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INTERNATIONAL ALLIANCE OF WASTE PICKERS

CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS

Managing Organics With Waste Pickers: A Briefing for Policymakers

MAY 2026

Index

Executive Summary

The waste picker sector forms the backbone of waste collection, sorting, and recycling in most of the world. The waste picker workforce, estimated at **15-20 million workers globally**, has begun to deploy its decades of expertise to develop new green jobs managing organic waste for citizens and municipalities.

In several countries, waste pickers have a decades-long history of using food waste for animal feed as well as making compost that is sold informally, providing a precious environmental service without recognition or compensation. In more recent years, a growing number of waste picker groups have become official service providers either for source-separated organic waste collection only, or both collection and processing of organic waste. This study assesses the experience so far and provides guidance for government officials and financial institutions to support waste-picker-operated organic waste management systems.

Key findings and recommendations

CHAPTER 1

Waste pickers are uniquely positioned to manage organics, because:

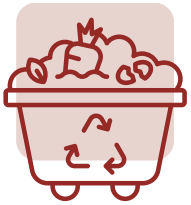
- They can serve as a single provider for all waste-management services;
- They are an organized workforce with extensive experience in waste handling, including organics;
- Hiring them ensures a just transition for waste pickers affected by dumpsite closures;
- Fair contracting of waste pickers helps generate and retain local wealth.

RECOMMENDATIONS FOR GOVERNMENTS:

- Recognize waste pickers as workers and waste service providers, guarantee their labor rights as workers and formally define waste pickers in public policy;
- Prioritize waste pickers for organic waste management, and guarantee secure and continued access to waste as a livelihood right;
- Include waste pickers in initiatives promoting composting and other management of organic waste.

CHAPTER 2

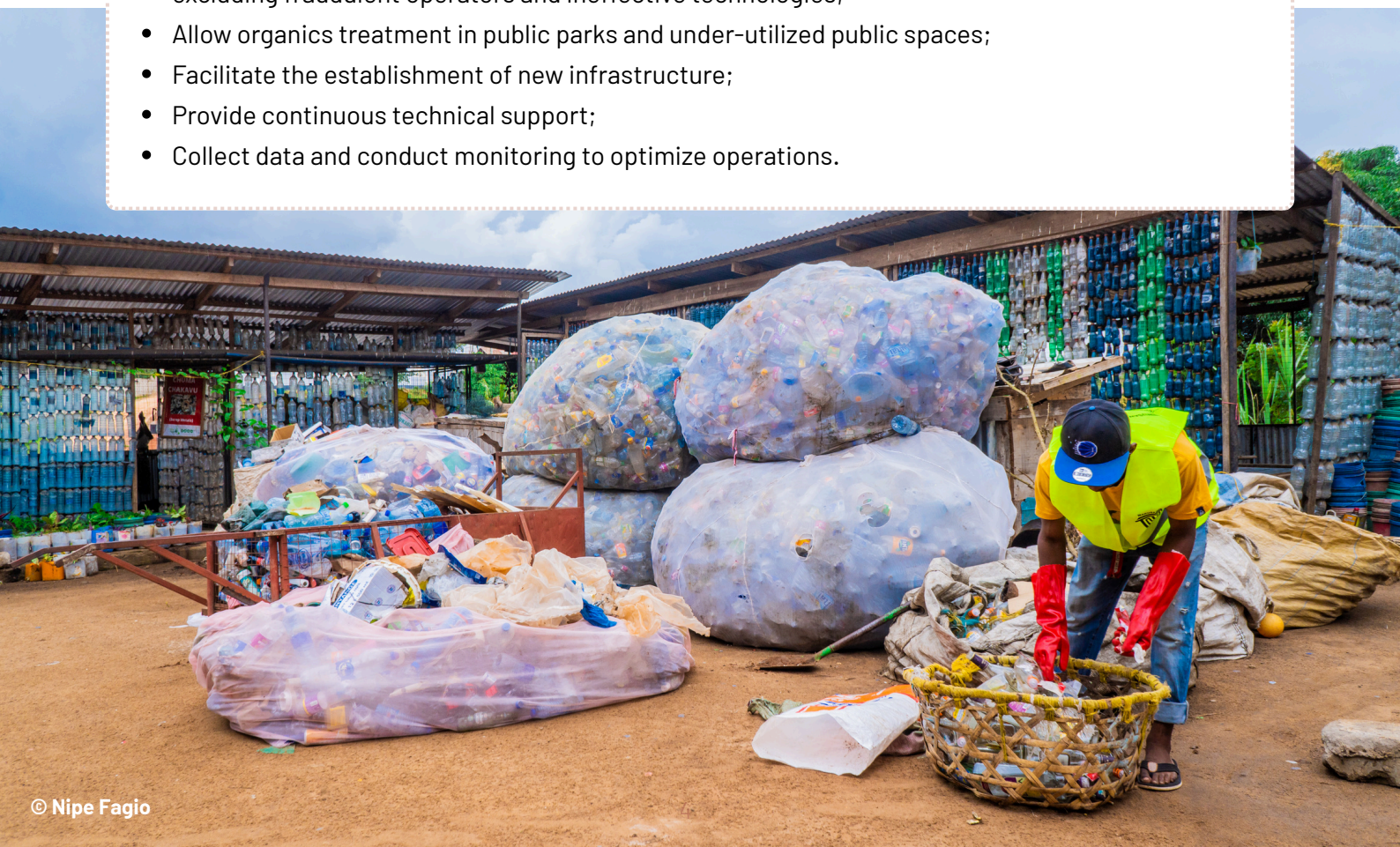
Key ingredients for successful organics management include:



