Bogotá, this responsibility is held by the municipal government, which is required to update the data every quarter. In South Africa, responsibility is held by a government department, the Council for Scientific and Industrial Research (CSIR), but the two organizations of waste pickers, African Reclaimers Organisation and South African Waste Pickers Association, will likely have access to it. In Bogotá, the Unified Registry of Waste Pickers is housed in the Administrative Unit of Public Services and is accessible to the public.

The information may be compiled manually or digitally, ranging from a physical numbering to fairly sophisticated, user-friendly apps that can be customized for the purpose needed.

Unless the process of data collection includes formal registration with a government body, the level of information that is shared publicly should involve careful consideration of the risks and benefits. In Pune, Solid Waste Collection and Handling (SWaCH)³ and KKP KP have been very prudent about sharing information. On one occasion the Additional Municipal Commissioner wanted to personally verify data regarding the earnings of waste pickers. A public meeting was organized so that he could interact with waste pickers to directly confirm the data. Among other things, the earnings of waste pickers depend upon the number of households serviced, types and quality of materials they collect and the hours worked. However, this complex set of factors was not reflected in the discussion. The public disclosure of earnings

caused resentment and friction among those present because some of those who were asked reported relatively robust earnings, as compared with others who earned much less. Some waste pickers had the feeling that their earnings were misrepresented.

Databases are also useful for drawing stratified samples for more intensive research, identifying stakeholders for engagement in planning and for planning appropriate policies and social welfare programmes. Information on the materials and quantities collected can be used to quantify the contribution of waste pickers to solid waste management and recycling. In Pune, the KKP KP database was used to draw a stratified sample for a study of the recycling chain commissioned by the International Labour Organization (ILO)⁴ and later for a study on the Economic Aspects of Informal Waste Management,⁵ which was commissioned by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

In Pune, the use of the waste picker database has extended beyond the issue of identity cards to the integration of waste pickers into solid waste management systems, including into municipal-funded insurance and scholarship schemes. In South Africa, the process of enumeration has been used as a conscious political tool to register waste pickers so they could access Extended Producer Responsibility (EPR) benefits from industry. It also was used to implement the *Waste Picker Integration Guideline for South Africa, 2020*.⁶ The *Guideline* explains why waste picker integration is important, who waste pickers are, how they work, the importance of recognizing their contributions, what waste picker integration is, and how to develop, institutionalize and implement waste picker integration plans. In New York, the results of the survey are being used to support legislation that will improve the situation of waste pickers.

³ SWaCH is the wholly owned cooperative of waste pickers that provides front-end waste management services to about 1 million households, through 4,000 waste picker members, in Pune, India, as part of a joint arrangement with the Pune Municipal Corporation.

⁴ Poornima Chikarmane, Medha Deshpande and Lakshmi Narayanan. 2000. Report on Scrap Collectors, Scrap Traders and Recycling Enterprises in Pune City, International Labour Organization, Geneva.

⁵ Ellen Gunsilius, Bharati Chaturvedi and Anne Scheinberg, with contributions from Adrian Coad and Sofia Garcia Cortes. 2011. *The Economics of the Informal Sector in Solid Waste Management*, based on information from: Scheinberg, A., M. Simpson, Y. Gupt et al. 2010. *Economic Aspects of the Informal Sector in Solid Waste Management*. GTZ and CWG, Eschborn, Germany.

⁶ Department of Environment, Forestry and Fisheries and Department of Science and Innovation. 2020. *Waste Picker Integration Guideline for South Africa: Building the Recycling Economy and Improving Livelihoods through Integration of the Informal Sector*. DEFF and DST: Pretoria. p.2.

Developing Data on Waste Pickers in Bogotá: Censuses and a Registry⁷

Context

In Colombia, waste pickers earn their livelihoods by selling packaging and other recyclable materials that they recover and collect from open dumps and streets. In so doing, they reduce collection and transportation costs and mitigate environmental impacts by supplying post-consumer materials to manufacturers. Persons engaged in this work are drawn from the urban poor, unemployed, migrants, and persons displaced by partisan violence. However, as waste collection became privatized in 1994 and contracted companies were given the right to collect recyclables, waste pickers were not allowed to retrieve recyclable materials from streets and public places, and animal-drawn vehicles that were used by them were banned. In response to these threats, waste pickers organized into the ARB (Waste Pickers' Association of Bogotá) and the ANR (Colombian National Waste Pickers Association) and were able to obtain favorable rulings from the Constitutional Court from 1995 to 2015. An important action growing out of these rulings was the request for a census of waste pickers supported by the Special Administrative Unit of Public Services (UAESP), the district government entity in charge of waste management in Bogotá. The census was subcontracted to the Javeriana University in 2010. The census contained an open call for those who considered themselves waste pickers to go to designated census points, where they were to complete a survey questionnaire. However, in 2011 the Constitutional Court found deficiencies in this census, specifically that individuals who sought benefits but were not waste pickers were included.

A "Guide for preparing the waste picker census under the framework of Resolution 754 of 2014" was developed in 2016 for municipal authorities by the Ministry of Housing, City and Territory following the Constitutional Court Order of 2011. This manual provides methodological guidelines and a list of topics that should be part of a waste picker census. The Ministry, in its capacity as the regulator of public services, made it mandatory for all municipal waste management plans to include a census of waste pickers. Additional regulations affecting waste pickers



*A member of the Waste Pickers' Association of Bogotá at the association's warehouse in the Colombian capital.
Credit: Juan Arredondo/Getty Images Reportage*

include the tariff structure to remunerate waste pickers as part of the public recycling service. The tariff was determined by the Water and Basic Sanitation Regulatory Commission. In addition, National Decree 596 and its Regulatory Resolution 276 of 2016 defined waste picker organizations as providers of recycling services and their right to receive remuneration, as well as social protection for this work, and formalized their collection routes.

Purpose

In 2011, the Constitutional Court ordered the District of Bogotá to update the census of waste pickers to identify and register both formal (those in an association, cooperative or pre-cooperative with legal status) and informal (those not in a formal organization or who work independently) waste pickers in the city and to correct irregularities in the 2010 Census. The Census undertaken in 2012 was to provide for a system to remunerate waste pickers as providers of public recycling. Since the Constitutional Court ruling involved establishing a system to provide

⁷ This report is based on Federico Parra and Joann Vanek, "The Collection of Data on Waste Pickers in Colombia, 2012-2022". WIEGO Statistical Brief no. 35, March 2023.

social protection to waste pickers, data were needed not only on the number of waste pickers, but also on aspects of waste picking activities and the poverty and vulnerability of workers and their families.

The objectives of the 2012 census also addressed problems in the earlier census to:

- fully identify waste pickers and their families
- rule out double registration
- prevent “non-waste pickers” from being registered in the census

Stakeholders and Their Responsibilities

The Municipality of Bogotá, specifically the mayor's office, was responsible for the 2012 Census. In addition to the overall coordination provided by the Mayor's office, beginning with the 2016 national waste picker census, responsibilities were distributed to the following:

- Ministry of Housing, City and Territory, which regulates public services. This ministry has the responsibility for ensuring that the census is carried out, following national guidelines, and for providing financial support for it.
- Water and Basic Sanitation Regulatory Commission, which determines tariffs for the payment of public services

In 2012, the office of the mayor of Bogotá created an internal work team to review the operation of the 2010 census and contracted the Universidad Distrital Francisco José de Caldas, a public research university in Bogotá, to jointly design the new census with the internal team. The work team also was tasked with developing a schedule for the collection centres throughout the city and for pricing measures. Waste picker leaders reviewed the questionnaire, proposed changes and endorsed the final version of the questionnaire. Waste picker organizations worked with the team to monitor and control the data as well as worked on the follow-up phase of the process.

Defining Waste Pickers

The definition of waste pickers used in the 2012 census was based on the 2007 Bogotá District agreement:

Waste pickers prepare or recover waste for their livelihood and that of their family. They reside in properties in areas classified as low-income. The poverty status of the waste picker will be established

by the district administration, according to its social policy and the applicable regulations.

The following definitions have been adopted as of the 2016 national census regulation:

Definition no. 36. Waste picker: A person who habitually performs the activities of recovery, collection, transportation, or classification of solid waste for its subsequent reincorporation into the productive economic cycle as raw material and who derives one's own and the family's livelihood from this activity.

Definition no. 86. Formal Organizations of Waste Pickers: Organizations that, in any of the legal forms allowed by the regulations in force, include within their corporate purpose the provision of public waste management services in recycling, are registered with the Superintendency of Residential Public Services (SSPD) and are made up entirely of waste pickers.

