



Integrating the Informal Waste Recycling Sector in Latin America

By “be Waste Wise”

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Editor' Note: This paper targets a broad audience. Unless specifically stated otherwise, the opinions expressed in this publication reflect the authors' personal observations. The following article is the result of a *be Waste Wise* panel with the same name.

“When designing solutions for improved waste management, we cannot just focus on technical aspects without an adequate understanding of how the overall system is currently working including both formal and informal elements” ~ Jane Olley

Introduction

Other *be Waste Wise* panels have considered recycling and waste management in North America and Europe. This panel explores how solid waste management is different in the Global South, and in particular in Latin America and the Caribbean, and considers the benefits of integrating the informal sector into municipal waste management strategies.

On a global level, increasing population coupled with high rates of urbanization has resulted in a still largely unacknowledged solid waste management crisis. Latin America is one of the most urbanized regions of the world and waste management infrastructure and services have generally not been able to keep pace with the rapid expansion of cities.

Some cities in Latin America are facing this challenge by integrating the informal sector recyclers who are already active in their cities into the municipal solid waste management systems. In many cities, these “*recicladores*”, “*cartoneros*” or “*catadores*” (a few of the many names used for these workers in the region) are responsible for up to 90% of the recyclable waste recovered from the waste stream. Their work reduces municipal waste transportation costs, increases landfill lifetimes and supports the recycling chain throughout the region.

Every location presents its own challenges—there is no one-size-fits-all solution for integrated solid waste management systems—but relevant lessons can be drawn from both failed attempts and successful examples of informal sector integration in recycling systems in Latin America.

Differences between waste management in the Global North and Global South

In the first series of “*be Waste Wise*” panels the discussion primarily focused on the issues affecting waste management and recycling in North America and Europe. This panel on Integrating the Informal Recycling Sector in Latin America is our first discussion about an issue that is particularly relevant to the low and middle income countries and the context in the Global South. Waste

management is highly context specific. Therefore it is important to distinguish between the conditions in the Global North and the Global South.

1. Recent ILO figures suggest that 24 million people around the world are involved in the informal waste recycling sector, 80% of whom are waste pickers. Some estimates say that 1% of urban population in developing countries make their primary household income through informal sector waste management activities. In Latin America alone, 4-5 million waste pickers earn their livelihood by being a part of the global recyclables supply chain (Regional Initiative for Inclusive Recycling).
2. Municipal budgets in the Global South are often limited and only a small percentage of that budget is assigned to waste management as compared to other municipal services. In the Global North waste management is recognized as a necessary public good and there is a greater willingness to pay for this service.
3. Solid waste management (e.g. waste collection, transportation and recycling) is generally more labour intensive than in North America and Europe.
4. Urbanization in the Global South is often haphazard and unplanned, creating pockets of high and low income neighbourhoods. This creates logistical issues for the waste management service provision limiting options for viable waste collection and transportation. It is often the informal sector that steps in to fill this service gap.
5. The maturity and strength of the legal framework differs between the Global South and Global North. In North America and Europe the legal framework of waste management actively promotes and provides incentives for waste reduction, reuse and recovery whereas, despite recent developments in some countries, in Latin America legal frameworks remain focused upon mixed waste collection, transportation and disposal.
6. Recycling rates in Argentina are at 11% of the total waste stream with 95% of this material is recovered by the informal sector (Eric Feinblatt). This situation is replicated in many other countries. The informal sector recovers between 50% (e.g. Mexico) and 90% (e.g. Nicaragua) of the waste recovered and in the different countries of the region. Resource recovery and recycling is driven by market conditions. Materials that have a value are diverted from landfill through an informal network of recyclers and waste collectors.
7. The composition of waste is also very different in the Global South where organic waste is a much larger percentage of the waste stream. Because of the high percentage of organics in the waste stream in many cities in the Global South, innovations in decentralised composting and small scale biogas have been seen across the Global South (particularly in India) and can be used effectively by the informal sector, making a zero waste future a real possibility.

Why include the informal sector?

The informal sector can be highly effective at collecting and diverting waste from landfill. When empowered with a facilitating legal framework, and collectively organized, the informal sector can be a key part of a sustainable resource recovery system. Using people power to increase recycling and diversion rates decreases the need for expensive, fixed, high technology solutions.

Understanding that the context for waste management is different between the Global North and Global South, and even in different areas within a city or region, means that no two situations will be the same. However, if there is one principle to follow it may well be to consider the context and look

for the simplest solution. The greenest cities of the future may well be those that use flexible, adaptable solutions and maximize the work that the informal sector is already doing.

Dr. Alfonso Martinez

“If a city wants to tell a story of successful administration and recycling and be a model green city, it should integrate waste pickers into the formal sector.” ~ Alfonso Martinez

Latin America has one of the highest rates of urbanization in the world (80% urban population). By 2050, 90% of Latin America’s population will live in urban areas. This high rate of urbanization coupled with the global economic crisis has resulted in a waste management crisis. Municipalities find themselves unable to keep up with providing services and infrastructure to the urban populations.

Just as waste management drivers are different in the Global North and Global South, these differences are also apparent within cities. There are often two very different contexts within cities. In low-income neighborhoods waste collection services are often not provided and individuals and families accumulate and then sell their recyclables for additional income. In contrast, residents in high income neighborhoods do receive a waste collection service and their motivation for recycling is often related to greater levels of environmental awareness. It is important to consider these differences when designing waste management solutions.