- Mandatory source separation of organic waste;
- Environmental education and incentives for behaviour change;
- Frequent doorstep collection;
- Start with large generators;
- Holistic city-level approach;
- Choice of technologies suited to the local context;
- Adequate technical support, equipment and infrastructure;
- Access to land space for organics management and treatment (decentralization is an option, including for large generators)

RECOMMENDATIONS FOR GOVERNMENTS:

- Require organic waste separation at source, starting with large generators;
- Contract waste pickers to manage organic waste in all public green spaces;
- Partner with waste pickers to develop city-level policies and assign dedicated staff;
- Consider auditing service providers to recognize strong performance and practices, while excluding fraudulent operators and ineffective technologies;
- Allow organics treatment in public parks and under-utilized public spaces;
- Facilitate the establishment of new infrastructure;
- Provide continuous technical support;
- Collect data and conduct monitoring to optimize operations.



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CHAPTER 3

Working towards gender equality

- Women represent a significant share of the waste pickers workforce;
- Women and gender minorities face overlapping vulnerabilities, including being women or gender minorities, being poor, working as waste pickers, and sometimes belonging to disadvantaged communities;
- Gender inequalities are multiple and include: the burden of unpaid care work, increased health risks from exposure to harmful substances (including for pregnant people), gender-based violence, income disparities, limited access to training and technology, and lack of recognition of their role;
- Creating spaces to identify gender differences and build collective power is an important starting point, while women and gender minorities participate in decision making spaces is a fundamental driver of change.

RECOMMENDATIONS FOR GOVERNMENTS:

- Provide funding for gender-transformative action in public policies and programs;
- Incorporate gender-disaggregated data into baseline assessments, research, and monitoring;
- Set specific targets to advance gender equality in policies and programs, including the inclusion of women and gender minorities in funded projects, negotiations, and training;
- Incorporate gender and power analysis into program and policy design;
- Provide access to resources not typically available to women and gender minorities, including technology, training, and financing;
- Support leadership and organizations working towards women's rights to promote gender equality and improve public policy;
- Incorporate gender-transformative monitoring, evaluation, accountability and learning systems;
- Promote a narrative shift in public communications that make patriarchal structures visible and promote gender equality.

CHAPTER 4

The Economics of Organic Waste Management

- Start-up financing may be followed by an optional shift to subscription fees;
- Full cost recovery is required for scaling;
- Sustained funding is essential for year-round operations;
- Private funding can complement but not replace public financing;
- Organics management supplements waste pickers' income but cannot sustain wages on its own;
- Revenue from product sales provides, at best, a complementary income stream and must not replace public remuneration for essential services;
- Compost production takes time and markets are often underdeveloped;
- Achieving commercial-grade compost can be challenging.

RECOMMENDATIONS FOR GOVERNMENTS:

- Clarify and simplify administrative requirements to manage organic waste and sell compost and other outputs, and assign dedicated staff to liaise with waste pickers;
- Reduce or waive fees for permits, licenses, and certification related to organic waste management and product sales;
- Subsidize compost lab testing costs or partner with universities to provide low-cost testing services;
- Expand municipal procurement of compost from organic waste management systems for use in public green spaces; and
- Protect household-level livestock rearing as a productive outlet for municipal food waste, a source of manure for high-quality compost applications in the agricultural sector, and a poverty alleviation strategy for waste picker households.
- Private funders, multilateral, and bilateral aid providers may help bridge financing gaps in organic waste management, particularly for time-bound needs such as start-up funding.


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Introduction

The waste sector is the third largest source of anthropogenic methane emissions globally, a powerful greenhouse gas that traps 82.5 times as much heat as CO_2 over a 20-year timespan. Methane emitted by organic waste - such as food scraps and green waste - disposed of in landfills and dumpsites is a key component of those emissions. In many countries, organic waste represents over 50% of municipal solid waste. Source-separated collection and treatment of organics can reduce methane emissions from landfills by 62%,[1] and help meet global targets such as the Global Methane Pledge[2] and the UNFCCC COP29 Declaration on Reducing Methane from Organic Waste. Methane also harms human health as a precursor to ozone, an air pollutant that causes respiratory disease and deaths, especially in peri-urban areas where landfills and dumpsites are concentrated.[3]

At the same time, organized waste pickers form the backbone of waste collection, sorting, and recycling in most of the world. The waste picker workforce, estimated at 15-20 million workers globally,[4] has begun to deploy its decades of expertise to develop new green jobs managing organic waste for citizens and municipalities. This study assesses the experience so far and provides guidance for government officials and financial institutions to support waste-picker-operated organic waste management systems.