Time Frame

The first census of waste pickers in Colombia was carried out in 2010. The subsequent census was carried out in 2012. The census was replaced by the Unified Registry of Waste Pickers (RURO) in 2014 and continues to be updated. The Registry contains information on the number and characteristics of waste pickers and their families.

Operational Aspects

To prevent the involvement of non-waste pickers, waste pickers were identified during their work activity through an unannounced process rather than by asking them to self-identify at a central census point. Previously identified waste picker leaders and representatives of UN Habitat were involved as observers of each stage of the census process. Recycling warehouses, where waste pickers sell their recovered recyclable material, served as the site for responses to the census form. This meant it was necessary to identify the recycling warehouses in the city of Bogotá before conducting the census of waste pickers. A form was developed for the compilation of information on warehouses/recycling centres. If a warehouse or recycling centre was used by waste pickers to sell their material, it was considered a census point.

A schedule of visits to each warehouse was based on an interviewer spending eight hours in each

warehouse administering the form to waste pickers, during six random days distributed over the 42 days of field work. Another set of sites was needed because some waste pickers do not sell their recyclable material in warehouses, but sell to other waste pickers or to intermediaries during their route. Thirty-three collection routes were identified.

The questionnaire for waste pickers had four sections:

Section 1: Interview control information: name of the interviewer, date, place and time of the interview, the questions asked, etc.

Section 2: Identification of the waste picker

Section 3: Social characteristics

Section 4: Characteristics of the occupation “waste picker”

The form for the warehouse – the census point – had the following parts:

Section 1: Control information

Section 2: Identification of the establishment

Section 3: Identification of the person who would supply information on the warehouse

Section 4: Legal documentation of the establishment

Section 5: Physical and operational characteristics of the establishment

The team that carried out the census comprised:

- 6 Field Coordination Support Personnel
- 26 Field and Verification Supervisors
- 401 Census and Verification Enumerators or Surveyors
- 1 General Supervisor
- 1 Digitization Supervisor
- 14 Reviewers and Digitizers
- In the field, the team consisted of:
 - 1 Field Coordinator who was in charge of 4 Support Coordinators
 - 4 Support Coordinators who were in charge of 6–7 Supervisors
 - Each Supervisor was in charge of 10 Surveyors.

In the data compilation, a careful screening process was undertaken to identify serious inconsistencies and incomplete responses. A subteam of the original census design and implementation team were involved in this.

Findings

- Sixty-nine per cent were men and 31 per cent were women, among a total of 13,984 waste pickers.
- Fifty-three per cent were between 26 and 50 years of age, and 10 per cent were over 60 years of age.
- Sixty-two per cent of waste pickers were covered by the state’s subsidized health benefits scheme, co-financed with funds from higher earners who contribute to the system. Seven per cent of waste pickers contributed to social security and 26 per cent had no social security.
- Forty-one per cent of waste pickers lived in houses, 24 per cent in tenements and 21 per cent under bridges, shelters, etc. Sixty-five per cent lived in rented accommodation, and 17 per cent owned their homes.
- Sixty-nine per cent of the waste pickers had three dependants; 31 per cent had more than four.
- Seventy-two per cent had been recycling for more than five years.
- Forty-four per cent of the waste pickers worked six days a week, while 23 per cent worked an average of three days a week. In terms of hours worked, 47 per cent worked more than eight hours per day, 25 per cent worked eight hours per day, and about 28 per cent worked less than eight hours a day.
- Fifty-one per cent of waste pickers sorted and classified materials, and 23 per cent were involved in cleaning the material. Very few people were involved in compacting, ripping, shredding, reuse or manufactured processing of material.
- Eighty-eight per cent sold their recyclables in warehouses; 5 per cent of waste pickers sold their materials to another waste picker.
- Twenty-six per cent transported materials by sack, followed by 18 per cent by human traction vehicles called “Zorro”, 13 per cent by an animal-drawn vehicle, and 7 per cent by a human traction vehicle with sphere bearings. Only 7 per cent drove motorized vehicles. Seventy-six per cent owned the means of transport used, while 13 per cent leased it from warehouse owners or waste pickers.



A waste picker in Bogotá loads the materials she has collected into the Waste Pickers' Association of Bogotá's truck.
Credit: Juan Arredondo/Getty Images Reportage

- Forty-seven per cent of waste pickers earned less than USD 128 monthly; 29 per cent earned between USD 128–256. Overall, 76 per cent of the waste picker population earned less than one legal monthly minimum wage of almost USD 298 in 2012.

Challenges and Strengths in Data Collection

A census is an expensive process that needs to be undertaken periodically. Not all municipalities have populations and sufficient generation of waste to support significant numbers of waste pickers. In Colombia, 965 municipalities (out of 11,236) are large enough to support waste pickers. However, according to the Superintendent of Public Services, as of December 2020, only 190 municipalities had reported undertaking a waste picker census.

The data collection in Bogotá had strong support from the mandates of the Constitutional Court as well as from the mayor and the local municipal government.

Updating Through a Registry

The directors of the census recommended that a post-census system be developed to update the 2012 baseline data. This resulted in the creation of the Unified Registry of Waste Pickers in 2014. The RURO includes information on the waste picker's nuclear family. The RURO began as a register of persons engaged in waste picking as their main

occupation. Work has continued to improve the registry by including more information, by making the presentation of the data clearer and more interesting and by making it more accessible. Today it is a comprehensive database on waste pickers in Bogotá that includes a wide range of information on waste pickers and their work: general information, social characteristics, activities involved in waste picking, commercial recycling, homeless waste pickers and women waste pickers. The Registry is housed in the Administrative Unit of Public Services of Bogotá (UAESP). The Registry also has an online interface so it can be accessed by the general public. <https://www.uaesp.gov.co/content/generalidades-del-registro-unico-registradores-oficio-ruro>.

Waste picker organizations are required to provide a list of their members annually to the Office of the Mayor of Bogotá. Unorganized waste pickers can register through the UAESP, which files the form and conducts field verification visits if necessary. Lists are submitted by recycling service providers registered with the UAESP and the Superintendencia de Servicios Públicos Domiciliarios (Superintendency of Residential Public Services – SSPD). Officials of the UAESP also identify and register waste pickers in their respective work localities. The Registry is updated with additions of new waste pickers and deletions of those no longer working. RURO was launched in 2014 with a total of 13,984 waste pickers; by 2022 the number had risen to 25,163 and by 2024 to 28,960.

A Survey on Canners in New York City⁸

Context

Sure We Can (SWC)⁹ is a non-profit recycling centre, a community space for those who collect bottles and cans in New York City, and a sustainability hub that promotes social inclusion, environmental awareness and economic empowerment. SWC was established in 2007 and now serves more than 1,200 waste pickers (commonly referred to as “canners”) annually.

The work of canners in New York City takes place under the New York Returnable Container Act of 1982. The “Bottle Bill”, as it is known, requires a 5-cent deposit on certain beverage containers. The deposit is reimbursed to the consumer by redemption centres and retailers, who in turn receive the deposit reimbursement plus a 3.5-cent handling fee, paid by the distributor for each container returned. Most consumers do not attempt to recover the deposit. Instead, the work is done by the canners, who collect and redeem discarded cans and bottles, sort them, and redeem them at redemption centres or redemption machines located across the city.

Purpose

In 2023, SWC conducted a survey of workers for whom canning is a significant source of income (“livelihood canners”). Consumers who store and redeem bottles and cans from their own households were not included.

The purpose of the survey was to bring visibility to canners in New York City by generating a database on their socioeconomic characteristics and working conditions, which then could be used in discussions with government officials on waste policy – at a time when a proposal for an expanded Bottle Bill (that would double the deposit amount) was being discussed in the legislature. The survey also aimed to reach out to canners and to inform them about canner organizing in NYC.



A waste picker in New York City.
Credit: Carlos Rivera

Stakeholders and Their Responsibilities

Sure We Can designed and conducted the survey and compiled the data. As a starting point, it used a questionnaire developed by Ground Score Association, a canner organization in Portland, Oregon. Canners were consulted in the survey design, and some canner representatives assisted in surveying the respondents. Canners also were involved in planning actions based on the survey results.

Defining Waste Pickers for the Survey Sample

“Canning” is the term generally used across the United States to refer to persons who collect deposit-marked beverage containers that others have discarded (as opposed to redeeming materials from personal consumption). The SWC survey aimed to reach canners for whom canning is a significant source of income (“livelihood canners”). Thus, to participate, canners had to be involved in the collection of materials outside

⁸ This report was based on a survey of waste pickers reported in J. Harvey, C. Hegel and C. Hartmann. 2023. Independent Recyclers in New York City: Sector profile and pathways to inclusion. Sure We Can, Alliance of Independent Recyclers, Western Connecticut State University, SUNY Westbury. The survey was funded by the Hispanic Federation, Inc., New York.

