

The Collection of Data on Waste Pickers in Colombia, 2012-2022

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A member of the waste picker cooperative Planeta Verde.
Credit: Federico Parra

Key Points

- A census of waste pickers was mandated by a Constitutional Order in Colombia and undertaken by the Bogota District in 2012. A work team to jointly design the census with a public university was created by the Mayor's office in Bogota.
- In order to avoid the inclusion of non-waste pickers, the workers were identified at warehouses or recycling collection centres, rather than being asked to come to census points. Thus before conducting the census of waste pickers, a census of the District's warehouses was made.
- A total of 13,984 waste pickers were verified in the city of Bogota as of September 2012; 69 per cent were men and 31 per cent were women.
- A post-census system – the Unified Registry of Waste pickers – was developed in 2014 to update yearly the 2012 baseline data. In 2022, RURO registered a total of 25,322 waste pickers in Bogota.
- The registry also contains data on social protection, housing, numbers of dependants, methods of transporting waste, where waste is gathered/sold and income levels.
- As of 2014, the national government requires all municipal authorities to prepare a waste picker census, and/or update it. It also created national methodological guidelines for this purpose.

Introduction

A series of Constitutional Court rulings beginning in 1995 in Colombia recognized waste pickers as providers of public recycling services and required their fair remuneration. Municipal authorities were given responsibility for the support of waste pickers and their organizations. First, however, it was necessary to identify the waste pickers qualified for the affirmative action required by the court.

The City of Bogota subsequently undertook a census that was unprecedented in Colombia. This brief offers details and insights about the definitions used to accurately identify waste pickers, the operational considerations, challenges and structure used in the census, and the results of that census and subsequent refinements. Out of this experience, a guide for other municipalities to follow when conducting a census of waste pickers was developed. This guide is outlined in detail in this brief.

The data collection efforts described in this brief illustrate a data source increasingly recognized by official statistics: citizen-generated data. Broadly defined, citizen-generated data is the direct involvement of citizens in any of the multiple stages of producing the data that describe 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. As this brief will show, the Colombia data were produced with the involvement of waste pickers and not only contribute to public awareness but also provide key information for the implementation of programmes to benefit waste pickers.

1. Background and context

Waste pickers recover packaging and products made of recyclable materials from the garbage deposited in open dumps and in the streets of municipalities and cities. In Colombia, the urban poor, the unemployed, migrants without labour options and persons displaced by partisan violence all have found a livelihood as waste pickers. This work provides essential income to individuals with few earning options and helps support families.



A collection centre.
Credit: Federico Parra, 2020

The environmental and economic contributions made by waste pickers have been documented. First, waste pickers in Colombia significantly reduce the amount of waste that reaches final disposal. According to data from the National Recycling Study, the reduction ranged from between 11 to 16 per cent of the waste produced in 2010 (Aluna Consultores Ltd. 2011). The 2018 report of the National Department of Statistics places the recycling rate in Colombia at 11 per cent, the second highest in Latin America after Peru (United Nations Environment Programme 2018).

Second, waste pickers supply recovered materials back into value chains to be used in manufacturing of, for example, containers and packaging. The Chamber of Paper and Cardboard of the National Association of Entrepreneurs of Colombia reported that 55 per cent of the raw material used in 2017 in its industry came from recycling (ANDI 2019) rather than virgin materials. By reintroducing materials to the production chain, waste pickers mitigate the environmental impacts of manufacturers,

importing companies, producers and users of containers and packaging.

Third, waste pickers provide environmental benefits and savings related to the extension of the useful life of final disposal sites (e.g. landfills). Further, waste pickers reduce the direct and indirect operating costs of waste collection and transport systems.

In spite of the environmental, economic, social and public contributions they make, waste pickers have historically worked under precarious conditions of poverty, vulnerability and invisibility. They have difficulty in accessing public services, housing and education. They have no coverage in programmes for occupational safety or retirement. Moreover, they are often discriminated against and viewed as criminals.

1.1 Privatization of waste picking

Many of the policies that have marginalized waste pickers are associated with the neoliberal orientation of the Washington Consensus.¹ In the mid-1980s this orientation influenced Colombian policies and led to the reduction of the state and the opening of the public sector to the market. Public garbage collection and disposal services were the first to be privatized. The closure of dumpsites and the introduction of sanitary landfills began in 1988. This led to the massive expulsion of waste pickers to the streets in Colombia's main cities, with no protection for their livelihoods and no labour alternatives other than competing for recyclable materials that had been disposed of in public spaces.

The privatization of waste collection and transportation continued to 1994, thereby privileging private companies as service providers. Since then, public policies have reinforced this model, turning citizens from "users of a public service" to "clients of private waste collection companies".