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[1] Tangri, N.; Vilella, M.; Moon, D. and Naayem, N. (2022) Zero waste to zero emissions: How reducing waste is a climate gamechanger, GAIA.
[2] The Global Methane Pledge aims to reduce global methane emissions 30% by 2030.
[3] Mar, K.; Unger, C.; Walderdorff, L.; Butler, T. (2022) Beyond CO2 equivalence: The impacts of methane on climate, ecosystems, and health, *Environmental Science & Policy*; Malashock, D. et al (2022) Estimates of ozone concentrations and attributable mortality in urban, peri-urban and rural areas worldwide in 2019, *Environmental Research*
[4] O'Hare, P. and Nøklebye, E. (2024) "The human face of the UN plastics treaty"? The role of waste pickers in intergovernmental negotiations to end plastic pollution and ensure a just transition, *Cambridge Prisms: Plastics* and references therein.

Scope and Methodology

This analysis draws on the experience of waste pickers managing organic waste across Africa, Asia-Pacific, and Latin America and the Caribbean, including 151 members of the International Alliance of Waste Pickers (IAWP) consulted during workshops in August 2025, as well as the following waste picker leaders and composting experts who kindly agreed to in-depth interviews:

- Jyoti Mhapsekar of Stree Mukti Sanghatana (SMS - Women's Liberation Organization) in the city of Mumbai, India;
- Harshad Barde, director of the Solid Waste Collection and Handling (SWaCH) cooperative set up by the Kagad Kach Patra Kashtakari Panchayat (KKPKP) waste pickers trade union in the city of Pune, Maharashtra, India;
- Mariam Shadrack, Marco Dotto, Paulo Sarakikya, and Tajaeli Alex Masaki of Nipe Fagio (NGO) supporting the work of the Wakusanya Taka Bonyokwa Cooperative in Bonyokwa, Ilala district, Dar Es Salaam region, Tanzania;
- Johnson Doe of the Green Waste Pickers Cooperative Society (GWPCS) in the city of Accra, Ghana;
- Nacho Coll of the Cooperativa Recuperadores Urbanos del Oeste (RUO), and Matías Tarando, of the Federación Argentina de Cartoneros, Carreros y Recicladores (FACCyR), in the city of Buenos Aires, Argentina;
- Juan Carlos Niño of the Oikos Vida waste pickers cooperative in La Plata, Colombia;
- Valquiria Cândido Silva of the Cooperativa de Trabalho e Coleta do Parque Cocaia (COOPERPAC) in the Grajaú district of the city of São Paulo, Brazil;
- Victor Hugo Argentino de Morais Vieira of Instituto Pólis[5] in São Paulo, Brazil.

The study considers the operational, economic, and policy factors that enable or constraint waste pickers' ability to deliver effective organic waste management services, including how these dynamics differ based on their gender. Its scope focuses on waste pickers piloting and operating organic waste management, primarily in urban settings, collecting and managing food and green waste from households, schools, government institutions, markets, restaurants, hospitals and other organic waste generators. It does not cover with organic waste generated through agricultural or livestock-rearing activities.

[5] See Instituto Polis' detailed resources on organic waste at https://brasilcompostacultiva.org.br

Waste Pickers are Uniquely Positioned to Manage Organic Waste

The role of waste pickers as a cornerstone of recycling systems, particularly in Global South countries, has been widely documented.[6] Waste pickers form the foundation of the recycling economy in the Global South. In many cases, they operate through contracts with governments and the private sector to provide materials collection and processing services; in others, they still struggle for recognition.

What has been less studied is their role in managing the organic waste stream. In several countries, waste pickers have decades of experience using food waste for animal feed and producing compost that is sold informally, providing valuable environmental services without recognition or compensation. In more recent years, a growing number of waste picker groups have become official service providers, either for source-separated organic waste collection, or both collection and processing of organic waste.

They are knowledgeable service providers for organics because, unlike private organics operators, they are already involved in the collection and sorting of multiple waste streams. This enables them to optimize efficiency in source-separated, integrated waste collection and management.

Waste pickers have several advantages, including:

- Decades of **expertise** in local waste management systems, from waste generation (sources and volumes), to source separation, household and commercial waste collection, collaboration with residential and commercial customers, as well as with local authorities, including regulatory compliance;
- A **workforce** already deployed in areas requiring organic waste management services, with deep knowledge of those territories and its collection routes, as well as established relationships with communities and authorities;
- A workforce whose **livelihoods** are already partially sustained by existing waste streams, making them well-positioned to pilot and scale new organic waste operations as a complement to their incomes;

[6] GIZ (2011) Recovering resources, creating opportunities Integrating the informal sector into solid waste management; Allen, C. (2021) An Inclusive Recovery: The Social, Environmental & Economic Benefits of Partnering with Informal Recyclers. GAIA.

- In some cases, access to **waste sorting spaces** suitable for organic waste management; and
- Trusted **relationships** with local residents, businesses, and authorities, enabling them to engage in environmental education and improve compliance with source separation.