Imported systems, and even locally derived systems based on examples from the Global North, generally focus on only one waste management scenario, making it difficult to manage the multiple competing scenarios in many cities in Latin America. There is often a bias towards the automation of waste management services, with the application of the high technology solutions used in the Global North. Regardless of the practicality or scientific evidence against certain high tech solutions, these are often sought after, thought to raise the bar of the city, to make it appear more sophisticated and modern. This leads to a misconception that working with informal sector is a step backwards in terms of urban development and modernization.

Conflicts between private waste management companies, the municipality and informal recyclers are common in Mexico. The waste management companies do not want pickers on the landfill and waste pickers then go to the municipality for help. However, municipalities usually have very little experience to support the integration of formal and informal waste sectors. There are opportunities for new systems to emerge within this conflict. For example, during a similar conflict in Mexicali, Mundo Sustentable, with the help of Danone, intervened to help a private company work with the informal waste sector and improve recycling rates.

In Latin America, there is a great opportunity to increase recycling rates by using labour-intensive solutions, which create jobs and support the development of a better urban environment in the cities. Municipal governments should be an integral part of these processes as they are usually responsible for solid waste management at local level. The key to catalyzing informal recycling sector integration will be the development and dissemination of successful examples.

Dr. Peter Cohen

“One of the major challenges is integrating an informal sector that presents both similarities and differences with the formal sector.” – Peter Cohen

Informal recyclers provide important a range of services to municipalities (such as waste collection and recovery in communities that would not otherwise have access to them), as well as cost savings (for example, the extension of landfill life and reduced transport costs), yet are rarely compensated for these benefits. Informal recyclers further form the foundation of an entire recycling supply chain, which ultimately benefits formal businesses, and often aliment entire local economies.

Municipal governments are often hesitant to work with informal actors, who are frequently seen as an unknown quantity. Yet often in the process of working and developing relations with informal recycler groups, their concerns diminish and they may actually exhibit enthusiasm. Likewise, the recyclers may gain in confidence and professionalism in their experience of formalization.

One major challenge facing efforts to integrate the informal sector in developing countries is the desire of some local governments to adopt technological solutions that appear more “modern.” In much of Latin America, however, low-cost, low-tech solutions tend to be more viable and sustainable.

Lucia Fernandez

“The state and the municipalities need to recognize the service that waste pickers are providing. This is happening in many places in Latin America (Colombia, Brazil and Argentina). Little by little the waste pickers are starting to be seen differently, not as a problem or a barrier to overcome, but as public service workers who are part of the waste management solution.” – Lucia Fernandez

The main difference between Latin America and the countries of the Global North is that solid waste management is a labor intensive system. It is made up of workers and hence has an important social component.

The ILO estimated there is 24 million of people working in the global recycling supply chain, but those at the bottom of the pyramid, the waste pickers, make up 80%. They remain the lowest paid even though they make an enormous contribution to their cities.

It is important to understand that highly sophisticated, high technology systems are not required for effective resource recovery. In many cities in Latin America between 80-90% of everything that is recycled is recovered by the informal recycling sector.

Despite the fact that there is little or no public investment in waste management or recycling infrastructure, cities with an active informal sector reach twice the rate of fully formalized municipal solid waste management systems. As an example, the recycling rate is 60% in Cairo, while in Rotterdam (and other cities in the Global North) recycling levels only reach 30%, even with a high public investment in the system (UN Habitat, 2010).

When designing infrastructure and waste management systems we must consider not only the waste management and resource recovery needs but also the social side of the system. In order to be effective, efforts to upgrade waste management services should go hand in hand with efforts to formalise and integrate the informal sector.

An example of a recent success story is that after 27 years of struggle, the waste pickers in Bogota, Colombia have managed to change the government’s outlook on their work and their existence. They are now included in the system and are paid per tonne of waste collected, just like any other private sector collection and waste management company would be. They have become recognized

as public service providers, acknowledged for their contribution to the environment and public health of the city.

The key challenge is to be much more creative and understand that in order to improve the working conditions of waste pickers and in order to increase recycling rates, we don't need high technology. We need a systemic approach and this can be very simple sometimes infrastructure as simple as a roof [on a sorting area] can be effective in improving working conditions.

We need to change our mindset. We are not living in a world of full employment, and so we should take care of the employment and livelihoods that have already been developed. We need to understand that the labor intensive recycling systems of the south provide livelihoods to millions of informal workers. These waste pickers have a right to continue to do the work they have been doing for centuries, and their access to materials must be ensured. They should be recognized and respected for earning a livelihood while providing services to the city.

Resources

1. [Working Towards Sustainable Development](#): Opportunities for decent work and social inclusion in a green economy. 2012. International Labor Organization (ILO).
2. [The informal recycling sector in developing countries](#): Organizing waste pickers to enhance their impact. 2008. Martin Medina.
3. [Solid Waste Management in the World's Cities](#). 2010. United Nations Human Settlements Programme (UN-HABITAT)

Websites

1. [Regional Initiative for Inclusive Recycling](#)
2. [Mundo Sustentable](#)
3. [Global Alliance of Waste Pickers](#)
4. [WIEGO](#)



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be Waste Wise is a simple idea: Use 21st century tools to share expertise globally, opening up high-quality, leading edge thinking to those who have not had access to this expertise, while also eliminating the environmental and financial costs of global conferences. *be Waste Wise* will conduct online video panels with experts from across the waste spectrum using Google+ Hangouts, broadcast them live, and then publish content for ready use by decision makers, policy analysts, experts and advocates. For more about *be Waste Wise* click [here](#).