To guarantee "public" profitability, many policies limited and even criminalized waste pickers' work. These include policies:

1. prohibiting animal-drawn vehicles for waste collection in cities;
2. restricting the provision of recycling services by organized communities of waste pickers in

municipalities or cities with more than 8,000 subscribers (which meant waste pickers could not organize to provide recycling services in municipalities with more than around 40,000 inhabitants);

3. criminalizing the extraction of waste from garbage bags placed in public spaces;
4. giving garbage collection companies property rights over waste; and
5. giving the exclusive right to collect recyclable waste through selective collection routes to private companies as part of a bidding process for the garbage collection service.

1.2 Actions to protect waste pickers

In response to these threats, waste pickers organized to protect their work. From 1995 to 2015, under the leadership of the ARB (Waste Pickers' Association of Bogota) and the ANR (Colombian National Waste Pickers Association), they won more than seven rulings in favour of their rights from the Constitutional Court in Colombia. Among these, the most outstanding are:

1. The recognition that waste pickers are subjects of special protection of the State, and affirmative actions must be developed to benefit them. (According to Article 13, paragraphs 2 and 3 of the Political Constitution of Colombia, affirmative actions are defined as policies or measures aimed at favouring certain persons or underrepresented groups in order to eliminate or reduce social, cultural, political or economic inequalities that affect them.)
2. The structural affirmative action defined by the Constitutional Court consists of the requirement to recognize waste pickers and their organizations as providers of public recycling services; they should be remunerated on the same terms as private waste collection, transportation, and controlled burial companies. This was supported by the argument that if there were no waste pickers, society and the government would have to pay garbage collection companies for the waste not recovered by the waste pickers.
3. The Constitutional Court in 2011 made municipal authorities responsible for the support

¹ The Washington Consensus, a term coined by economist John Williamson in 1989, refers to a set of economic principles that the World Economic Forum, the International Monetary Fund and the World Bank agreed would help manage the "debt crisis" in the global South in the 1980s (Hurt 2020).

of waste pickers and their organizations. Responsibility involves:

- o the full identification of waste pickers through censuses as subjects of special protection of the state and recipients of affirmative action;
- o the guarantee that waste pickers have access to recyclable waste; and
- o the development of organizational and technical support programs appropriate to the needs of waste pickers at different levels of organization in each municipality, recognizing that some waste pickers are unorganized, others have weak levels of organization, and others have strong levels of organization.

The Constitutional Court in Order 275 of 2011 compiled all rulings since 2003 on the protection of waste pickers into a single set of rulings, thereby giving them more force. The district government of Bogota, whose mayor at the time was Gustavo Petro,² implemented this ruling. The first important action was to design and conduct a census of waste pickers. This was unprecedented in any city in Colombia.

2. The 2012 Bogota Waste Pickers Census

The Special Administrative Unit of Public Services (UAESP), the district government entity in charge of waste management in Bogota, supported a census of waste pickers. It 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. It identified 10,673 waste pickers.

The Constitutional Court in Order 275 of 2011 found deficiencies in this census that resulted in individuals who sought benefits but were not waste pickers being included in the census. The court prescribed the following remedy:³

Paragraph 117 of Constitutional Order 275 [...] ordered the District to update the

census of waste pickers, with the purpose of identifying and registering both formal (those in an association, cooperative, pre-cooperative with legal status) and informal (those not in a formal organization or who worked independently) waste pickers in the city and correcting irregularities in the previous census. In addition, schedules and recycling routes were to be developed with the participation of waste picker organizations and in coordination with the schedules and routes of private waste collection services, so that waste pickers and private operators would not be in competition. Collection centres for waste pickers throughout the city, as well as pricing measures to regulate the purchase and intermediation of recyclable waste, were to be identified. Any other affirmative action defined by the District to benefit waste pickers was also to be identified.

The objectives of the 2012 census addressed problems in the earlier census as follows:

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

In 2012, Mayor Petro's office created an internal work team that would thoroughly review the operation of the 2010 census⁴ and sub-contracted the Universidad Distrital Francisco José de Caldas, a public research university in Bogota, to jointly design the new census with the aforementioned team.

2.1 Defining “waste pickers” for the census

The first step was to adopt a new definition of waste picker that would refine the definition contained in the 2002 national decree (1713) on the regulation of waste management. According to the earlier definition, a “waste picker” was a person or a legal entity who provided public waste management services in waste recovery or recycling. Thus, waste pickers included workers in waste logistics companies, in informal employment and even in recycling companies. The new definition was taken from the “2007 district agreement 287” issued by the

² Gustavo Petro was subsequently elected President of Colombia; his term runs August 2022 to August 2026.