At the same time, source-separated organic waste collection and management has several co-benefits for the management of dry recyclables. It results in **cleaner dry recyclables** that are in better condition for high-quality recycling, and reduces the workload of workers sorting mixed waste to recover recyclables.

> Because we did organic waste source separation, the recyclables that we got did not get contaminated, they were so clean. It's also good for the circular economy in terms of the companies that we provide this material to."
>
> - Johnson Doe, GWPCS, Accra (Ghana)

An organized and experienced workforce in service of organic waste management

The involvement of an organized and experienced waste picker workforce has been decisive in organic waste management projects in many locations.

> The main factor that has determined progress in organic waste management has been the existence of a grassroots organization and the coordination and support of waste picker organizations."
>
> - Juan Carlos Niño, Oikos Vida, La Plata (Colombia)

Indeed, organic waste management functions best when paired with the collection and sorting of recyclables, as the two activities complement each other, improving efficiency and cost-effectiveness, within an integrated waste management approach.

Nipe Fagio and Wakusanya Taka Bonyokwa Cooperative: When Good Services Expand

In Bonyokwa, a ward located in Dar Es Salam, Tanzania, Nipe Fagio and Wakusanya Taka Bonyokwa Cooperative run a landmark waste-picker-led waste management service. Door-to-door collection of source-separated waste - organized into organic, recyclable, residual, and domestic hazardous fractions -, is combined with materials processing at a materials recovery facility (MRF) and a strong community engagement, making the model exemplary.

After separate collection, recyclables are sorted and prepared for sale at the MRF, while organic waste is composted. The resulting compost is sold and also used in on-site organic farming. This integrated service has achieved a remarkable 95% source separation rate, including virtually 100% diversion of organic waste away from disposal among participating households.

The success of the model has attracted interest within and beyond Tanzania. Nipe Fagio has replicated the approach in other areas of Dar es Salaam, as well as in Tanga, Arusha, and Zanzibar.[7]

[7] For more information, visit https://nipefagio.co.tz/ and read Nipe Fagio (2024) Zero Waste Model: Dar es Salaam Case Study.

A single service provider for all waste-management services

In many cities, waste pickers manage multiple waste streams through separate collection into three or four fractions, offering several advantages in terms of unified logistics and consolidated community engagement.

For instance, waste pickers in Pune, India, have over 20 years of experience in doorstep collection of segregated waste from private compounds, individual households and informal settlements, as well as schools, government institutions, and private offices. Their transition from waste picking at dumpsites to doorstep collection enabled them to charge fees to citizens who no longer needed to dispose of waste at local dumpsites.

The SWaCH cooperative was established in partnership with the Pune Municipal Corporation and is authorized to deploy waste pickers across the city for door-to-door collection of segregated waste.

> Once you're able to provide that kind of a service to a citizen or to a housing colony [housing development], you get entrenched into that system because now you're their waste collector, you're their recycler, and you're their composting agent. So your value to the citizen is very, very high, which leads to longer-term sustainable service provision and additional income for the waste pickers."
>
> - Harshad Barde, SWaCH, Pune (India)

Shifting jobs from dumpsites to doorsteps

Dumpsite closures, or the relocation of dumpsites to larger landfills far from cities, without consultation or alternatives for the people who make a living from waste, and often linked to privatization processes, threaten the livelihoods of waste pickers across the globe.[8] In this context, waste separation at source, and the separate collection and management of organics, is both an environmental imperative to prevent methane emissions, and an economic imperative to ensure a just transition for waste pickers.

In Accra, Ghana, waste pickers have organized themselves in response to the looming threat of dumpsite closures. Waste pickers working at the landfill are organized into their own association, while the GWPCS

[8] Palacio, C. (2025) Dumpsite Closures Are Spreading Harm. Waste Pickers Are Fighting Back, IAWP

carries out doorstep, source-separated waste collection, modeling what a just transition away from landfill could look like:

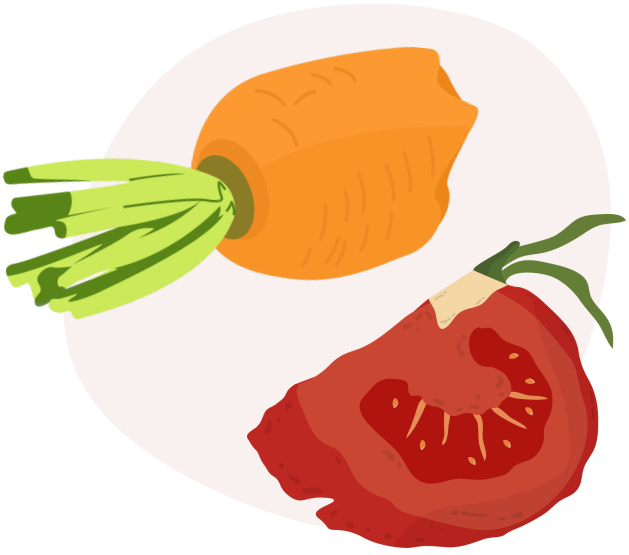
> Our main vision is to provide jobs for the youth, especially waste pickers who always depend on the landfill for survival. And we take this cooperative as an alternative model for our livelihood in terms of dumpsite closure or any challenges that will confront waste pickers. We will not always be at the dumpsite waiting for the waste, so we have to also be in the community working as waste pickers."
>
> - Johnson Doe, GWPCS, Accra (Ghana)

Rescuing food waste for animal feed: a long history

Waste pickers have been collecting food waste for animal feed for decades, if not longer. This practice has been documented since the 1930s in Egypt[9] and since the 1970s in Senegal,[10] and it remains the most widespread organic waste management practice among waste pickers worldwide.