⁹ <http://www.surewecan.org/>

their own household. Other criteria for participation in the survey were:

- 18 years or older
- verbal consent to participate
- English or Spanish spoken well enough to complete the survey

A USD20 incentive was offered to canners for participation in the survey. This corresponded with an incentive offered by New York City for participation in a health survey. The compensation served to limit the sample to livelihood canners as well as ensuring that the values of SWC (solidarity, fairness) were maintained in the research.

Time Frame

Since spring and summer are peak periods for canners, the survey was carried out between mid-April and mid-August 2023. This strategy ensured the participation of a more representative sample of canners because the higher earnings of summer months draws in individuals from more diverse backgrounds. Only individuals who depend entirely on canning for their livelihoods work during the winter months, making them a more homogenous sample.

Operational Aspects

Sampling and Choice of Worksites

In the absence of data on canners in New York City, a mix of purposive and convenience sampling was used. Canners from 38 work sites (redemption centres and reverse vending machines) across all five boroughs were covered. Measures also were taken to secure more representative samples *within* boroughs, to allow for cross-borough comparison.

Three key parameters were used to define the sampling frame:

- **Ethnic and linguistic heterogeneity:** Because many canners work and redeem within ethnic enclaves, specific measures were taken to ensure ethnic heterogeneity of the sample, including using census tract data to choose sites of work in areas with different ethnic majorities. Most canners in New York City speak English, Spanish or Chinese. However, it was not possible to conduct the survey in Chinese because of the difficulties that even a

Chinese-speaking surveyor would have with the many regional dialects.

- **Geographic spread:** Rather than focus on a higher number of surveys at a lower number of sites per borough, the opposite approach was taken. Surveys were conducted at as many sites of work as possible within each borough to achieve a broad geographic spread.
- **Proportionality to NYC population:** With no existing statistics on the population of canners in the city, the parameter used for choosing within-borough sample size was to match the sample size to that borough's share of the overall NYC population.

The survey was conducted at the worksites where the canners were more likely to congregate. These sites were identified in several ways:

- An existing (but out of date) database of redemption centres provided by the New York Department of Sanitation was cleaned. Most redemption centres on the original list were inactive. Through phone calls and in-person visits, a set of active redemption centres were identified in two boroughs (Brooklyn and Queens). From that set, in each borough, one redemption centre in three separate census tracts – one majority Latino, one majority African American, and one majority Asian – were identified. This provided the basis for an ethnically diverse sample. From there, additional worksites – both redemption centres and reverse vending machines – were identified, using both the original list and information secured by word of mouth from canners and redemption centre managers alike.
- This method was not feasible in three boroughs (Bronx, Manhattan or Staten Island), where redemption centres could not be identified from the existing database. In these boroughs, worksites were identified through exploratory field visits and word of mouth.

A pilot of 40 participants was undertaken at Sure We Can, and the results were used to revise the survey questionnaire.¹⁰ Then the survey was administered to 237 respondents using a mobile data collection app (SurveyCTO). Surveyors generally approached canners

¹⁰ The survey questionnaire is not included in this brief because it includes detailed instructions for the interviewer, making it long, complex and specific to New York City. However, it may be obtained by contacting Sure We Can.

who were on foot, but canners who arrived in vehicles also were approached. The sample size was limited by resource and time constraints, compounded by low foot traffic at the work sites and the reluctance of some participants. Ten surveyors were involved in data collection, and each survey took about 10 minutes.

Qualitative interviews were done with 12 individuals who were identified first through the surveys and who expressed interest in providing more input. The long-form interview format allowed canners to tell more of their life stories and to unpack the economic and social meaning of canning in their lives.

Findings¹¹

Canners are a diverse community

- 52.5 per cent men and 47.5 per cent women
- 45 per cent Spanish speaking and 45 per cent English speaking, 10 per cent other languages
- 64 per cent born in another country

Most canners are older adults, and many have chronic health issues

- Average age 54 years; 19 per cent were 65+ years
- 34 per cent had chronic physical and mental illness

Canners are experienced in their trade

- 85 per cent have been canning for over a year; the average years worked is 11

Canners keep NYC clean and have a small carbon footprint

- Almost all – 87 per cent – of canners walk
- The most common location for sourcing materials was loose cans on streets and sidewalks.

Canners earn on average one-third of NYC's minimum wage

- On average, canners worked 23.4 hours and earned USD 119 weekly, which amounts to five dollars an hour – only one third of the NYC minimum wage.

Canning can offer benefits to health and well-being

- 58 per cent of canners reported they experience health and social benefits from canning, including: an outlet for socializing, a form of distraction from stress and anxiety, an important source of dignity and independence for older canners, who are economically dependent on family members, and a source of calm and routine for canners living with mental illness.

Challenges and Strengths in the Data Collection

Strengths

- The survey took into account the heterogeneity of the canning community and took measures to capture a diverse sample, including by carrying out data collection in Spanish and English and by including a mix of different types of canners (housed/unhoused, full-time and part-time canners, etc.).
- Data collection was carried out during the busiest period for canners so as to ensure maximum representation and coverage.
- Canners themselves were involved in the study design and the data collection.
- Data collection was carried out at the redemption centres where canners congregate.
- Sampling was proportionate to the population in the boroughs.

Challenges

- The sizable proportion of Chinese-origin canners could not be included because of difficulty in accessing the community and organizing Chinese-language data collectors.
- Projections of the number of canners in NYC was not possible.

Updating the Study

A 2019 study by a local foundation estimated the number of canners in New York City to be about 10,000; the present study did not aim to estimate the number of canners in New York City.

¹¹ The Alliance of Independent Recyclers (AIR), flyer, The Alliance of Independent Recyclers demands action for our community, New York, 2024.

Developing Data on Waste Pickers in Pune: the Registration Process and the Database¹²

Context

Organizing waste pickers in Pune led to the formation of the waste picker union Kagad Kach Patra Kashtakari Panchayat (KKPKP) in 1993. The imminent threat of displacement by private waste collection service providers was the rallying point for the resistance and mobilization of waste pickers across the city. The initial mobilization was led by a committee of waste pickers in one area along with non-waste picker organizers. Since waste picking is a street activity, meetings were held at the municipal containers, landfills, scrap shops/ buy-back centres and the slum area where the waste pickers lived.

In 2005, KKPKP negotiated a partnership with the Pune Municipal Corporation and two years later founded SWaCH – a waste picker cooperative that now provides door-to-door collection in the city.

The Municipal Solid Waste (Management and Handling) Rules, 2000 introduced the requirements of source segregation of waste and diversion of waste from landfills into recycling. The rules were the outcome of the Report on Solid Waste Management in Class I Cities in India, commissioned by the Supreme Court of India, in response to public interest litigation. A new set of rules, the 2016 Municipal Solid Waste Rules, incorporated waste pickers into solid waste management plans for the first time. These additions to the rules were due to the efforts of KKPKP, which was represented in the drafting committee, SWaCH, and other member organizations of the Alliance of Indian Wastepickers.

The Solid Waste Management Rules, 2016¹³ provide the institutional framework within which workers in the waste value chain operate. Rule 11 requires the state urban development department to prepare a state policy and solid waste management strategy for the state or the union territory, in consultation with stakeholders, including representatives of waste



A waste picker in Pune, India.
Credit: Julian Luckham

pickers, self-help groups and others working in the field of waste management. The policy and strategy plans were required to be consistent with the national policy on solid waste management and the national urban sanitation policy of the Ministry of Urban Development and submitted not later than one year from the date of notification of the Rules. The Rules further state that the solid waste management policy and strategy should emphasize waste reduction, reuse, recycling, recovery and optimum utilization of various components of solid waste to ensure diversion of waste from the landfills. The Rules state that, in reducing waste, the primary role of waste pickers, waste collectors and the recycling industry should be acknowledged in State policies and strategies and that broad guidelines regarding their integration in the waste management system should be spelled out. Rule 11 (m) further directs state governments to start a scheme for the registration of waste pickers and waste dealers.¹⁴

¹² Lakshmi Narayanan and Poornima Chikarmane, who prepared this report, based it on their involvement in the development of the registration system and their work with KKPKP and its allied organizations, SWaCH and Kagad Kach Patra Nagari Sahakari Pat Sanstha.

¹³ Solid Waste Management Rules, 2016. Ministry of Environment, Forest and Climate Change, Government of India.

¹⁴ Rule 11(m) of the Solid Waste Management Rules, 2016 requires the Secretaries of the State Urban Development Department to “start a scheme on registration of waste pickers and waste dealers”.

Moreover, Rule 15 (c) sets the following requirement:

that state policies and strategies should acknowledge the primary role played by the informal sector of waste pickers, waste collectors and recycling industry in reducing waste and provide broad guidelines regarding integration of waste picker or informal waste collectors in the waste management system.

