Reverse Logistics for Packaging – Brazil’s EPR Model

Jacqueline Rutkowski / June, 2021
About this Brief

This brief is one of a series of case studies examining Extended Producer Responsibility (EPR) systems in various locations around the globe. Produced by the Global Alliance of Waste Pickers and WIEGO, this series looks at how the growing adoption of EPR policies and systems worldwide can either threaten or improve livelihoods for informal waste pickers who have traditionally been key players in recycling and reuse.

EPR systems come in many shapes and forms and can cover a range of materials. Their primary purpose is to hold producers responsible for the environmental and economic cost of the packaging and products that they put into the market. Some systems are mandatory policies, while others are voluntary initiatives led by companies or consortiums.

Waste is not just an environmental issue—it is a valuable commodity. For waste pickers, EPR systems can be controversial because they shift both power and profit to producers or other waste sector actors, often introducing new actors who compete for materials. But in places where waste pickers are organized, EPR can be a positive disruption that has the potential to finance new or existing waste picker activities. Thus, EPR can present both risks and opportunities for waste pickers and their organizations. Without a clear understanding of EPR in different contexts, however, it can be difficult for waste pickers and their organizations to know what to demand when an EPR system is being proposed or how an existing system should be changed.

This series aims to close that knowledge gap by sharing on-the-ground, lived experience of local waste pickers and their organizations in places where some form of EPR exists. Each study concludes with a set of recommendations for improving the system to better accommodate waste picker integration.

Local and national waste picker organizations were involved in the research and development of each brief. This case study presents the vision of Brazil’s National Movement of Waste Pickers (MNCR) based on its experience with the Sectoral Agreement.

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Brazil’s 2010 National Solid Waste Policy mandates that packaging waste is subject to reverse logistics, the system developed in Brazil for collecting and sending waste for recycling or else environmentally-sound disposal. This is a form of Extended Producer Responsibility (EPR). The law’s principle of shared responsibility assigns the duty to implement reverse logistics between manufacturers, importers, distributors, consumers and local authorities.

Furthermore, the law mandates that waste pickers should be prioritized in waste management systems, both through involvement in selective collection as well as sorting and reselling packaging materials. Corporate producers have formed partnerships with organized waste picker cooperatives, and they allocate investments to the cooperatives in exchange for data on material recovery. The current system allows waste picker cooperatives greater access to capital, which is critical to build capacity.

However, serious power inequities remain between private waste producers and waste picker cooperatives, and it will be important to ensure fair remuneration, as well as the inclusion of municipalities and individual waste pickers (those who are unaffiliated with cooperatives) in the reverse logistics process.

**Basic Case Data**

- **Location:** Brazil
- **Scale:** National
- **System type:** Mandatory sectoral agreement
- **Materials included:** Cardboard, plastic, metals, glass packaging
- **Quantity of material recovered annually:** 354,649.08 tons\(^1\)
- **Material destination:** Recycling
- **Number of organized waste pickers involved with formal (contracted) opportunities:** 5,000
- **Number of unaffiliated waste pickers informally engaging in the system:** Unknown

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Background: Waste Picker Inclusion in Brazil

Since the late 1990s, Brazilian waste pickers (or *catadores* as they are called locally) have been organizing themselves into associations and cooperatives in all regions of Brazil, having earned recognition as selective collection service providers in the waste management system. Consequently, they are considered priority partners in the systems of reverse logistics. In addition to being recognized as actors in waste management and recycling chains, cooperative waste pickers achieve better working conditions and income. Now, they separate the material they collect in equipped warehouses rather than on the streets or in dumps, as before. These warehouses are usually provided by local authorities or other partners to waste pickers, if and when they organize themselves into cooperatives. Because cooperatives collect and separate materials together, waste pickers can sell recyclables at greater scale, thus generating higher prices for all members.

In Brazil, selective (source segregated) collection is a part of waste management. Waste management is defined as a sanitation service, which, as a whole, is defined as a public service under the responsibility of the local authorities. Municipalities can hire private operators—either a company or a waste picker cooperative—to provide this public service. By law, cooperatives can be hired in a simplified legal process, which unfortunately still only occurs in less than 10% of Brazilian municipalities.