Using discarded food waste for human and animal consumption, when safe to do so, is the most environmentally rational way to manage organic waste. It sits at the top of the organic waste hierarchy, immediately after food waste prevention.

(see Figure 1 below)



However well-established this practice is among waste pickers, it is constrained by limited financing and transportation challenges. As a result, too much organic waste remains unmanaged and ultimately ends up in landfills and dumpsites, where it generates methane emissions.

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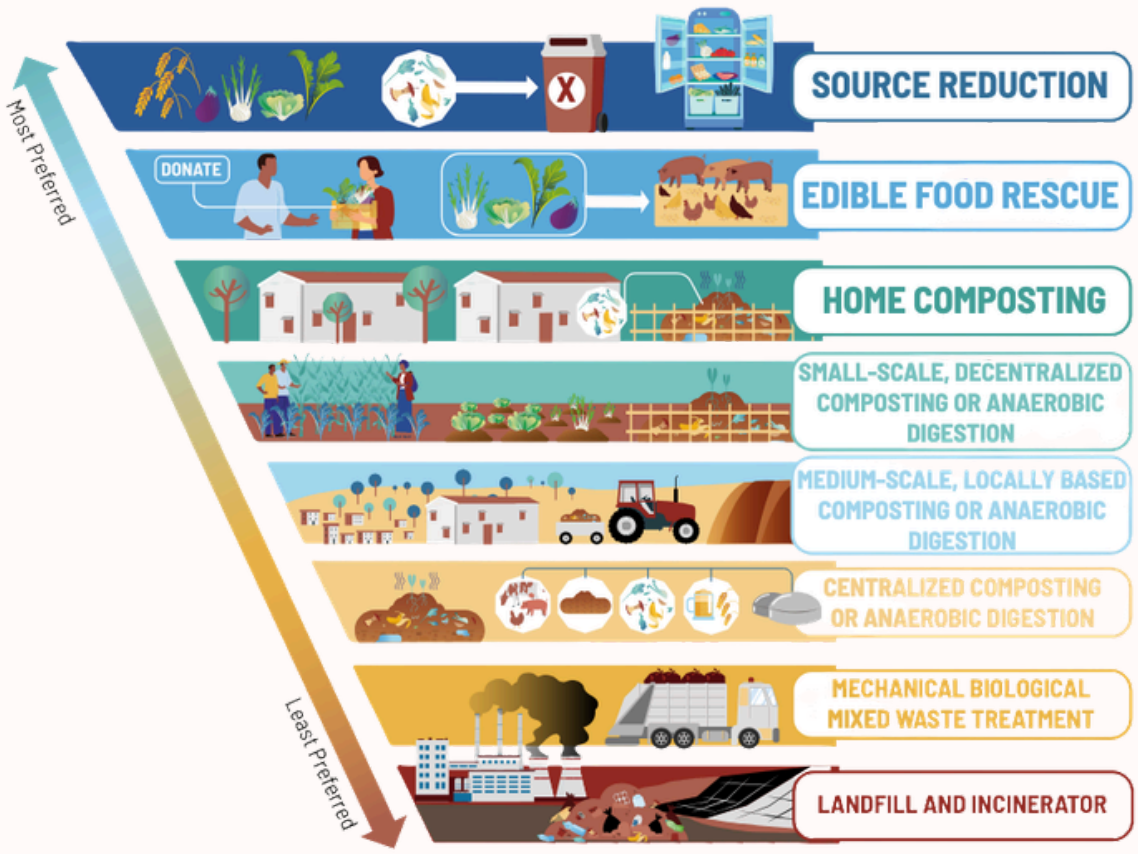
[9] Salah Fahmi, W. and Sutton, K. (2006) Cairo's Zabaleen garbage recyclers: Multi-nationals' takeover and state relocation plans, *Habitat International*

[10] The Ndiago Thiep community has pioneered organic waste collection for animal feed.

Figure 1: Organic waste management options in context within the food waste hierarchy.



Source: Institute for Local Self-Reliance

Three examples of composting operations that emerged in very different contexts in Colombia, India, and Ghana offer key lessons on the importance of source separation, how to scale operations, and the need for continuous financial and technical support.