³ The Colombian Constitutional Court has two types of rulings: “sentences” are legally binding decisions, and “orders” evaluate compliance of sentences already issued. An order often adds new directives to the sentence.

⁴ An author of this brief, Federico Parra, was a member of this team.



*On the recycling road.
Credit: Federico Parra, 2018*

City Council of Bogota. Article 2 of this agreement restricts the beneficiary population to those waste pickers experiencing conditions of poverty and vulnerability. Translated, it reads:

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.

2.2 Operational description

In the second step, all existing databases on waste pickers in the city and the robustness of the processes that created them were reviewed. These included the Census of Waste Pickers conducted by the National Department of Statistics for the Special Administrative Unit of Public Services of Bogota in 2003; the census conducted by the Javeriana University in 2010; the databases of waste pickers who had participated in programs of the National Learning Service; and the lists of members of waste

picker organizations registered to date in the city of Bogota.

The review showed that it was necessary to consider not only the waste picker but also the family unit, exploring the social and family division of labour through a qualitative post-census survey containing strategic questions.

The next steps consisted of defining the fundamental issues of interest for the census and then developing a questionnaire to collect data on these issues and to fully identify the city's waste picker population, following the guidelines of the Constitutional Court. The data sought included aspects of waste picking activities, as well as the poverty and vulnerability of the workers and their families in order to justify their special protection by the State.

The form to be applied to waste pickers was structured in 4 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”

Since the objective of the Constitutional Court ruling was to establish a system to remunerate waste pickers as providers of public recycling services, a filtering system was needed to prevent non-waste pickers from registering. This was solved by identifying waste pickers during their work activity through an unannounced process rather than asking them to self-identify. Previously identified waste picker leaders and representatives of UN Habitat were involved as observers of each stage of the census process.

Because a decision was taken to identify waste pickers in their work rather than summoning them to census points, it was decided that recycling warehouses (where waste pickers sell their recovered recyclable material) would serve as the site where waste pickers responded to the census form. Thus it was necessary to first identify the recycling warehouses in the city of Bogota before conducting the census of waste pickers.

The census initially yielded 1,343 warehouses, distributed in the different administrative subdivisions or localities of Bogota. However, when warehouses that had not been registered were identified in the field, the total number of warehouses or recycling collection centres grew to 1,625. These warehouses were supplied with verification forms requesting their permission to serve as a census point. Many warehouses refused, so only 1,536 served as census points.

A form for the compilation of information on warehouses/recycling centres was developed. This form was designed to be applied only to warehouses or recycling centres, in order to characterize them and determine whether they were used by waste pickers to sell their material. If so, they could be considered census points. The form had the following five parts:

- Section 1: Control information
- Section 2: Identification of the establishment
- Section 3: Identification of the person who would supply information on the warehouse

Box 1: Composition of Census Teams

The team administering the waste picker 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

- Section 4: Legal documentation of the establishment
- Section 5: Physical and operational characteristics of the establishment

A specific form was also designed to identify individual waste pickers (included in Annex 1).

A schedule of visits to each warehouse was established. It was based on an interviewer spending eight hours in each warehouse to administer the form to waste pickers, during six random days distributed over the 42 days of field work. The result was information on 14,414 waste pickers.

Another set of sites was also 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 by the waste pickers' organizations and resulted in information from an additional 855 waste pickers.

A careful screening process was then undertaken. It identified serious inconsistencies and incomplete responses. As a result, **13,984 waste pickers** were verified in the city of Bogota as of September 2012.



A human-powered vehicle called 'Zorro'.
Credit: Federico Parra, 2016

2.3 Findings of the 2012 Bogota Waste Pickers Census

- Of the total 13,984 waste pickers, 69 per cent were men and 31 per cent were women.
- Over half of all waste pickers (53 per cent) were between 26 and 50 years of age. A relatively high proportion (10 per cent) were over 60 years of age.
- Concerning coverage by social security:
 - 62 per cent of waste pickers were covered by the state's subsidized social security system (providing health benefits only); the system is co-financed with funds from higher earners who contribute to the system.
 - 7 per cent of waste pickers paid social security under the contributory regime.
 - 26 per cent of the waste pickers – 3,260 – had no access to social security.
- The type of housing was varied: 41 per cent of waste pickers lived in houses, 24 per cent in tenements and 21 per cent under bridges, shelters, etc. Very few waste pickers were homeowners (17 per cent total, with 14 per cent owning their homes and 3 per cent paying for them through a mortgage). The largest proportion of recyclers lived in rented housing (65 per cent).
- 69 per cent of the waste pickers identified in the census had up to three people who were dependent on them. The remaining 31 per cent had more than four people.
- 72 per cent had been recycling for more than five years.
- 44 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.
- 51 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.

