Impact of inclusive solid waste policy in Brazil

In the summer of 2017, MIT City Planning Master’s student Talia Fox spent six weeks in Belo Horizonte, Brazil researching the experiences of wastepickers participating in corporate social responsibility (CSR) programs established under the PNRS. Her research in Brazil builds upon previous MIT D-Lab student work exploring mobile technologies for wastepicker cooperatives with the Danone Ecosystem Fund through the course D-Lab: Waste, as well as D-Lab’s Practical Impact Alliance (PIA) Inclusive Recycling Working Group.

The research suggests that while some CSR programs can provide structural, administrative, and social support for wastepickers, due to the fact that corporations controlled the development of the PNRS and its programs, wastepickers remain insufficiently compensated for their services. Drawing from the successes and challenges of the PNRS, this D-Brief identifies strategies to ensure that waste management policy in middle and low-income countries benefits small-scale, informal waste actors as they fight for respect, fair pay, and legal protections.

Key findings and recommendations

The participatory system that the PNRS prescribes:

- perpetuates power imbalances among businesses, government, and wastepickers;
- reinforces a lack of corporate and government accountability through democratic processes;
- provides unfair compensation to wastepickers for their economic, social, and environmental work; and
- facilitates some improvement for wastepickers in terms of income, autonomy, and recognition.

To improve implementation of the PNRS, decision-makers should:

- establish specific guidelines and enforcement mechanisms for sector agreements among industry players, including financial disclosure requirements;
- encourage participation of municipal leaders in discussions regarding the role of CSR programs in their cities;
- compensate wastepickers as market actors by assessing the value of their contributions to waste systems; and
- utilize data-driven incentives to support recycling activities to ensure mutually beneficial outcomes for wastepickers and corporations.
Study methodology

The primary sources for the research were 16 semi-structured interviews (30-60 minutes each) conducted in Portuguese during six weeks in June and July of 2017, in the city of Belo Horizonte, Minas Gerais. Interviewees included representatives of wastepicker cooperatives and associations, also called membership-based organizations (MBOs), municipal and state government, industry, academia, private foundations, and nonprofits involved in work related to waste. Interviews were coded into themes and triangulated with notes from observations of meetings and events attended during the study period, as well as literature, reports, and popular sources. Also informing the study conclusions were thirty-four interviews conducted with members of eight wastepicker cooperatives and associations in January of 2017 in southeast Brazil, as part of the aforementioned D-Lab PIA project.

Waste management context in Brazil

The PNRS emerged from the volatile politics of labor organizing and private sector control following Brazil’s military dictatorship (1964-1985). The PNRS is therefore considered a major victory for leaders of Brazil’s national wastepickers’ movement (MNCR), who successfully fought for wastepicker representation in the law. Wastepickers in Brazil play an important role in the country’s waste management systems, but like many wastepickers around the globe, they are not often recognized or remunerated for their work.

Under the terms of the PNRS, product manufacturers must implement EPR or “reverse logistics,” a policy concept that attributes responsibility for the disposal of post-consumer materials to the manufacturer of a product. To establish Brazil’s EPR system for packaging, 20 groups of 3,786 producers and manufacturers signed a sector agreement, which states that these corporations will partner with wastepicker MBOs to recycle post-consumer packaging.

Analysis of policy and programs: findings and recommendations

Power imbalances

Participation of municipal leaders

According to interviewees, despite the participation of diverse sectors in the formation of the PNRS, the business lobby heavily influenced the regulation. By law, businesses control the formation of sector agreements to implement EPR. As a result, their priorities appeared in the first iterations of the agreement. Researchers (Besen and Jacobi 2017) have determined that business leaders also dominated the public comment and review process for their own agreement proposal, leaving out wastepickers and municipalities. The absence of municipal participation, in particular, threatens a political emphasis on the city in Brazil in the past two decades and associated policies supporting the urban poor.

To ensure that wastepickers retain an ally in decision-making processes, city leaders should play a more central role in discussions with the packaging sector and federal facilitators. Many municipalities already invest in wastepicker MBOs by providing physical infrastructure and paying for utilities, or even contracting MBOs to manage collection. Future iterations of the packaging sector agreement should acknowledge this by requiring businesses to compensate municipalities for the service they are performing in facilitating reverse logistics. Finally, government can work with civil society actors to reinvigorate programs like the Waste and Citizenship Forums, which can strengthen partnerships between municipalities and wastepickers.

Lack of corporate and government accountability

Guidelines and enforcement mechanisms

From the perspectives of wastepickers and allies interviewed, a law designed to support corporate interests means little enforcement of the primary goal of PNRS: to hold all waste actors accountable. Industry representatives and wastepickers alike explained that corporations had financial incentives to push for less stringent recyclable material quotas and taxation structures within the sector agreement. Furthermore, investment in MBOs is inconsistent and arbitrary: some corporations, including Danone through its CSR program Novo Ciclo, contribute significant resources, while others do not even participate in the sector agreement and are not penalized.