Nurturing local economies with green jobs

When municipalities contract waste pickers rather than private companies to collect and manage waste, public spending is fully directed toward environmental services and the creation of good local green jobs, ensuring that profits remain within the community and further strengthen local economies.[11] Furthermore, waste pickers' high diversion rate extend the lifespan of landfills and waste processing infrastructure.[12]

[11] For more on zero waste jobs, see Ribeiro-Broomhead, J. and Tangri, N. (2021). ZeroWaste and Economic Recovery: The Job CreationPotential of Zero Waste Solutions, GAIA

[12] IAWP's Vision for a Just Transition for Waste Pickers under the UN Plastics Treaty (2023)

Municipalities should contract waste pickers in a way that guarantees their labour, social, and economic rights as workers, meaning not only fair compensation for their environmental services, but also access to appropriate technology and infrastructure, access to technical knowledge and skills development, and labor rights including health insurance and occupational health protection. This approach has been conceptualized as the "fair tonne" of waste, recognizing that not all approaches to waste management generate the same social and economic benefits.[13]

Social inclusion also involves providing or subsidizing daycare centers for the children of waste picker workers, particularly women waste pickers. In Buenos Aires, Argentina, the waste picker group Amanecer de los Cartoneros receives government support for a daycare center for children aged between 3 months to 5 years, that operates during working hours.[14]

An essential prerequisite: waste picker recognition

Too many waste pickers are still unable to work safely or effectively due to lack of government recognition and, in some cases, restricted access to waste and active prohibition of informal waste collection.[15] In many locations, access to waste streams is being shifted away from waste pickers despite years, and sometimes decades, of services, in favor of larger private companies. Women waste pickers face overlapping vulnerabilities, as waste pickers, as women, as individuals experiencing poverty, and in some cases as members of disadvantaged communities. These differences compared to male waste pickers are often overlooked and left unaddressed.[16]

Governments must therefore urgently recognize the central role of waste pickers as workers and rights-holders in collecting, sorting and managing municipal waste, end any repression, and prioritize them as service providers for integrated municipal waste management. Only once they are able to operate as recognized waste management service providers can they apply for permits, licenses, and certification, and operate in compliance with the law, as well as access legal guarantees for their rights as workers.

Governments can also facilitate service provision by waste pickers by reducing the administrative burden. For example, in Brazil, cities can hire waste pickers without public tenders, since federal legislation requires that they be prioritized as municipal recycling service providers.

Governments should also strengthen gender considerations across their policies and programs, including allocated dedicated funding to advance gender equality.

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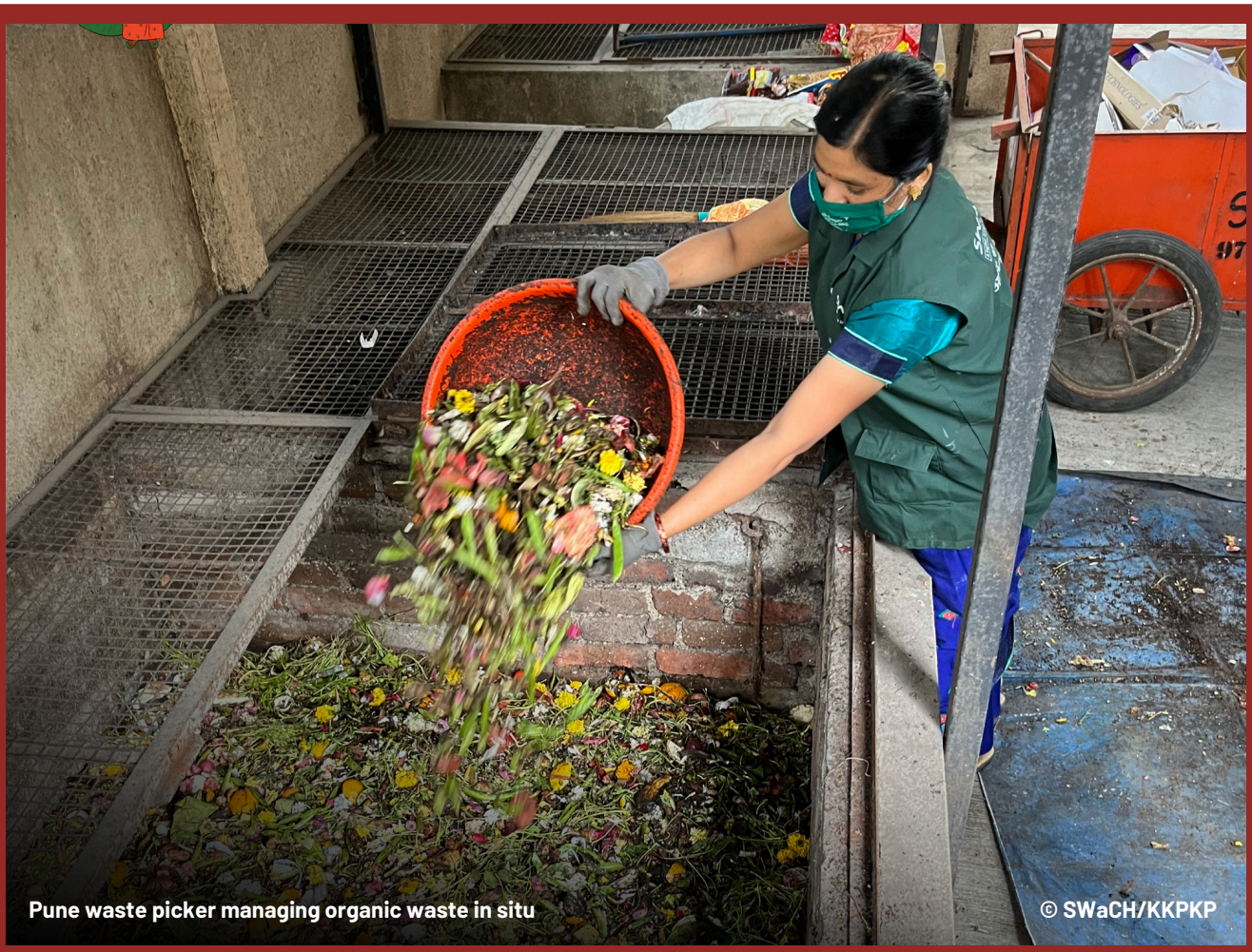
[13] LatitudR (2025) Articulación, financiamiento y derechos laborales, las claves para un Tratado Global de Plásticos fortalecido por el reciclaje inclusivo
[14] GAIA and FACCyR (2019) Inclusion of Waste Pickers in Zero Waste Programs
[15] Infobae (2019) Polémica por los nuevos contenedores de basura "inteligentes" que impiden el cartoneo y la búsqueda de comida
[16] Dias, S. and Ogando, A. (2019) From Theory to Action: Gender and Waste Recycling, WIEGO