- Most waste pickers (88 per cent) sell their recyclables in warehouses; 5 per cent of waste pickers sell their materials to another waste picker.
- Regarding the means of transporting materials: the sack has the highest proportion (26 per cent), followed by a human traction vehicle called “Zorro” (18 per cent), animal-drawn vehicle (13 per cent), and a human traction vehicle with sphere bearings (7 per cent). Only 7 per cent drove motorized vehicles.
- On ownership of the means of transport, most waste pickers (76 per cent) indicated that they owned the means of transport used while 13 per cent leased it. Among those leased, the owners were the warehouse owners and other waste pickers.
- By income levels, 47 per cent of waste pickers earned less than 250,000 pesos (approximately USD 128)⁵ monthly and 29 per cent earned between 250,000 and 500,000 pesos (USD 128–256). Overall, 76 per cent of the waste picker population earned less than one legal monthly minimum wage, which was set at 567,000 pesos (almost USD 298) in 2012.

Waste picker leaders had expected a significantly higher number of waste pickers in the 2012 census. However, the increase was small – approximately 1,200 more than in the 2010 census – but the expectations of a higher number were fulfilled through the application of the post-census registration process.

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 (RURO) in 2014. The RURO includes information on the waste picker’s nuclear family.

3. The Unified Registry of Waste Pickers (RURO)

The Unified Registry of Waste Pickers of Bogota has evolved through two district administrations. It began as a register of persons engaged in waste picking as their main occupation. Today it is a comprehensive database on waste pickers in Bogota 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 also has an online interface so it can be accessed by the general public.

Waste picker organizations are required to provide a list of their members annually to the Office of the Mayor of Bogota. The lists submitted are then compared to the information in RURO and provide the basis for updating the Registry with the additions of new waste pickers and deletions of those no longer listed.

The second source for updating the registry is the request made by *unorganized* waste pickers to be recognized as waste pickers. They do so through the Special Administrative Unit of Public Services (UAESP), which applies the census instrument and conducts field verification visits if necessary.

The third source corresponds to the reports of members made by the new waste picker organizations. These organizations are registered as recycling service providers with the UAESP and with the entity that oversees public service providers, i.e. the SuperIntendencia de Servicios Públicos Domiciliarios (Superintendency of Domiciliary Public Services – SSPD).

The fourth source of information is “local promoters” of the UAESP, who are officials in the territory. They make visits and review the plans, programs and projects on recycling that are carried out in each of the administrative subdivisions of the city, also known as localities.

RURO was launched in 2014 with a total of 13,984 waste pickers. The following table shows the increase in numbers of waste pickers registered in RURO from 2014 to 2022.

⁵ 1 USD = 1,950 Colombian pesos at the average 2012 rate.

Total number of waste pickers in RURO database		
YEAR	Newly registered waste pickers in RURO	Total*
2014	13,984 3,726 new	17,710
2015	771	18,481
2016	968	19,449
2017	1,877	21,326
2018	1,018	22,344
2019	1,288	23,632
2020	515	24,147
2021	691	24,838
2022	325	25,163

*Source: UAESP

4. National Guidelines for the Municipal Census of Waste Pickers

To comply with the 2011 Constitutional Court Order 275, several governmental bodies began in 2013 to issue regulations to facilitate (in theory) the recognition and remuneration of waste pickers and their organizations as providers of the public service of waste recovery or recycling. This is understood as structural affirmative action. The governmental bodies include the Ministry of Housing, City and Territory (the entity in charge of the regulation of public services in Colombia) and the Water and Basic Sanitation Regulatory Commission (the entity in charge of the definition of tariffs for the payment of public services in Colombia). The following regulations of the Ministry require waste picker censuses in all municipalities of Colombia and provide methodological guidelines to carry them out: the 2013 National Decree 2981, the 2014 Resolution 754, the 2015 National Decree 1077 and the 2016 National Decree 596. Waste picker censuses are to be mandatory in all waste management plans at the municipal level.

The Water and Basic Sanitation Regulatory Commission established the tariff structure to remunerate the public recycling service through resolutions 720 of 2015 and 853 of 2018.

Decree 596 and its regulatory resolution 276 of 2016 established a formalization route that is described in the WIEGO Technical Note 12 (Parra and Abizaid 2021). This decree adopted the following definitions

of “waste picker” and “formal waste pickers organizations”:

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 Superintendence of Household Public Services (SSPD) and are made up entirely of waste pickers.

These definitions are significant because they prevent companies or corporate entities from being identified as waste pickers and thereby receiving the benefits earmarked for waste pickers. Moreover, the definition includes the “recovery” of waste, so that the extraction of recyclable waste from garbage bags placed in public space can no longer be criminalized. Finally, by focusing on persons whose livelihood depends on this activity, waste pickers would be eligible to apply for special protection. A “Guide for preparing the waste picker census under the framework of Resolution 754 of 2014” was developed in 2016 for municipal authorities. This manual provides the methodological considerations and a list of topics that should be part of a waste picker census.