Rule 15 (d) also requires that *they facilitate formation of self-help groups, provide identity cards and thereafter encourage integration in solid waste management, including door to door collectors of waste.*

Purpose

From the beginning, mapping and data collection were an integral part of the work of the new union KKPKP. This work was driven by the need to reach and mobilize every waste picker in the city to become a member and participate in the collective struggle for access to better livelihoods and social welfare benefits. The information collected in the enumeration process enabled the Pune Municipal Corporation (PMC) to become the first municipality in India to issue identity cards to waste pickers, in 1996. The municipality has since relied on the union to provide needed data. Until 2021, the lists of waste pickers by name provided by the KKPKP were accepted by the PMC. Thereafter, as significant financial benefits were provided to waste pickers and/or their family members, the PMC instituted a process of verification of the lists of waste pickers. The process involved direct verification of individual waste pickers by ward-level municipal sanitary inspectors, with the final certification by the Assistant Municipal Commissioner in charge of Solid Waste Management.

The information on waste pickers in the KKPKP lists has been used in the following ways:

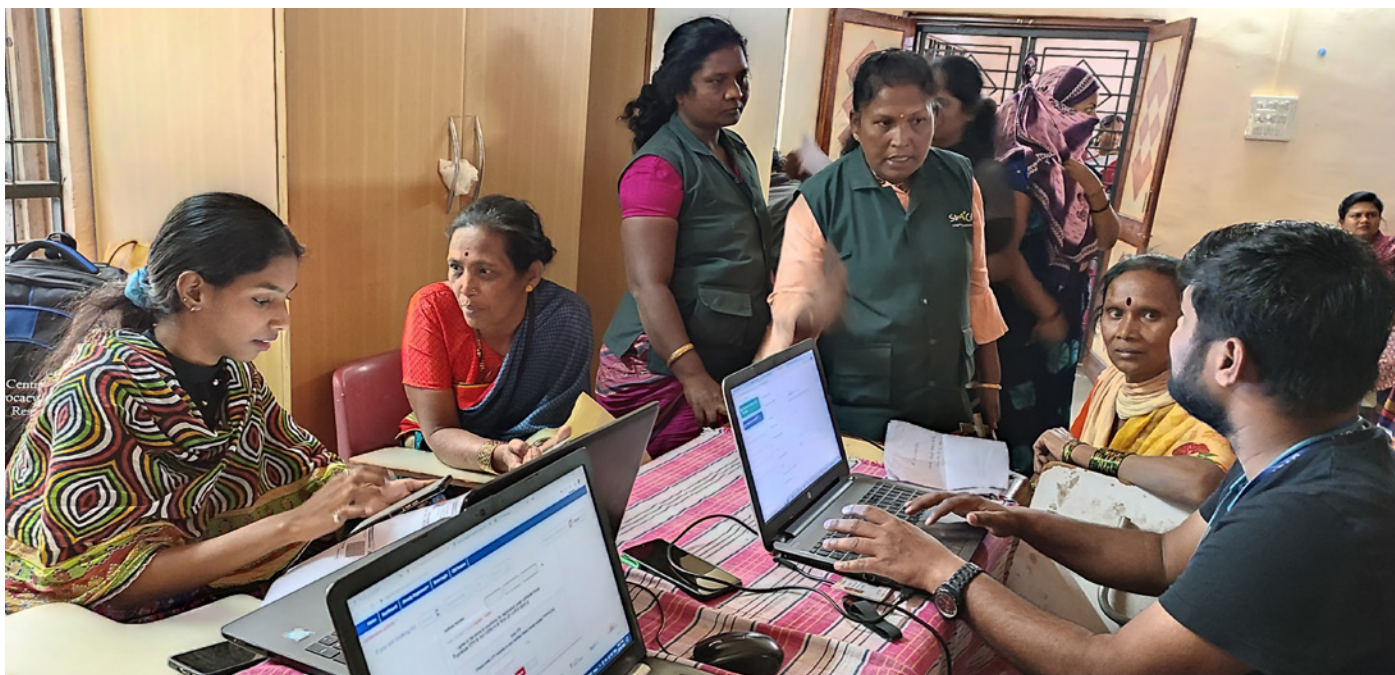
- Issuing waste pickers identity cards by the Pune Municipality.
- Integrating waste pickers into door-to-door waste collection through the SWaCH cooperative

- Providing social protection to waste pickers from the municipal budget.
- Reporting compliance under the Solid Waste Management Rules, 2016 and the National Swachh Bharat Mission (SBM) since 2014.¹⁵

Stakeholders and Their Responsibilities

- Waste pickers were both active participants and subjects in the enumeration process. The following membership-based organizations of waste pickers led the process of data collection, verification, compilation, maintenance and updating the database:
 - o Kagad Kach Patra Kashtakari Panchayat (KKPKP) – the trade union of waste pickers
 - o Kagad Kach Patra Nagari Sahakari Pat Sanstha (KKPNSPS) – the savings-credit cooperative of waste pickers
 - o SWaCH Pune Seva Sahakari Sanstha Maryadit (SWaCH) – the cooperative of waste pickers; a joint initiative of the KKPKP and Pune Municipal Corporation that provides user fee-based door-to-door waste collection services to Pune residents
 - o SWaCH+ – the wholly owned cooperative of waste pickers, which develops enterprises of waste pickers for composting, thrift stores, biogas, plastic and other scrap trading
- Pune Municipal Corporation (Departments of Solid Waste Management, Health and Social Development) endorses and verifies waste picker lists and provides health and education benefits.
- Departments of Environment and Urban Development mandate the identification, authorization and integration of waste pickers.
- Department of Social Justice and Empowerment provides education benefits to authorized waste pickers.

¹⁵ Rule 15 of the Solid Waste Management Rules, 2016, requires municipalities to establish a system to recognize organizations of waste pickers or informal waste collectors for integration of these authorized waste pickers and waste collectors in Solid Waste Management, including door-to-door collection of waste; and to set up Material Recovery Facilities to enable informal and authorized waste pickers for sorting recyclable waste. Implementation timelines have been prescribed against which municipal bodies have to report to the Swachh Bharat Mission.



Registering waste pickers in Pune.
Photo courtesy of KKPKP

- Swachh Bharat Mission¹⁶ monitors compliance with respect to the identification, authorization and integration of waste pickers.
- Department of Labour undertakes eSHRAM¹⁷ registration in the National Database of Unorganized Workers (NDUW).

- Itinerant waste-buyers (purchasing small quantities of high-value material/s from waste generators)
- Itinerant waste-barterers (colloquially termed as *dabba batliwalas* – exchanging utensils for recyclables)
- Semi-formal SWaCH waste collectors (authorized to collect waste for free or for user fees, having rights over the waste collected)

Defining Waste Pickers

Waste pickers recover paper, plastic, metal, glass, bones and rags from garbage bins, landfills, households and commercial enterprises, and sort and grade the collected materials and sell them to scrap traders by weight or unit.

The following are the broad set of categories of waste pickers in the Pune enumeration:

- Itinerant pickers (free roaming)
- Landfill pickers
- Informal door-to-door collectors (unauthorized)
- Sorters at material recovery facilities
- Sorters at scrap shops

Time Frame

The KKPKP has collected relevant information annually since the Trade Union was registered in 1993. The data required are determined by the advocacy and programmatic requirements of both KKPKP and SWaCH.

Registration Forms/Questionnaires

KKPKP and SWaCH have separate forms drafted by activists and staff (often slum dwellers and/or educated children of waste pickers) of the respective

¹⁶ Swachh Bharat Mission was launched on 2 October 2014. It focuses on inculcating healthy habits with regards to water, hygiene and sanitation to empower each individual to become an agent of change. In 2021, the Government of India launched its flagship five-year Swachh Bharat (Clean India) Mission-Urban 2.0 (SBM-U 2.0), committing to making all cities “garbage-free cities” (GFCs) by 2026, while maintaining open-defecation-free (ODF) status across 4,372 urban local bodies. <https://swachhbharatmission.gov.in/sbmcms/index.htm>.

¹⁷ The Ministry of Labour & Employment has developed the eShram portal for creating a National Database of Unorganized Workers (NDUW), which will be seeded with Aadhaar. It will have details of name, occupation, address, occupation type, educational qualification, skill types, etc., for optimum realization of their employability and extend the benefits of the social security schemes to them. It is the first-ever national database of unorganized workers, including migrant workers, construction workers, gig and platform workers, etc. <https://eshram.gov.in/e-shram-portal>.

organizations and revised through a consultative process with waste picker leaders. The items of information collected include information about the member, age, sex, caste/religion, the members in his/her household, type of work, workplace details, hours of work, earnings, conditions of work, types and quantum of material collected, scrap dealer, and information such as disability in the family. For SWaCH members, more detailed information related to the place of work, number of households serviced, timing of work, and working conditions is collected (see Annex on page 23).