Pune waste picker managing organic waste in situ © SWaCH/KKPKP

SWaCH/KKPKP conquering scale: From a handful of enthusiasts to 26,000 users

In Pune, India, waste pickers were initially primarily engaged in the collection of dry recyclables. Their strong rapport with local residents, along with their willingness to manage organic waste *in situ* for a small group of composting enthusiasts between 2011-2014, laid the foundation for what has become a large and successful composting operation.

Solid Waste Collection and Handling (SWaCH),[17] a cooperative established by the Kagad Kach Patra Kashtakari Panchayat (KKPKP) waste pickers trade union in Pune, recognized the opportunity for waste pickers to complement their livelihoods by offering a new service to existing clients in areas where they were already operating.

[17] https://swachcoop.com/

> The waste pickers wanted to do it, there was a need from the citizen side, and it ticked all the boxes: environmentally, socially, financially, for everyone, for all the stakeholders involved."
>
> - Harshad Barde, SWaCH, Pune (India)

The cooperative is predominantly composed of women, who represent 70% of its members. Initially, SWaCH provided training, fresh compost, and other materials to interested waste pickers. Since 2015, it has closely supervised the waste pickers' composting services to ensure the long-term success of composting and anaerobic digestion operations, and has supported them in interfacing with users. Their focus on compost quality has also led to the closure of operations in locations where the conditions for success - such as adequate space or adequate compensation for waste pickers-, were not in place.

Today, SWaCH serves 26,000 households, schools, and offices including government canteens, across 287 locations spanning over 500km^2 in the city of Pune. Its members provide doorstep collection of organic waste, followed by in-situ composting or anaerobic digestion, preventing 21.5 tonnes of organic waste from ending up in dumpsites each day.

© SWaCH/KKPKP

Figure 2: Summary of six waste-picker-led organic waste management systems

Nipe Fagio- WTBC

Dar Es Salam, Tanzania

Area **Community (Bonyokwa neighborhood)**	**Area** **Individual commercial client (large generator) (Mawasiliano neighborhood)**
Quantity 4t/day **Users** 3,000 households	**Quantity** 2.5t/day **Users** Fresh produce market: 164 vendors
Inputs food waste (garden waste to balance compost)	**Inputs** food waste (raw fruit and vegetables)
Management location Local waste picker materials recovery facility (MRF)	**Management location** On site
Collection mode Source-separated doorstep	**Collection mode** Vendors throw organic waste in dedicated bins, that workers empty
Collection schedule 5 days/week	**Collection schedule** 5 days/week
Technique Heap/chamber composting & black soldier flies	**Technique** Heap/chamber composting
Output use Small-scale sales of compost, maggots	**Output use** Small-scale sales of compost, maggots
Economics Part of integrated waste management fee	**Economics** Custom fees based on types and quantities of organic waste

Oikos Vida

La Plata, Colombia

Area

Community (Bellavista, Jorge Eduardo Duran, El Eden neighbourhoods) and institutional clients (school canteens, hospital and prison)

Quantity
1.7t/day

Users
1,000 households, restaurants, and canteens

Inputs
food waste
garden waste (pruning and lawn clippings)

Management location
Public parks

Collection mode
Source-separated doorstep (half the year); drop off (half the year)

Collection schedule
3 days/week
On-demand collection available to restaurants

Technique
Windrow composting

Output use
Compost used in local gardening activities, donated to users

Economics
Labor funded from government during half the year only; doorstep

GWPCS

Accra, Ghana

Area

Community (Kpone-Tema neighbourhood) (Pilot: 2022-early 2024)

Quantity
3.5t/day

Users
households, restaurants, bars, markets

Inputs
food waste (market: especially citrus)