After the selective door-to-door collection made with manual carts, the collected material is packed in trucks for transport to the shed for sorting and baling. Cooperative "CooperRegião", Londrina, PR, Brazil, 2018. Photo credit: Archives MNCR

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2 “Selective collection” is the common term used in Brazilian waste management systems for door-to-door collection of segregated waste.

3 “Reverse logistics” (RL) (Logística Reversa, LR, in Portuguese) is the term used for Extended Producers Responsibility in the Brazilian Solid Waste Legislation (PNRS).


Figure 1 demonstrates the varied ways in which materials are passed along the chain for recycling or disposal. Particularly in the largest cities, private cleaning companies are generally responsible for collecting recyclable waste door-to-door, and waste picker cooperatives are responsible for the sorting, baling and marketing of the material, acting as Materials Recovery Centers.6

In many cities where there is no selective collection officially organized by local authorities, recyclable materials are collected as “donations” from individuals or public institutions that separate recyclable materials to be collected by cooperatives or autonomous waste pickers. In some cities, residents and waste pickers use an app on their smartphones to connect and arrange pickup of recyclable materials. Waste pickers also usually provide recyclable collection services in small companies and residential condominiums and for large events, such as football games and street parties.

In addition to the transport and pre-treatment service for recycling, waste pickers also offer information about recycling, educate citizens on how to separate waste at source, and raise awareness of the environmental and social benefits of their work.

**Figure 1: Waste recycling supply chain in Brazil**

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Context and Governance of Brazil’s Reverse Logistics

Brazil’s National Solid Waste Policy (n° 12.305/2010), approved in 2010, also indicates that packaging waste is subject to reverse logistics; that is, it must submit to “a set of actions, procedures and means [to] enable collection and return it to the business sector, for reuse, in its cycle or in other productive cycles or other environmentally appropriate final destination”. Responsibility for the implementation of the reverse logistics must be “shared between manufacturers, importers, distributors and traders, consumers and local authorities”.

Local authorities are responsible for implementing selective collection services, and for adopting other procedures to reuse solid waste. They also must work with economic and social agents to identify and implement measures that enable the return of these wastes to the production cycle. Manufacturers (producers) are responsible for implementing and operating the reverse logistics system through the “purchase of used products or packaging and to set up reusable and recyclable waste delivery points”. The law also specifically mandates that “the participation of waste picker cooperatives must be prioritized” in the operation of reverse logistics, especially in the case of post-consumer packaging and in the execution of selective collection by local authorities.

In 2015, the Brazilian government signed a reverse logistics agreement with a coalition of packaging companies that includes 20 associations representing 3,786 food, beverage, cosmetics, cleaning products and other companies. This agreement sets targets for the gradual reduction of packaging disposal in landfills: by 22% by 2018 and 45% by 2031. This goal must be achieved by improving the national recycling infrastructure in two aspects: investing in waste picker cooperative facilities and implementing points to receive recyclables from consumers.

Finally, the agreement encourages companies to promote information and mobilization campaigns for the correct separation of packaging waste by citizens.

A parallel agreement between companies and MNCR (Movimento Nacional dos Catadores de Materiais Recicláveis, or National Movement of Waste Pickers - Brazil) established that the investment in waste picker associations and cooperatives would be made through ANCAT (Associação Nacional dos Catadores e Catadoras de Materiais Recicláveis), the national association of waste pickers that formally represents the MNCR. ANCAT is responsible for providing technical assistance to cooperatives to help them diagnose, plan, and implement solutions to improve working conditions and productivity; this assistance will come largely through investments in equipment and the retrofitting of cooperative facilities.

The Agreement was operated through an Executive Secretariat that was led by CEMPRE until 2019, and now is led by the Coalition of packaging companies. The Brazilian federal government, via the Ministry of the Environment, is responsible for monitoring the Agreement results.