To promote improved accountability, transparency is key. The sector agreement should require that individual corporations disclose expenditures, as well as the means by which they decide how to
invest through CSR programs. Guidelines for these programs should further ensure that companies invest in a meaningful way. According to wastepickers and nonprofit staff interviewed, investments should support long-term commitment to a group, rather than a temporary project or donation of technology, as well as staff that will develop mutually trusting and communicative relationships with wastepickers. CSR programs should also be required to acknowledge publicly that their investments are not charitable; they respond to legal requirements intended to compensate the legitimate work of economic actors.

_Unfair compensation to wastepickers ➤ ➤ ➤

_Wastepickers as market actors_

The lack of financial accountability discussed above specifically presents challenges for the wastepickers as they advocate levels of investment that appropriately remunerate their work. Adapting CSR programs to fulfill EPR saves corporations money, despite the fact that they serve very different purposes. Because of the charitable nature of CSR, the PNRS does not require that businesses invest in wastepicker MBOs at a rate proportional to the quantities of material the MBOs recycle. Nevertheless, corporations may assert that they have recycled this material by submitting data to fill their EPR material quotas under the PNRS.

Wastepickers and MBOs should be compensated as market actors for the services they provide as recyclers, environmental educators, economic engines for municipalities and regions, and spaces of professional, economic, and social development. Where possible, investments should be proportional to a standardized calculation of the value that the wastepicker MBOs contribute to the waste system, in terms of quantities of materials processed, miles traveled, and/or natural resources saved.

_Some improvements for wastepickers ➤ ➤ ➤

_Data-driven incentives to support recycling activities_

Wastepickers and nonprofit staff interviewed widely agree that Danone’s Novo Ciclo and similarly-structured programs have made improvements to wastepicker livelihoods and cooperative processes. At the same time, many CSR partnerships withhold benefits from smaller cooperatives that need the most support. This challenge exists because the packaging sector agreement incentivizes companies to seek out the most productive MBOs, generally located in the most developed cities. Submitting data on the quantities that MBOs produce is the way to prove compliance, so if businesses collect data from a single, larger MBO, rather than several smaller MBOs, they can save on administrative and logistical costs.

Rather than prioritizing World Cup cities as sites for investment, as the current agreement does, future agreement iterations should require that a certain percentage of business investment go to smaller, less productive MBOs to support improved incomes and autonomy. Furthermore, the mere submission of production data should not prove that a company has recycled. Future agreements could require that corporations, wastepickers, and government develop collaborative definitions of what counts as evidence for recycling. These alternative metrics could incentivize corporations to invest meaningfully, while providing a more accurate picture of the material recycled and the livelihoods improved.
Evaluating Inclusive Recycling Practices Under Brazil’s National Solid Waste Policy

FIELD RESEARCH
Talia (left) spent a total of nearly three months in Brazil learning about the wastepickers’ movement and its role in the development of Brazil’s waste policies. In the time between her two field visits, Talia analyzed her data in the context of the country’s ongoing political and historical dynamics. She connected with staff of local nonprofits and corporations, whose support will enable her to return recommendations to the networks of wastepickers, researchers, and technicians who shared their time and information.

Next steps
Future installments of this research can more broadly represent the perspectives of government and industry in the development of the PNRS and packaging sector agreement. Next steps, to that end, will include speaking to a wider range of corporate leaders and high-level public officials involved in negotiations. Results from this research will be circulated to participating partners in Brazil to inform subsequent phases of the packaging sector agreement. Recommendations will also be presented at a market system co-design workshop in Ghana in August 2018, where government officials, wastepickers, and multinational corporations will co-design an inclusive recycling system for the city of Accra.

Future impact
Because the basis for EPR policies is those established in the European Union and other OECD nations, simply replicating existing policies may not be appropriate for distinct contexts. Evaluating inclusive recycling practices under Brazil’s National Solid Waste Policy hopes to improve implementation of the PNRS by informing a future iteration of Brazil’s EPR system that more directly benefits wastepickers. This research also provides a case study of the adaptation of EPR to the global South, where wastepickers and other small-scale actors play an important role.

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MIT D-Lab Inclusive Markets
The MIT D-Lab Inclusive Markets program engages with regional and community leaders to develop inclusive businesses, markets, and economies that promote equity, resourcefulness, and resilience for people living in poverty.

Further information & full thesis
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1 While in Brazil, many wastepickers are incorporated into formal systems, most wastepickers around the globe are part of informal economies.

Image on page one header: . Recyclable materials sorted by members of the Ação Reciclar Cooperative in Poços de Caldas, July 2018

Founded in 2002 and based at the Massachusetts Institute of Technology, MIT D-Lab works with people around the world to develop and advance collaborative approaches and practical solutions to global poverty challenges.