The data collected also are related to the organizational activities and programme focus of KKPKP at different points in time. Education of the children of waste pickers has been a major focus since the inception of the KKPKP, but more systematic data related to the education of children has been included in the past 15 years. Since 2008, the health status of waste pickers has been an area of focus, and greater efforts have been made to record health data.

As the database includes all waste pickers of Pune, information about whether they are members of KKPKP and SWaCH, their membership status, willingness to pay and actual payment of subscription fees are included.

Data are collected through work in the field and membership drives. In addition, data are directly generated based on financial transactions and participation across organizations.

Administrative Data

Often relevant items of information are sourced from administrative data and entered into the database. For example, in 2022, according to KKPKP's recommendation, the PMC paid the premium for waste pickers in a national insurance scheme promoted by the government of India. In addition, the enrolled member is required to provide bank account and Aadhar¹⁸ card details. These items are scanned. The scans of documents that are required periodically or long term (Adhaar, ration card, birth certificate) are stored in the database, and the details are also entered into the database. The scans of documents such as school and college mark sheets,

which change annually, are stored in folders after the information is entered into the application forms for the schemes. The Kagad Kach Patra Nagari Sahakari Sanstha (KKPNSPS), the credit cooperative of waste pickers, also has longitudinal data related to savings and credit behavior of its members to supplement the database.

Methods of Data Collection

Through the years, different methods have been used to collect data on waste pickers, including those who have become union members. In the early years, the registration sheets for union membership were completed on paper and filed, and later bound into volumes across geographical slum pockets. An extensive campaign was undertaken to reach all waste pickers. This included distribution of leaflets and messages at multiple contact points. The registration sheets were completed at many locations by the activists and field staff of the organization. Instead of waste pickers coming to a central location, activists met workers on their work beats – on the streets, at the landfills, sorting and storage sites, tea shops, congregation points, scrap trader locations and at residences. This enabled onsite verification of waste pickers and prevented the entry of others who were not waste pickers. Usually, forms were completed in the presence of other waste pickers, either in small groups, or with at least one waste picker who signed off as a witness. Each waste picker signed off on the intake sheets to endorse the information provided. This year-and-a-half-long process was undertaken by 14 field mobilizers, 5 volunteers, 3 activists, and 100 waste picker leaders from across the city. Data from 11,000 waste pickers were collected. Subsequently, the updating of annual data has been undertaken by the staff of KKPKP and SWaCH. Currently, the KKPKP data team includes 20 grass-roots activists whose role includes data collection, and 2 data entry operators, while the SWaCH data team comprises 173 field coordinators responsible for data collection and a back-end team of 3 data entry operators and 2 managers.

Over the years, questionnaires and hard copy forms have been replaced by digital methods (handheld devices and kobo forms). Photographs are captured at

¹⁸ The Aadhar card is a unique 12-digit identification number with biometric identification that is issued by the Unique Identity Authority of India (UIDAI) to all residents of India for easy identification and elimination of duplicate and fake identities. The UIDAI is a statutory body constituted under the Aadhar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016. <https://uidai.gov.in/en/about-uidai/unique-identification-authority-of-india.html>.



Waste pickers in Pune.
Photo courtesy of KKPKP

the time of intake, and locations of the municipal skips and sorting centres are recorded using GIS mapping, with handheld devices such as smartphones. Scans of bank passbooks are used to collect bank account details. The school performance reports of the children are collected to record their educational status and performance.

The spread of mobile technology has been a game changer. Waste pickers who in 1993 had never used landlines as a means of communication comfortably use cell phones for calling and WhatsApp for sending photographs and documents. The higher level of literacy among the children of waste pickers and their comfort in communicating via email also have helped. However, waste picker literacy levels remain fairly low, and oral communication remains the dominant form for collecting information.

Data Compilation and Dissemination

In the 1990s, data were maintained manually, as KKPKP did not have access to computers or dedicated staff able to use them. Records of the membership dues paid by KKPKP members as well as the financial transactions of the members of the credit cooperative (KKPNSPS) were maintained manually. The use of computers and the familiarity with them occurred in the new millennium. MS Excel was used to record information. Since 2008, the KKPKP database has been maintained in MS Access and includes the storage of all information. The credit cooperative upgraded to a special software for credit cooperatives. Since

SWaCH provides a service to citizens under a formal contract with the municipality, the work-related data requirements of SWaCH are much greater and more rigorous. The organization has sought assistance from Treeni software specialists. Digitized data collection tools have significantly reduced direct data compilation work as well as the errors due to manual entry of data.

SWaCH, KKPKP, SwaCH+ and KKPNSPS have separate databases with detailed information of individual members.

Neither individual member information nor the entire database are shared or publicly accessible to others. Individual members can access any of their records. Summary items of information are provided strictly on a need-to-know basis to the PMC, Social Welfare Department, funders, researchers, academic institutions and networks.

Findings

- Individual member lists of KKPKP and SWaCH are provided to the PMC annually. These lists show that, in 2023, there were 7,260 waste pickers in KKPKP and 3,700 in SWaCH. Intake sheets completed for each member provide robust demographic data capturing sex, caste, religion, age, education, as well as information on the family members of waste pickers, living conditions, waste collection, access to material, actual waste collected, etc.

- The database allows for stratified sampling, enabling calculation of reduction of greenhouse gas emissions, and reduction in municipal solid waste handling costs, livelihood potential, etc. due to the work of waste pickers
- Dynamic work-related data are captured on an ongoing basis for those who enter or exit. SWaCH reports are generated as and when required by each organization. Monthly information sheets for KKPKP provide the status of different programmes and members across the union and the credit cooperative. Lists of members disaggregated by sex, age, and residential area were extracted from the database to facilitate provision of relief, including medication for diabetes and hypertension during the pandemic.
- Lists of children eligible for specific government educational benefits are generated annually.
- Analysis of the complaints received by the KKPKP Helpdesk are used to monitor efficiency and efficacy.
- Analysis of work information helps track changes, plan and monitor interventions.
- The core data also serve as the basis for conducting specific internal and externally supported studies on earnings from waste collection, hours of work, credit and health-seeking behaviour.

Challenges and Strengths in Data Collection

Strengths

Three major requirements in data management are the collection of full and accurate data from the field; its storage; and its use. Many membership-based organizations are handicapped by the inadequacy of data. KKPKP and SWaCH, on the other hand, have not only managed to capture, store and regularly update data, but have used it to ensure the integration of waste pickers into solid waste management policy and practice, as well as to claim substantial benefits

from municipal and other government budgets. Some examples are provided here.

The KKPKP database was used in 1995 to argue for provision of identity cards by PMC for waste pickers as workers. The sample for a study carried out for the International Labour Organization in 2001 was drawn from the database.¹⁹ The findings of the study were used to successfully advocate for a medical insurance scheme for waste pickers that would be funded from the municipal budget. Some years later, information on illness, accidents and workplace injuries were added to the database and then used to argue for inclusion into a PMC health scheme and for provision of safety equipment. Several reports that included data on waste collection in Pune drew upon the information available in the database.²⁰ The findings of the studies were used to argue for integration and the setting up of the SWaCH Cooperative. Data on medical issues and death and have helped recover insurance claims. Educational benefits for the children of waste pickers have been possible because of education-related data and small studies on the expenditure incurred by parents.

Challenges

- In the early years, waste pickers were reluctant to provide their personal information and to be photographed for their identity cards for fear of reprisals and police harassment. At the time, waste pickers were usually the first to be picked up by the police with neighborhood theft. An important step in building the waste pickers' trust was inviting the Police Commissioner to distribute the identity cards. This assured waste pickers that the photo-identity cards were not some ruse to harass them. It also sent a message down the law enforcement hierarchy that waste pickers were not to be harassed.
- Membership-based organizations like the KKPKP are not well resourced financially and technically. The hardware and software are often not up to date, and human resources for data collection and management are trained on the job because of resource constraints.

¹⁹ P. Chikarmane, M. Deshpande and L. Narayanan. 2001. Report on scrap collectors, scrap traders and recycling enterprises in Pune, International Labour Organization. <https://www.swachcoop.com/pdf/ILO%20Study.pdf>

²⁰ The Economics of the Informal Sector in Solid Waste Management. 2006. <https://swachcoop.com/pdf/theeconomicsoftheinformalsector.pdf> and P. Chikarmane and L. Narayanan. 2006. Solid Waste Collection in Pune: A situational analysis. Regional Centre for Urban Waste Management of the All India Institute of Local Self Government, Mumbai (unpublished).