The guidelines were structured in three parts. The first part dealt with the preparation of the census, its technical conditions and basic contents; the second with the implementation of the census; and the third with the analysis of the information and the structure of the final report.

The guide included the identification of warehouses or places where waste pickers go to sell the materials they have collected. These were referred to as Economic Recycling Units (Unidades Económicas de Reciclaje – UER). They serve as census points and observation points.

4.1 The Planning Phase – A 7-Step Process

1. Create the technical coordinating team with the requirement of professional members in statistics, engineering, and social work.
2. Review information sources, including information on existing recycling warehouses and recycling economic units, waste pickers' databases, waste pickers' organizations, municipal waste management systems, and recycling value chains. The review is to include documentary sources and interviews with key actors such as governmental authorities, waste picker leaders, waste collection company managers and intermediaries.
3. Consolidate (or prepare if necessary) a database of Economic Recycling Units and recycling collection routes used by waste pickers or other actors in the municipality's recycling value chain. The geo-referencing of these units provides for the structuring of the units as census points.
4. Adjust census instruments to capture the data listed in the tables on the right and below.
5. Train the operational field team: the educational requirement of the surveyors is set at academic or technical bachelor's degree. The number of surveyors should correspond to 25 per cent of the UERs (for example, if 100 UERs are identified in a municipality, then at least 25 enumerators should be hired). The duration of the census should allow coverage of 100 per cent of the UERs as census points. An estimate of the duration of the census is determined by the number of inhabitants of the municipality.
6. Invite previously identified waste picker organizations to review and validate the questionnaire forms, support the training of enumerators or surveyors, and accompany the next phase of implementation as observers.
7. Adjust instruments.

Waste picker survey form	
Topic	Information required
Control of the information collected	Form number Date and time of interview Results of the interview (complete, incomplete, refused) Name of interviewer Remarks
Waste picker identification	Full name of waste picker Identity card (if available) Gender Are you head of household? Place of birth Date of birth Place of residence Telephone or cell phone Marital Status
Social characteristics	Educational level Driver's licence Participation in components of the social security system (<i>Subsidized, beneficiary, contributor or principal, none</i>) - Health - Retirement or pension fund - Occupational risks Type of Housing (house, apartment, tenement, room, other) Ownership of the dwelling Persons that make up the family nucleus (<i>name, age, relationship, occupation, educational level</i>) Number of people who depend on your activity as a waste picker
Characteristics of the waste picker's activity	Time spent waste picking Activities prior to recycling Days worked per week Hours worked per day Hours spent in a day on each sub-activity of waste picking: recovery, collection, transport, selection, commercialization, improvements to recovered materials. Seasonality Location of work: Neighbourhoods or areas Membership in an organization of waste pickers? Years as member and type of membership Means of transport or hauling used (motorized, animal traction, human traction, other) Ownership of means of transport (leased, owned, borrowed, other) Improvements made to recovered materials (sorting, cleaning, separation of components, compacting, reuse, etc.) Type of material recovered weekly Place of sale of recyclable material (middleman's warehouse, organization's warehouse, other recycler, middleman's truck, other) Average income from the previous week's recycling activity Complementary sources of income (if any)

Format for the identification and description of the recycling economic units	
Topic	Information required
Control of the information collected	Form number Date and time of interview Results of the interview (complete, incomplete, refused) Name of interviewer Remarks
Identification of the establishment	Business name Address Telephone Name of Interviewee Interviewee's title Legal identification of the establishment
Characterization of Recycling Economic Units	Owned, leased or occupied property Reference in the Chamber of Commerce Sole establishment, main or branch office Legal form (company, simple corporation, cooperative, commercial company, etc.) Number of people working in the establishment (for "occasional" workers, establish the number of days per week; for permanent establish the type of relationship) Type of property (warehouse, local, house, lot, inhabited house, other) Hours of operations
Physical and operational characteristics of the facility	Maximum storage capacity Warehouse area in square metres Existence of differentiated spaces for loading and unloading, weighing, classification, cleaning, washing, other improvements to the material, administrative personnel Machinery for processing material Processes carried out in the facility: sorting, compacting, cleaning, baling, and packaging, shredding, ripping, other processes Suppliers of recyclable materials (recyclers, middlemen routes, recyclers' organizations routes, large waste producers) Purchaser of recycled materials (recycling processing industry, other intermediaries) Percentage of rejected waste Materials marketed by type

4.2 The Implementation Phase – A 5-Step Process

1. The census operation is structured according to the identification, description and georeferencing of the UERs. The visits for the application of forms by the surveyors in each of the UERs are based on the days and hours of greatest activity. The schedule will be established by the planners. Waste pickers will not be informed ahead of time to ensure the exclusion of persons who are not waste pickers.
2. The census in the recycling collection routes is carried out following the procedures described above.