Integration of Waste Pickers in the System

CEMPRE invited the MNCR to participate in the negotiation of the Sectoral Agreement, alongside itself and representatives from the Ministry of the Environment. By law, the proposal also had to be submitted to public consultation for amendments before it came into force. Due to the obvious power inequities, organized waste pickers were unable to exert significant influence in the Agreement to install provisions favourable to waste pickers, such as linking the amount of financial support from producers to the real costs of services or allowing waste pickers autonomy over how these funds are allocated.

The partnership between waste picker cooperatives and producers began around 2010, when large multinational companies like Coca-Cola, Danone, Natura, Gerdau, and Tetrapak (among others) started offering financial incentives to some cooperatives in exchange for information on the quantities of waste diverted for recycling. Many...
years earlier, CEMPRE had declared that "the catador is the main agent of [recycling] in Brazil." Their decision was motivated by several factors. First, MNCR had a 20-year history of struggle and mobilization. Another factor in the producers’ decision was the political climate in the federal government: the Agreement was negotiated under a progressive government that supported the demands of social movements such as the MNCR.

These partnerships between producers and waste picker organizations, many still in force despite a shift in Brazil’s federal government toward the right, are operated via NGOs or consulting companies hired by the packaging producers to implement improvements in cooperatives in exchange for “production” data. Only after the Sectoral Agreement, however, was a more direct relationship established between these companies and waste picker organizations. ANCAT has increased its participation in the system annually but is still only one among other NGOs and consultancy companies that receive resources from the Coalition and other producers.

Over the past five years, ANCAT has operated several projects directly linked to or derived from the Sectoral Packaging Agreement, annually involving more than 5,000 waste pickers who are organized in about 300 cooperatives based in 100 different cities. The waste picker cooperatives have been given financial support to increase their capacity through acquisition of equipment, and they have received support in articulating local partnerships, such as, for example, with municipal governments.

Transparency, Accountability and Equity

To ensure transparency of data within the reverse logistics system, ANCAT manages a database, recording monthly production data for each of the cooperatives that it supports. These records are based on the receipts that cooperatives receive when they sell paper, cardboard, plastic, glass and metal packaging to middlemen or directly to the industry. In this way, it is possible to record how many tons of different recyclables have been diverted from landfills in various regions of Brazil.

Because the reverse logistics system’s target is related to the amount of packaging waste diverted from landfills, companies must confirm that “X” tons of packaging have been transferred to the recycling industry—which means that they have not been landfilled. However, there is currently no mechanism set up to independently monitor the reverse logistics system. Instead, the Coalition reports the results to the Ministry of the Environment, which in turn makes the data publicly available.

The amount of money that companies reimburse cooperatives for their services is not defined by the government nor by the real costs of services offered. Instead, individual companies or groups of companies now arrange reverse logistics schemes with certain cooperatives and set their own terms for remuneration of catadores. Companies in the coalition also define how much they will compensate ANCAT in exchange for the information recorded in the ANCAT database.

However, the Coalition does define fees to be paid by each company according to the amount of packaging placed on the market, though this figure is not shared publicly or with the government. The Coalition is also responsible for managing the fees it collects from companies and for operating the various processes related to the Agreement. However, information about which company’s packaging has been placed on the market and how much is not disclosed or audited by government or by society, is only discussed between each producer and the Coalition, due to alleged commercial confidentiality.

An annual contribution of financial resources flows from the Coalition to ANCAT, which, in turn, establishes its own internal procedures for investment in cooperatives. ANCAT organizes, annually, a kind of national bidding process, to which any cooperative can present itself as a beneficiary of ANCAT’s investments in exchange for data. However, as there is a limit on the financial resources available, a limited number of cooperatives can be supported each year. ANCAT determines its investments based on certain legal aspects; they also do a check to

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13 The production data refer to the quantity of different recyclables that a cooperative sells each month, after having collected and sorted the material into different fractions (HDPE, LDPE, PET, PP, cardboard, white paper, mixed paper, aluminium, ferrous and other metals, etc). Each fraction, after being pressed and baled, is weighted, and sold to middlemen or industry. For each sale, an invoice is issued stating the weight of each material. A copy of this invoice is sent to ANCAT to feed its database.
ensure cooperatives are effectively formed by waste pickers, based on the evaluation of the MNCR’s coordination in each state. In each of the 27 Brazilian states, there are waste pickers “affiliated” with the MNCR who must confirm that a cooperative is organized under the MNCR’s principles of social solidarity economy, which include self-management, democratic decision-making, internal transparency, equitable rights, and duties, including payment.14 This is not a formal procedure, but, of course, the MNCR representative must know the cooperative to approve or disapprove affiliation.15