Moreover, how the data are collected and by whom are critical factors.

- Underreporting of worker earnings and of the amount of scrap material reclaimed is prevalent and requires assessment by observation and additional questioning. Using observation and additional information collected from a group of waste pickers with verbal responses, senior staff and activists work with data collectors to authenticate the data. Waste pickers often report a lower income to SWaCH staff, in the hope of increasing their work, and a higher figure to the credit cooperative to demonstrate their loan-repayment capacity. Sharing the monthly report with specific data parameters to capture such variations across organizations helps cross-check such data. Additional evidence has been used to validate information, including school performance reports, receipts from scrap traders, bank passbooks, medical records and hospital bills.

Updating the Database

The database of the KKPKP from 1993 forms the core platform on which dynamic, relevant information such as deaths, financials, dues and receipts are entered on an ongoing basis and reflected in monthly reports. Newer items of information have been collected and added over the years, as and when required; parameters such as the type of house or marital status have not been updated as these are time-consuming, expensive exercises. Deaths are recorded more diligently due to the insurance and other financial implications. Newer members are added on a monthly basis. Every couple of years or so, the details of all the members are updated by the individual organizations, and information is shared across organizations.

The programmatic and advocacy work of KKPKP and SWaCH have led to waste pickers transitioning to newer types of work such as door-to-door waste collection, management of compost and/or bio-methane plants and material recovery facilities. All these initiatives, including the issuance of ID cards, education programmes, credit services, result both in the exclusion of some and the inclusion of other urban poor informal workers. Waste pickers who do not, cannot or will not participate in the organizational membership are soon left with no access to waste or waste work, yet continue in the database as waste pickers seeking to be “integrated”. From a data and enumeration perspective, newer categories of workers are registered to reflect both their current and previous work and to differentiate them from the former itinerant waste pickers.



Annex: Kobo form, filled online

SWaCH Pune Member registration form

Ward (as per Drop Down List of 15 wards)		Upload Photograph (as per format indicated). Do not wear scarf or mask)	
Division Name			
Sub- Division Name			
Local Sanitary Office			
Member name	Working Since	DDMMYYYY	
SWaCH Id (for office Use)			
Gender	Male	Female	Other
Date of Birth (as per pan card)	DDMMYYYY		
Education			
Marital Status	Married	Single	Other
Religion	Caste		
Availability of Caste Certificate	Yes No		
Type of cellphone	Smart Phone	Basic Phone	No Phone
Phone number (If no phone, share number of some other family member)			
Whatsapp number in case of smart phone			
Address (with Pin code, landmarks, survey number)			
Address as per Adhar card			
Next of kin			
Relationship with next of kin (as per drop down list)	Husband Wife Son Daughter Mother Father	Sister Brother Grandmother Grandfather Grandson Granddaughter	Daughter in Law Son in law Mother in law Father in law Other
Age			
Bank account (upload passbook details)			
Is anyone from your family a member of KKPKP, SWaCH, KKPKNPS, SWaCH Plus	Yes (Numbers) No		
If yes- details for each	Name Relationship Member of Which organisation (KKPKP, SWaCH, KKPKNPS, SWaCH Plus)		
SWaCH membership fees paid (Tick yes or no, and give details after)	Yes: If yes, Receipt number: No: If not, due amount:		
Service details			
Number of households for door step waste collection (non slum)	Number of households for gate collection (non slum)		
Number of households for slum doorstep waste collection	Number of commercial establishments for waste collection		

Number of households for composting service	
Monthly earnings from waste collection User fees	
Monthly earnings from composting service fees	
Monthly earnings from sale of scrap	
Monthly earnings from other services	
Hours of work: Start: Finish:	
Name of scrap shop Address	
Bank details	
Name of Bank	
Name on Bank Passbook	
Account number	
IFSC	
Other details	
Member Raincoat size	S, M, L, XL
Member footwear size	4,5,6,7,8,9,10
Member uniform size	32,34,36,38,40,42,44,46,48,50
Comments and Remarks	
Date of form submission	
Coordinator Name and Signature	
Ward coordinator Name and Signature	
Kothi representative Name and Signature	
Member signature	

List of documents submitted on KOBO

1. Aadhar Card
2. Bank Passbook
3. Ration Card
4. PAN Card
5. Election Voter Card
6. Driving Licence
7. Passport
8. Tax receipt
9. Electricity Bill
10. E Shram Card
11. Caste Certificate
12. School Living Certificate
13. Birth Certificate
14. Handicap Certificate
15. BPL Card
16. Other government documents

The Registration Systems for Waste Pickers in South Africa²¹

Context

An estimated 60,000²² waste pickers (or reclaimers as they are referred to in South Africa) were engaged in materials recovery and collection of recyclables from the streets and landfills in 2021. Reclaimers sell the materials they collect to buy-back centres (BBCs). Some BBCs are informal enterprises. Others are formal enterprises owned by recycling companies or larger buyers. Reclaimers sort the materials before they sell them to the centres. BBCs may then do additional sorting. Most bale the materials, which is how they get higher prices when they sell.

South Africa has national plans to integrate waste pickers into waste management systems and plans for regulations that provide for the payment of service fees to registered waste pickers. The first significant developments were included in the 2011²³ National Waste Management Strategy for South Africa, a part of the national Green Economy Plan. The Strategy proposed “extending and formalizing jobs in the various stages of the recycling value chain, including collection, sorting, reuse, repair, product recovery, processing and manufacturing of recyclable materials”, and committed the government to providing guidance to municipalities and businesses on how to improve conditions for waste pickers.

Following these commitments, between 2011 and 2016 the Department of Environmental Affairs and the South African Cities Network organized a number of workshops on waste picker integration. The government then convened a Waste Picker Integration National Stakeholder Working Group, which met from 2016 to 2019. The Working Group was composed of representatives from the African



Waste pickers in Johannesburg, South Africa.
Credit: Jonathan Torgovnik/Getty Images Reportage

Reclaimers Organisation (ARO); South African Waste Pickers Association (SAWPA); Packaging SA; the national Department of Environment, Forestry and Fisheries (DEFF, now known as DFFE); the national Department of Science and Innovation (DSI); the South African Local Government Association (SALGA); and several municipalities. It was convened by the South African Department of Environment, Forestry and Fisheries and the Department of Science and Innovation. The University of the Witwatersrand (WITS) supported the efforts of the Working Group through research and policy advocacy and facilitated the Working Group process. *The Waste Picker Integration*

²¹ This note draws upon the following documents:

Supporting Waste Picker Registration and Integration: Insights from South Africa. 2023. The World Bank, PROBLUE, University of Johannesburg, Sticky Situations, Cities Support Programme.

M. Samson, A. Mkhathshwa, N. Dlamini, N. Brits and J. Van Den Bussche. 2022. Waste Research Development and Innovation Roadmap Research Report, Department of Science and Innovation, Republic of South Africa, Cities Support Programme, Sticky Situations, WITS University.

Department of Environment, Forestry and Fisheries and Department of Science and Innovation. 2020. Waste Picker Integration Guideline for South Africa: Building the Recycling Economy and Improving Livelihoods through Integration of the Informal Sector. DEFF and DST: Pretoria.

²² This estimate has been circulated publically, while a scientific extrapolation based on a modelling developed elsewhere, adapted by Linda Godfrey, puts the figure at 215,000.

²³ National Waste Management Strategy. 2011. Department: Environmental Affairs, Republic of South Africa.

*Guideline for South Africa, 2020*²⁴, was developed by this Working Group. The *Guideline* explains why waste picker integration is important, who waste pickers are, how they work, the importance of recognizing their contributions, what waste picker integration is, and how to develop, institutionalize and implement waste picker integration plans (p. 2 of the *Guideline*).

The COVID-19 crisis led to the pile-up of recyclable materials as the country's reclaimers were prohibited from working. As a result, the prices for recycled materials dropped. In response to the crisis in waste management and the situation of reclaimers resulting from COVID-19, in 2020 the United Nations Environment Programme (UNEP) convened a Working Group on COVID-19 and the Waste Sector. Various levels of government and other stakeholders, including organizations of reclaimers and academic institutions, were part of this group. Project 1 of this Working Group focused on reclaimers and COVID-19. Project team members included representatives of reclaimer organizations, several national government departments, industry, NGOs, and academics. They identified financial and food relief for reclaimers as the top priority. The names of the intended beneficiaries, the reclaimers, were collected by municipal officials, with assistance from SAWPA and ARO. As no verification was conducted, many non-reclaimers were included on municipal lists. Only South Africans were eligible for the financial payment, but all reclaimers were technically eligible for food relief and provision of personal protective equipment. However, there were problems in the implementation of the relief programme. Many reclaimers whose names were on the lists did not receive the payment, while the inclusion of non-reclaimers in the beneficiary scheme led to resentment among actual reclaimers.