3. The census of waste pickers in the new UERs and routes identified in the previous phase is also carried out.
4. In order for the census to cover the greatest number of waste pickers, a public call for applications should be made to those who did not participate in steps 2 and 3. In steps 3 and 4, the verification of the results of the calls should undergo strict validation through control questions, feedback from the organizations, and cross-checking with other databases, among other mechanisms.
5. When the previous steps have been completed, a verification survey is randomly sent to 10 per cent of the total number of respondents.

4.3 Review, Compilation and Publication – A 5-Step Process

1. Review of the information
2. Preparation of the information
3. Information processing
4. Analysis and report preparation
5. Publication of the report and public information activities

According to national regulations, at the beginning of each municipal administration period, the need to update the waste picker census must be evaluated with the participation of waste pickers and their organizations.

End Note

Although all municipalities in Colombia are expected to carry out a census of waste pickers, recycling is not viable in small and rural municipalities. The volume of recyclable materials is not sufficient, and if materials are produced, the cost of transporting them to recycling centres would be very high. Municipalities with fewer than 10,000 inhabitants are too small to have a substantial number of waste pickers.

In Colombia, 965 municipalities (out of a universe of 1,1236) 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.

⁶ <https://www.datos.gov.co/Mapas-Nacionales/Departamentos-y-municipios-de-Colombia/xdk5-pm3f>

References

Aluna Consultores Ltd. 2011. *Estudio nacional del reciclaje y de los recicladores* [National Study of Recycling and Waste Pickers]. Bogotá, Colombia: CEMPRE. Available at: <http://www.anrcolombia.org/index.php/biblioteca-de-consulta/investigaciones-y-reportes?download=93:informe-condensado-del-estudio-nacional-de-reciclaje-agosto-2011-arb-cempre-aluna-consultore>

Cámara de la Industria de Pulpa, Papel y Cartón - ANDI [Chamber of the Pulp, Paper and Cardboard Industry – ANDI]. 2019. *Informe de Sostenibilidad 2017: Primera Edición* [Sustainability Report, First Edition]. Available at: <https://www.andi.com.co/Uploads/INFORME%20PULPA%20PAPEL%20Y%20CARTO%CC%81N%20VERSIO%CC%81N%202019.pdf>

Hurt, Stephen R. "Washington Consensus". Encyclopedia Britannica, 27 May 2020. Available at: <https://www.britannica.com/topic/Washington-consensus>

Ministerio de Vivienda Ciudad y Territorio. 2015. *Guía para elaborar el censo de recicladores bajo el marco de la resolución 754 de 2014* [Guide to Prepare the Census of Waste Pickers under the Framework of Resolution 754 of 2014]. *El marco del proyecto "Hacia el reconocimiento y la institucionalización del reciclaje inclusivo"* [Framework of the project "Make the recognition and institutionalization of inclusive recycling"]. *Alianza para el Reciclaje Inclusivo* [Alliance for Inclusive Recycling].

Parra, Federico & Olga Abizaid. 2021. Formalization as Public Service Providers: Achievements and Obstacles for Colombia's Waste Pickers. WIEGO Technical Brief No. 12. WIEGO: Manchester. Available at: https://www.wiego.org/sites/default/files/publications/file/technical-brief-12-2021-ENG_0.pdf

United Nations Environment Programme. 2018. Cited by Ministry of Housing City and Territory of Colombia in the presentation "The Future of Cities and Solid Waste," April 2022.

Universidad Distrital Francisco José de Caldas. 2013. *Informe final censo de recicladores, Bogotá Humana 2012. Convenio específico 001 de 2012 de la unidad administrativa especial de servicios públicos, alcaldía mayor de Bogotá.* [Final Report of Waste Pickers Census, Bogotá Humana 2012. Specific Agreement 001 of 2012 of the Special Administrative Unit of Public Services, Mayor of Bogotá.]