The amount that ANCAT invests is related to the production capacity of each cooperative. In 2020, ANCAT defined an amount to be paid per ton, depending on the quantity of recyclables processed monthly in each cooperative. This investment program consumes 78% of the total funds that ANCAT receives. The remaining 22% of the resources provided by the Coalition is spent on managing the system, including national waste picker coordination teams.

ANCAT maintains accountability to the MNCR through presentations and discussions of the results of ANCAT’s participation in the Sectoral Agreement at periodic National Movement Coordination meetings. The National Coordination of the MNCR is formed by 37 waste pickers selected in processes of debate and deliberation in each of the 26 Brazilian states in which the MNCR is organized, as well as the Federal District.

Impact of COVID-19

Cooperatives were seriously affected by the COVID-19 pandemic. Most local authorities have decided to discontinue selective collection due to health concerns, and many intermediaries have stopped buying material due to lockdown rules. Waste pickers have found themselves without alternative income sources and many have faced serious resource scarcity, including a lack of food. The MNCR ran a national donation campaign to help them. Fortunately, the cooperatives that had been participating in the Sectoral Agreement were supported by companies that continued to donate resources to these cooperatives, although no production data was offered in exchange.

Strengths of the Brazilian Reverse Logistics System

1. The financial support received by cooperatives contributes to the improvement of working conditions and productivity of waste picker cooperatives and, therefore, contributes to increasing individual waste pickers’ incomes as well as providing sustainability to cooperatives. To some extent, this money remedies the lack of access to working capital, a resource that cooperatives are unable to access in Brazil.

2. The traceability of the reverse logistics system is guaranteed by two databases that record the quantities of each recyclable material sold in each of the participating cooperatives. One database is administered by ANCAT and the other by the Coalition itself, where data from other similar experiences are also computed. The database managed by ANCAT also records individual waste picker income and the prices of the material sold in each Brazilian region. This database was the basis for a Brazilian Yearbook for Recycling,16 launched in 2018, which intends to annually record waste pickers’ contributions to recycling in Brazil. In addition to generating an important record about the activities of the waste pickers, these systems allow ANCAT to track the packaging recovery in an efficient and reliable way.

3. Plastic, metal, paper and glass waste sold as recyclables by cooperatives can be reported as packaging, which facilitates the implementation of the reverse logistics system. The cooperatives’ mode of operation ensures that most of this material comes from households, where a large part of packaging waste is generated. This

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14 Waste picker cooperatives usually share all the income they earn equally among all members, regardless of the role that each individual plays in the cooperative. The amount paid per hour worked is the same for all associated waste pickers; some differences in the amount paid monthly, when they exist, are related to the number of hours worked by each person in the month.

15 There are a few cases of cooperatives that were created by people who take advantage of the poor education of waste pickers to exploit them. In these cases, the MNCR generally acts to empower the waste pickers, building capacity and supporting them so that they can take ownership of the cooperative.

guarantees the environmental principle of Extended Producer Responsibility, which aims to increase recycling targets and the amount of packaging actually diverted from the landfill.

4. The reverse logistics system has demonstrated that cooperatives have the capacity to act as strong players in the recycling production chain. In 2018, the MNCR organized UNICATADORES, a National Federation of waste picker cooperatives, and recently organized a collective social enterprise whose objective is to intervene at national-level recycling markets to ensure fairer distribution of the value chain's earnings, generating resources for new investments. Their ultimate goal is to improve the working and income conditions of all waste pickers across Brazil. Financial support is needed to carry out these proposals and it is hoped that the reverse logistics system and partnerships with packaging producers will lead to greater support for cooperatives.