These challenges reinforced the need for an effective system to identify reclaimers, identified as a priority in the *Guideline*. The COVID-19 Working Group Project 1 team therefore prioritized the development of a South Africa Waste Picker Registration System (SAWPRS). All parties in the project team agreed to the basic structure of the SAWPRS principles to guide its development, as well as on the information to be gathered from reclaimers. The Cities Support Programme of the

National Treasury, the Department of Science and Innovation and the United Nations Industrial Development Organization (UNIDO) subsequently provided financial resources to support development of the registration system. The Council for Scientific and Industrial Research (CSIR) coordinated the project and led the technical development of the SAWPRS. The University of Johannesburg facilitated stakeholder engagement and piloting of the system.

Reclaimers played a central role in developing the registration system. In order to ensure that only legitimate reclaimers are included, registration must be conducted by a two-person team, including a registrar (who can be from any party in the sector) and a verifier (who must be a reclaimer). Applicants are asked locally specific screening questions. After verification, registered reclaimers receive an SAWPRS Card that includes their photo, name, and unique SAWPRS identification number. The two main reclaimer organizations, ARO and SAWPA, led registration on the ground, with participation from municipal representatives in some municipalities and support from the company Sticky Situations.

The World Bank PROBLUE programme subsequently provided financial support for initial rollout of the SAWPRS; the rollout was coordinated by the University of Johannesburg with support from Sticky Situations and was led by ARO and SAWPA.

The Extended Producer Responsibility Regulations of South Africa (EPR 2021) require industry to support waste picker integration and to pay reclaimers who are registered on the South Africa Waste Picker Registration System a service fee²⁵ for collecting post-consumer regulated materials generated by households or by commercial, industrial or institutional facilities as end-users of a product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain (EPR Regulations 2021, p. 19). Each Producer Responsibility Organization (PRO) is empowered to choose its preferred system for tracking sales by reclaimers and making payments to them, and each system must integrate with the SAWPRS. This has resulted in an overly complicated system, in which

²⁴ Department of Environment, Forestry and Fisheries and Department of Science and Innovation. 2020. Waste Picker Integration Guideline for South Africa: Building the Recycling Economy and Improving Livelihoods through Integration of the Informal Sector. DEFF and DST: Pretoria.

²⁵ Government Gazette No. 44539. 2021. Amendments to the Regulations and Notices Regarding Extended Producer Responsibility, Department of Environment, Forestry and Fisheries, Republic of South Africa.

reclaimers must be registered on multiple tracking and payment platforms if they sell materials to multiple buyers registered on different tracking systems. To date, the PROs have registered only a small number of reclaimers on tracking and payment systems and have not had a coherent programme to ensure that reclaimers registered on the SAWPRS are registered on tracking and payment systems, despite their legal responsibility to do so.

Purpose

The development of the South Africa Waste Picker Registration System responded to the needs to:

- register waste pickers in order for government to provide income support, personal protective equipment and food relief during the COVID-19 pandemic
- implement the Waste Picker Integration Guideline for South Africa, 2020
- generate accurate data on waste pickers
- involve waste pickers in the registration process, which leads to instilling confidence and ensuring higher levels of registration

As the EPR Regulations require Personal Responsibility Organizations to pay reclaimers registered on the SAWPRS, the SAWPRS also now plays a pivotal role in ensuring that reclaimers are paid for the collection service that they provide to industry and municipalities.

However, to date reclaimers have not been paid.

Additional incentives of the SAWPRS for South Africa's national networks of waste pickers included:

- ensuring that the numbers of waste pickers are reflected in government data
- the opportunity to engage with and build relationships with waste pickers across South Africa through the registration process
- mobilizing waste pickers for registration and facilitating the process of organizing
- building critical mass to demand effective implementation of the EPR regulations
- facilitating the payment of a service fee to waste pickers through EPR – potentially a single issue that could unite waste pickers

whether they were organized or not, by offering a platform for collective bargaining and a national focus.

Stakeholders and Their Responsibilities to SAWPRS

- ARO and SAWPA (waste picker networks): mobilization, registration, verification, issuing cards
- Cities Support Programme in the National Treasury: partial financial support towards the development and piloting of the SAWPRS
- Department of Science and Innovation: partial financial support towards the development and piloting of the SAWPRS
- UNIDO: partial financial support for development and piloting of the SAWPRS
- Council for Scientific and Industrial Research: design, development, housing the SAWPRS software during the pilot and for the first year of implementation
- WITS and the University of Johannesburg, with support from the company Sticky Situations: stakeholder input into the design of the SAWPRS, piloting the system and its initial rollout, training all involved
- Producer Responsibility Organizations (PROs): ensuring registration of reclaimers on SAWPRS, issuing cards
- The World Bank PROBLUE programme: financial support for initial rollout of the SAWPRS

Stakeholders and Their Responsibilities for EPR Payments to Reclaimers

- PROs: develop and deploy systems to track reclaimers' sales of recyclables; register reclaimers and buy-back centres on these systems; pay reclaimers
- ARO and SAWPA: support PROs to register reclaimers on tracking and payment systems
- DFFE: approves Personal Responsibility Organization plans, monitors PRO compliance with the regulations



A waste picker on Johannesburg's Marie Louise landfill.
Credit: Jenny Grice

Defining Waste Pickers

The *Waste Picker Integration Guideline* defines a waste picker as someone who collects reusable and recyclable material from residential and commercial waste bins, landfill sites and open spaces in order to re-value them and generate an income.²⁶

Time Frame for SAWPRS Registration

Between May 2021 and June 2022, pilot registration for the SAWPRS was led by WITS and the University of Johannesburg, with support from the company Sticky Situations, as part of the project titled, "Capacity Building for Waste Picker Registration Platform and Mainstreaming of Waste Picker Integration Guideline". Between June and December 2022, the initial rollout, funded by the World Bank's PROBLUE programme, was led by the University of Johannesburg, with support from Sticky Situations. ARO and SAWPA led on-the-ground registration in the pilot and initial rollout.

Waste pickers from ARO and SAWPA continued to register others even after the pilot and initial rollout ended. The coalition of ARO, SAWPA and others involved in the registration process suggested that a National Registration Campaign be carried out annually.²⁷

Time Frame for EPR Payments to Reclaimers

The EPR Regulations stipulate that service fee payment to reclaimers was to have commenced in November 2022. Due to limited action by PROs to establish the systems required to register reclaimers and buy-back centres on the tracking and payment systems, very few reclaimers have been paid to date. Neither the PRO Alliance nor the national government have made aggregated data on payments available publicly or to the waste picker organizations.

Operational Process for SAWPRS Registration²⁸

In each location, the registration campaign was divided into three distinct phases.

1. Mobilization campaign
2. Registration
3. Card distribution

The campaign teams comprised the Campaign Team Leader, Mobilization Leader, Educators and Recruiters, Marshalls, Registrars and Verifiers, each of whom had specific roles and responsibilities. The team members were mostly waste pickers so as to instill confidence

²⁶ Waste Picker Integration Guideline for South Africa (pp viii) <https://wasteroadmap.co.za/wp-content/uploads/2021/02/Waste-Picker-Integration-Guidelines.pdf>.

²⁷ Supporting Waste Picker Registration and Integration: Insights from South Africa. 2023. The World Bank, p 11.

²⁸ For more details please refer to <https://wastepickerintegration.org/wp-content/uploads/2023/01/SA-Waste-Picker-Registration-Campaign-Manual.pdf>

among other waste pickers during the campaign process. Verifiers had to be waste pickers. The campaign teams planned out the needed activities. They demarcated the geographical areas, identified the sites of residence, work and buy-back centres of waste pickers. Mobilization was envisaged as a two-stage process: the initial visit to scout the area to gather a set of basic information, followed by meetings with waste pickers to explain the need for registration, the detailed process to be followed and to address any of their concerns.

The registration team included a Registrar and a Verifier, and the registration process was carried out jointly. The registration was done online via cell phone as a two-stage process. The first stage involved registering the waste picker, and the second verifying the waste picker. The recruiters and educators had the job of explaining the process and allaying the fears and apprehensions of the waste pickers. The Marshalls were responsible for ensuring that the waste pickers stood in queues and order was maintained.

The third stage of the process was the distribution of identity cards; this usually was scheduled two or three weeks after the registration process was completed.