Superintendencia de Servicios Públicos Domiciliarios. 2022. Informe Sectoral de la Actividad de Aprovechamiento 2020. Available at: <https://www.superservicios.gov.co/sites/default/files/inline-files/Informe-Sectorial-de-Aprovechamiento-2020-v2.pdf>

Judicial Decisions

Constitutional Court of Colombia. 2015. Auto 587/15 *Pronunciamiento frente a la medida cautelar decretada en el Auto 089 de 2015, en el marco del seguimiento a las órdenes proferidas en el Auto 275 de 2011, en cumplimiento de la Sentencia T-724 de 2003 y de los parámetros fijados en el Auto 268 de 2010* [Order 587/15 Regarding the Precautionary Measure Granted by Order 089 of 2015, a follow-up to the Directives Issued by Order 275 of 2011, in Pursuance of Judgement T-724 of 2003 and of the Parameters set out by Order 268 of 2010]. Available at: <https://www.corteconstitucional.gov.co/relatoria/autos/2015/a587-15.htm>

Directives

Mayor of Bogotá. 2012. *Decreto municipal 564 de 2012 por medio del cual se adoptan disposiciones para asegurar la prestación del servicio público de aseo en el Distrito Capital en acatamiento de las órdenes impartidas por la Honorable Corte Constitucional en la Sentencia T-724 de 2003 y en los Autos números 268 de 2010, 275 de 2011 y 084 de 2012* [Municipal decree No. 564 of 2012 Adopting Provisions to Ensure Public Waste Management Services in the Capital District, in Observance of the Honourable Constitutional Court's Orders Issued in Ruling T-724 of 2003 and in the Orders No. 268 (2010), No. 275 (2011) and No. 84 (2012)]. Available at: https://xperta.legis.co/visor/legcol/legcol_de9fe5942c4501cae0430a01015101ca/coleccion-de-legislacion-colombiana/decreto-564-de-2012

Ministerio de Vivienda, Ciudad y Territorio (MINVIVIENDA). 2013. *Decreto 2981 de 2013 por el cual se reglamenta la prestación del servicio público de aseo* [Decree No. 2981 of 2013 Regulating the provision of Public Waste Management Services]. 20 December 2013. Available at: <https://www.minvivienda.gov.co/sites/default/files/2020-08/decreto-2981-de-2013-reglamentario-del-servicio-publico-de-aseo.pdf>

Ministerio de Vivienda, Ciudad y Territorio (MINVIVIENDA) and Ministerio de Ambiente y Desarrollo Sostenible (MINAMBIENTE). 2014. *Resolución 754 de 2014 por la cual se adopta la metodología para la formulación, implementación, evaluación, seguimiento, control y actualización de los Planes de Gestión Integral de Residuos Sólidos* [Resolution No. 754 of 2014 Adopting the Methodology to Develop, Implement, Evaluate, Monitor, Control and Update of the Integral Solid Waste Management Plans.] Available at: <https://www.minvivienda.gov.co/sites/default/files/2020-08/resolucion-754-de-2014.pdf>

Comisión de Regulación de Agua Potable y Saneamiento Básico (CRA). 2015. *Resolución 720 de 2015 por la cual se establece el régimen de regulación tarifaria al que deben someterse las personas prestadoras del servicio público de aseo que atiendan en municipios de más de 5.000 suscriptores en áreas urbanas, la metodología que deben utilizar para el cálculo de las tarifas del servicio público de aseo y se dictan otras disposiciones* [Resolution No. 720 of 2015 Establishing the Tariff Regulation Regimes with which Providers of Public Waste Management Services in Municipalities with More than 5,000 Subscribers in Urban Areas Are Required to Comply and the Methodology to be Used for the Calculation of Waste Management Service Fees, and Containing Other Provisions]. Available at: https://normas.cra.gov.co/gestor/docs/resolucion_cra_0720_2015.htm

Ministerio de Vivienda, Ciudad y Territorio (MINVIVIENDA). 2016. *Decreto 596 por el cual se modifica y adiciona el Decreto 1077 de 2015 en lo relativo con el esquema de la actividad de aprovechamiento del servicio público de aseo y el régimen transitorio para la formalización de los recicladores de oficio, y se dictan otras disposiciones* [Decree No. 596 of 2016 Amending and Supplementing Decree No. 1077 of 2015 with Reference to Recycling Activities Within Public Waste Management Services and the Transitional Scheme to Formalize Waste Pickers de oficio, and Containing other Provisions]. Available at: <http://es.presidencia.gov.co/normativa/normativa/DECRETO%20596%20DEL%2011%20DE%20ABRIL%20DE%202016.pdf>

Annex 1: 2012 Bogota Waste Picker Census identification information

Waste Picker Census 2012, Bogotá Humana

Data Collection Form

I. PERSONAL DATA

1. a. First surname _____ b. Second surname _____
 c. Name _____ d. Middle name _____
2. ID Card
 a. Citizenship card _____ b. Identity card _____ c. None _____
3. ID Number: _____
4. Place of Birth
 a. Department _____ b. Municipality _____
5. Date of Birth: DD ____ MM ____ YYYY _____
6. Place of Residence
 a. Borough _____
 b. Neighbourhood _____
 c. Address _____
 d. Telephone No. _____
 e. Mobile No. _____
7. Gender
 a. Male ____ b. Female ____
8. Are you the head of household?
 a. Yes ____ b. No ____
9. How long have you been living in Bogotá?
 a. All my life ____ (go to question 10) b. _____ (years)
10. Place of Origin
 a. Department _____ b. Municipality _____