Challenges of the Brazilian Reverse Logistics System

1. The amounts paid by producers are not based on the costs of services (collection, sorting, baling, stock, etc.) performed by the cooperatives plus a due remuneration, as normally occurs in cases of payment for the provision of services. This remuneration is essential to guarantee the sustainability of the cooperatives and the reverse logistics system as a whole. The MNCR frequently raises this issue to producers, who repeatedly refuse to answer or even discuss it due to the power inequality between the two entities. This decoupling of the actual costs of packaging recycling and the amounts financed by packaging producers in EPR systems also occurs in places like the EU.17 Despite the various differences, the producers, given the disproportionate power they hold in the arrangement, may search for cost reductions and define the rules that best suit them in the system.

2. Lack of municipal involvement in the reverse logistics system makes it difficult to prioritize the inclusion of waste picker organizations, and gives producers more power to establish rules that benefit them and undercut their financial responsibility to the system.

3. As implemented, the current reverse logistics scheme does not guarantee the inclusion of individual waste pickers who are not members of a cooperative, although some cooperatives have partnerships with them, offering better prices for recyclable materials than middlemen and providing them with other types of support in cooperative warehouses. The large number of unaffiliated individual waste pickers underscores the need for organizing new cooperatives throughout Brazil (especially considering many individuals who still work in informal dump sites).

4. Many existing waste picker cooperatives need to improve their management skills and available infrastructure, which requires working capital.

5. Since the Sectoral Packaging Agreement came into force, Brazil has been in constant political turmoil that culminated in a 2016 political coup. A second phase of the Agreement, proposed by the producers to the government, included some changes suggested by waste pickers such as the expansion of the number of cooperatives and cities to be supported. This recommendation has been under government assessment since 2018. However, the government does not take a position and has not invited waste picker organizations to be involved in discussing it. On the other hand, some alternative proposals, presented by the waste management industry, that favour the incineration of waste and a greater cost reduction for companies, based on “recycling certificates,” are continually gaining strength.

**Recommendations for a more Inclusive Reverse Logistics System**

- Municipalities need to be incorporated into the reverse logistics system, as they are legally responsible for the selective collection of municipal solid waste. However, this inclusion should not imply the exclusion of waste pickers. Local authorities should contract waste picker cooperatives as service providers, ensuring their involvement in selective collection and payment from producers for sorting services. This is essential not only as an environmental justice issue, but also in order to maintain positive results provided from the inclusion of waste pickers in waste management and a reverse logistics system.\(^{18}\)

- Waste picker organizations should be included in the negotiations with companies and government to update and expand the reverse logistics system.

- The reverse logistics system should cover all of the materials generated by producers, who should be required to report fully on their material generation and recovery.

- The amount of money paid by producers to waste pickers/cooperatives should be based on the costs of services (collection, sorting, baling, stock, etc.) performed, and should also include financial support for the establishment of new cooperatives, training of new and existing cooperatives, as well as improvements to systems and infrastructure.

- Waste picker cooperatives should be given priority contracting within the system. The additional social work that these cooperatives perform when they include unaffiliated waste pickers in their activities must be recognized and duly remunerated.

- The system should not be allowed to incentivize incineration or chemical recycling.

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ABOUT GLOBAL REC
The Global Alliance of Waste Pickers is a networking process supported by WIEGO, among thousands of waste picker organizations with groups in more than 28 countries covering mainly Latin America, Asia and Africa. Visit www.globalrec.org

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

ABOUT MNCR - BRAZILIAN WASTE PICKERS NATIONAL MOVEMENT
MNCR is a policy-action oriented movement, founded in 2001, which aims to organize Brazilian waste pickers in their struggle for rights and recognition as actors in the value chain of recycling and waste management services. Visit www.mncr.org.br

ABOUT ORIS - OBSERVATORY FOR INCLUSIVE AND SOLIDARITY RECYCLING
ORIS is an interdisciplinary action-research network, organized in 2012, by academics and technicians from various institutions, which aims to build solutions for the treatment of solid waste from a socio-environmental perspective, based on theory and practical knowledge. ORIS supports the MNCR in solving eventual technical restrictions on waste pickers as providers of waste management services.