SAWPRS Registration Records

Items on the registration record were developed consultatively by the working group of key stakeholders in the waste sector, including representatives involved in the development of the *Guideline*. Although initially a survey-type approach was considered with many items of information, it was decided that a registration system needed basic information only on identification and actual work-related activities. A technical advisory committee comprised of representatives from ARO, SAWPA and industry actively participated in the design of the registration record. Local reclaimers always were involved in the registration process. They also agreed on the registration teams' development of screening questions that only local reclaimers would be able to answer. This would help to prevent the entry of free-riders, municipal workers and others in the registration process.

SAWPRS Data Collection

Registration was carried out at specific locations during specified hours. Information on time and place of registration was widely circulated, including to

the buy-back centres, so that waste pickers would know where and when to register. Once the waste picker arrived with identification documents, two persons were involved in the registration process: the Registrar and the Verifier. The Registrar was from any stakeholder group (although typically a waste picker) and the Verifier was necessarily a waste picker. The Registrar logged onto the SAWPRS website via a mobile phone or tablet. The Verifier completed verification by logging into the SAWPRS using the same mobile phone or tablet.

As of January 27, 2023, the SAWPRS had registered and verified 7,134 waste pickers. ARO had 3 lead coordinators who were reclaimers based in Johannesburg, and a registration team of 51 reclaimers, 26 men and 25 women. They worked for 146 days. SAWPA had 11 provincial coordinators. Although the pilot and initial rollout officially ended in 2022, waste pickers continue to register others on the system, at times in collaboration with PROs.

SAWPRS Geographic Coverage

The initial registration rollout funded by PROBLUE was conducted in 18 municipalities in eight provinces. Two principles guided the selection of sites for registration based on the continuation of the four pilot cities and the cities where the organizations had contact with waste pickers.

SAWPA had central teams traveling en bloc, primarily focusing on waste pickers at landfills. By contrast, ARO paid particular attention to the registration of waste pickers on the streets in four provinces and relied on local teams for registration. Both organizations used WhatsApp and Google Forms for communication.

Composition and Roles of the Registration Teams

- mostly reclaimers
- more women than men
- mix of South Africans and non-South Africans in all teams
- often younger people because of their comfort with the digital process
- role division including registrars, verifiers, queue marshals and mobilizers
- no municipal officials directly participated due to time constraints; some municipal interns participated as registrars.

SAWPRS Data Compilation

The Council for Scientific and Industrial Research held the data during the pilot and initial rollout. Subsequently, the PRO Alliance, on behalf of the Stakeholder Governance Committee, assumed management of the SAWPRS system and database. Strict criteria are in place on who can access data, as privacy of individual reclaimers' data needs to be maintained. Care is taken to ensure that relevant information can be provided within the context of compliance with the Protection of Personal Information Act (POPIA).²⁹

Operational Process for EPR Payments

The South Africa Waste Picker Registration System described earlier refers to the registration system and process for waste pickers. An additional system and process records the EPR payments to reclaimers based on the quantity, type and quality of materials that they sell to the buy-back centres. Reclaimers need to be registered on both systems, the SAWPRS as well as the EPR system.

The EPR system requires the registration of buy-back centres on weight-tracking systems. Each waste picker has to be registered on at least one weight-tracking and payment system. The system is expected to achieve two goals. Section 5A1(m) of the EPR Regulations requires Producer Responsibility Organizations for regulated materials (which include packaging, paper and e-waste) to integrate waste pickers into the post-consumer collection value chain. In addition, Section 5A1(p) requires PROs to "compensate waste collectors, reclaimers or pickers, who register with the National Registration Database [SAWPRS], for collection services and environmental benefits, through the collection service fees by November 2022."³⁰ To obtain accurate information, PROs are required to encourage waste pickers to register with a weight-tracking technology system that will track the weight of the disaggregated materials they sell to the buy-back centres. The buy-back centres also will be registered on the weight-tracking system. After registration, waste pickers will be paid a weight-based service fee through the blockchain-linked system installed at the buy-back centres.

Findings

While information about individual waste pickers registered in the SAWPRS is not in the public domain, aggregated information on gender, race, age, number of years in the sector will be publicly accessible. Protocols on access to information to various stakeholders are still being developed. Analysis of the registered workers is not yet publicly available. The PRO Alliance governed by the multi-stakeholder committee has recently taken over and will access the data produced.

Regarding the weight-tracking and payment systems: Each Producer Responsibility Organization manages and oversees its own system. The details of the weights of each of the materials collected by each waste picker are added into the system at the time of each sale transaction. This information is collected by the relevant PRO, which then authorizes payment to the waste picker. To date, PROs have shared only some aggregate data on the number of waste pickers paid. It is a priority for ARO and SAWPA that they receive reports on the quantities of materials collected by reclaimers, including breakdowns by material type, location, etc., as well as information on the number of waste pickers paid and the amount of payments received. The seven PROs in the PRO Alliance have not yet provided regular reports on these matters, and there is no structured communication with PROs not in the PRO Alliance. DFFE has not released aggregated information, nor has it made a commitment to do so.

Challenges and Strengths in Data Collection

Challenges

- The Extended Producer Responsibility regulations permit the Personal Responsibility Organizations to establish their own tracking and payment systems. As a result, many have their own tracking systems for the same recyclable materials such as PET bottles. The system is complex, since there are multiple buy-back centres, PROs, prices for different materials and different payment systems for reclaimers. Petco and Polyco are among the few PROs that have taken steps to meet their legal responsibility for paying reclaimers and have incurred the cost of registration.

²⁹ <https://popia.co.za/>

³⁰ World Bank, p. 13.

However, Banque software, which Petco (the PRO for Coca Cola) initially contracted for recording weights of materials and payments, has reneged on allowing waste pickers to access their own data on their mobile phones. These complications among PROs have negatively affected the registration and payment of reclaimers. Most importantly, neither the PRO Alliance nor any individual PRO has meaningfully prioritized ensuring that the waste pickers already registered on the SAWPRS are registered on weight-tracking and payments systems and that the buy-back centres they sell to are registered on the weight-tracking systems. As a result, the PROs are generally non-compliant with the regulations, and only a small proportion of waste pickers in the country are receiving payment, despite the regulations stating that payment should have commenced several years ago.

- If buy-back centres are not registered, the reclaimer selling to them receives no benefit – and they show up as inactive, whereas in fact the PRO has not covered them or the buy-back centre under the registration.
- EPR regulations do not specify that the companies are responsible for hosting the SAWPRS or funding rollout of registration on the SAWPRS, and PROs have expressed hesitation about the same.
- Despite the setting up of the SAWPRS, Johannesburg has allocated 1 million rand and is attempting to register waste pickers on its own registration system, which is not connected to the SAWPRS or payment systems. It is likely that other municipalities are taking similar actions.
- To date, it is unclear whether DFFE has taken any action against PROs for not complying with these aspects of the regulations.
- In year one of the regulations, agreement could not be reached between waste pickers and the PRO Alliance regarding the amount of the service fee, which the PRO Alliance unilaterally set at 15 cents per kilogram for all regulated materials. ARO and SAWPA did not

accept the 15 cents, but did not oppose it in year one, as they were keen for the system to get up and running. However, the PROs have reneged on an agreement to hold discussions on the level of the quantum for year two.

Strengths

- The registration system has been strengthened by the involvement of the two national networks of waste pickers in the actual mobilization, registration and verification. The government tends to negotiate directly with business. However, since the EPR payments must go to reclaimers, their involvement was inevitable. Both ARO and SAWPA are mentioned as implementing bodies of the 2020 National Waste Management Strategy aspects related to waste picker integration.
- The registration and card distribution has encouraged more reclaimers to register, and this process is ongoing even after the end of the project. Reclaimers have used the cards creatively, to negotiate access to scrap and prevent confiscation of materials.
- The combined registration and payment system has four elements. Every buy-back centre is registered on a weight-tracking system; every waste picker is registered on the SAWPRS; every waste picker is registered on at least one weight-tracking system and on a payment system of their choice. The waste picker will be paid the service fee only if the weight of each regulated material is recorded and linked to the payment system. This inbuilt incentive of direct weight-based EPR service fee to waste pickers will help track waste pickers and materials more effectively.
- The informal committee responsible for these processes is coalescing into a Governance Committee of PRO representatives, ARO, SAWPA, SALGA, and the national government.

Updating the information

The registration effort is recent and still in process, hence the question of updating data has not been looked into as yet.



Authors

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About WIEGO

Women in Informal Employment: Globalizing and Organizing (WIEGO) is a global network focused on empowering the working poor, especially women, in the informal economy to secure their livelihoods. We believe all workers should have equal economic opportunities, rights, protection and voice. WIEGO promotes change by improving statistics and expanding knowledge on the informal economy, building networks and capacity among informal worker organizations and, jointly with the networks and organizations, influencing local, national and international policies. Visit www.wiego.org

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