II. SOCIAL DATA

11. Educational Level and Highest School Year Completed

Total number of school years completed

- | | |
|--------------------------|--------------|
| a. Undergraduate/College | _____ 1 to 6 |
| b. Technological School | _____ 1 to 3 |
| c. Technical School | _____ 1 to 2 |

- d. High School _____ 1 to 6
- e. Elementary School _____ 1 to 5
- f. None

12. Social Security Registration Status

Health				Pension	ARP
a. Subsidized	b. Contributing Member	c. Beneficiary	d. None		[Occupational Risks Management]

13. Type of Housing

- a. House _____
- b. Apartment _____
- c. Low-Income Housing _____
- d. Other _____ Specify _____

14. The house where you live is:

- a. Paid-off house _____
- b. Home loan _____
- c. Rented _____
- d. Other _____ Specify _____

15. How long have you lived there? _____ Years _____ Months

16. Immediate Family

No.	Surnames	Names	Age	Kinship(*)	Occupation(**)
1					
2					
3					
4					
5					
6					
7					

* Spouse/Partner, Children, Other

** Waste picking, Paid work, Unpaid work, Work and study, Domestic work, Other

17. How many people depend on your work as a waste picker? _____

III. WASTE PICKING DATA

18. How long have you worked as a waste picker? _____ Years _____ Months _____
 a. What did you do before working as a waste picker? _____

19. How many days a week do you work as a waste picker? _____
 a. How many hours a day do you work as a waste picker? _____
 b. Do you have another occupation besides waste picking?
 Yes _____ Please specify _____
 No _____

20. In a regular week, where (neighbourhoods), when and at what times do you work as a waste picker?

Neighborhood	Dawn							Morning							Afternoon							Evening						
	12 am - 6 am							6 am - 12 pm							12 pm - 6 pm							6 pm - 12 am						
	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S

21. Which waste picker organization/s are you affiliated to?

No.	Organization	For how long?	
		Years	Months
1			
2			
3			
4			
5			

22. How many working hours a day do you spend doing the following?

	Activity	Hours
a.	Waste picking	
b.	Hauling (transport)	
c.	Sorting	
d.	Trading	
e.	Processing	

23. What means of waste collection do you use and for how many hours?

	Means	Hours		Means	Hours
a.	Motor vehicle		e.	Sphere-shaped container cart	
b.	Animal-powered vehicle		f.	Human-powered vehicle (zorro)	
c.	Tricycle		g.	Burlap sack	
d.	Flat cart		h.	Other. Please specify	

24. These means of waste collection are:

a. My own		b. Leased			c. Borrowed	
	b.1 Warehouse	b.2 Organization	b.3. Other. Please specify.	c.1 Warehouse	c.2 Organization	c.3. Other. Please specify.

25. Where do you collect materials? (Multiple-choice question)

	Place	Arrangement	%
a.	On the street	N/A	
b.	Condominiums or houses	b.1 Contract	
		b.2 Source	
c.	Shopping centres or office build-ings	c.1 Contract	
		c.2 Source	
d.	Other. Please specify		

26. Do you process collected materials? Yes _____ No _____ Go to question 28

27. What kind of processing?

- a. Sorting and classification _____
- b. Cleaning _____
- c. Compacting _____
- d. Tearing _____
- e. Grinding _____
- f. Refuse or manufacturing _____
- g. Trash/rubbish _____
- h. Other _____ Specify _____

28. From the materials below, what estimated amount do you recover weekly?

Group	Material	Kg
Paper	Cardboard	
	Folding	
	Files	
	Newspapers	
Plastics and acrylics	Dough	
	Clear PET	
	Flexible plastic	
	PVC	
	Rigid plastic	
Glass	Broken glass	
	Glass containers	
	Glassware waste	
Metals	Copper	
	Aluminum	
	Scrap	
Batteries		
Other	a.	
	b.	
	c.	

29. Who do you sell the collected materials to?

	Sale Destination	%
a.	A company	
b.	A warehouse	
c.	A truck	
d.	Another waste picker	
e.	A waste picker organization	
f.	Other. Please specify.	

30. What was your income from waste picking last week?

\$ _____



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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Statistical Briefs

WIEGO Statistical Briefs are part of the WIEGO Publication Series. They 1) provide statistics on the informal economy and categories of informal workers in accessible formats at the regional, country and city levels; and/or 2) describe and assess the methods for the collection, tabulation and/or analysis of statistics on informal workers.