Management location
Local waste picker MRF

Collection mode
Source-separated doorstep

Collection schedule
2 days/week

Technique
Static pile composting & anaerobic digestion

Output use
N/A

Economics
N/A

RUO

Buenos Aires City, Argentina

Area **Community (Caballito neighborhood)**	**Area** **Community composting (Caballito neighborhood)**
Quantity 0.4t/day **Users** schools, hospitals, museum, clubs, offices, fast food restaurants	**Quantity** 0.4t/day **Users** households
Inputs majority of garden and pruning waste food waste	**Inputs** mostly food waste
Management location Waste-picker-operated MRF that includes an ecological restoration park	
Collection mode Source-separated doorstep	**Collection mode** Drop off
Collection schedule 3 days/week	**Collection schedule** Yerbal Center is open for drop off 6 days a week
Technique Windrow composting	**Technique** Bin composting ($1m^3$)
Output use Compost used in local reforestation activities, donated to neighbors and bagged for small-scale retail sale	
Economics Collection fee for private businesses	**Economics** Free service

SWaCH-KKPKP

Pune, India

Area

Municipal (whole city)

Quantity	Users	Quantity	Users
21.5t/day	26,000 households schools, offices	21.5t/day	government canteens

Inputs food waste (mostly raw) garden waste (leaves only)	**Inputs** food waste (mostly cooked)
Management location On site	**Management location** On site
Collection mode Source-separated doorstep	**Collection mode** Source-separated doorstep

Collection schedule

6 days/week, visits (60-90min), ~weekly supervisors visit

Technique Customized aerobic composting pits (with coco peat)	**Technique** Anaerobic digestion
Output use Compost donated to users	**Output use** Biogas used directly in canteens
Economics Flat service fee	**Economics** Small generators: flat service fee; large generators: fee based

Key ingredients for successful organic waste management

Setting Up Organics Management

Requiring source separation

Organic waste management performs best when organics are separated from other waste streams at the source. Fostering user compliance requires a two-pronged approach involving government regulation and environmental education.

Pune's government opted to regulate large generators of organic waste. India's 2016 Solid Waste Management Rules recommended that cities require in-situ composting. On this basis, Pune's city government mandated organic waste management at source for any premises of more than 50 residential units or generating more than 100kg/day of organic waste in 2017. This complemented an earlier local regulation from 2004 requiring all new buildings to provide space for in-situ organic waste management. These rules laid the foundations for SWaCH's organics success story, enabling in-situ composting or anaerobic digestion to 26,000 users today (see the "Emergence of organics operations" section above).

The legal requirement for source-separated organics management is a powerful instrument that governments can adopt, and one that is still lacking in most countries:

> The main challenge is getting people to accept source separation. Schools, large events, they mix all the waste, they throw lots of things away. And having the laws for this."
>
> - Valquiria Cândido Silva, COOPERPAC, São Paulo (Brazil)

Oikos Vida composting pioneers: from sorting mixed waste to source separation

Oikos Vida have pioneered municipal waste composting in La Plata, Huila, Colombia since the 1990s. In an effort to end open dumping and burning of waste, waste pickers formed an integrated waste management company and, in 1994, obtained municipal support to operate a sorting center and a small landfill. They manually sorted recyclables and organic waste from mixed waste and composted the organics fraction using very basic infrastructure. La Plata's waste pickers obtained certification for the commercial production and sale of compost, inspiring similar initiatives in other Colombian cities.

In 2006, a policy change led to the waste pickers losing access to their composting facility, and removed the economic incentive to manage organic waste at source. In response to this challenge, La Plata's waste pickers developed source-separated collection of dry recyclable waste, and eventually restarted composting pilots in 2013. Today, these pilots form a community composting system that has gained government recognition. Oikos Vida's current composting services in the city of La Plata serve 1,000 households.

Engaging communities through environmental education

Community engagement, including through environmental education, is essential to ensure effective source segregation of organic waste in the long term. Most waste picker organizations interviewed for this study have staff dedicated to door-to-door education of users.

> The formula to be successful is to ensure high citizen participation, which requires well-targeted environmental education actions and the use of educational tools and instruments."
>
> - Juan Carlos Niño, Oikos Vida, La Plata (Colombia)

©Oikos Vida

In Accra, Ghana, the GWPCS dedicated community education team educates users about the environmental importance of separating waste at source for pollution prevention, as well as the practical aspects of doing so, and distributes bags for dry recyclables and bins for organic waste.

Several waste picker organizations assign women for community outreach, environmental education, and doorstep collection roles, as they are often perceived as more relatable to residential users with whom they interact during collection and who are also predominantly women responsible for household waste sorting(e.g. La Plata, Colombia; Accra, Ghana; Dar Es Salaam, Tanzania). Others have found that women are more involved than men in cultivating home gardens, and more interested in accessing compost.

At the same time, environmental education must integrate gender elements and ensure that the burden of source separation of waste is not placed disproportionately on women.

Environmental education can help overcome reluctance towards food waste and biodegradation:

We have all kinds of conflicting taboos. There's a taboo about throwing edible food - so you're not supposed to do that. But there's also a taboo on handling other people's organic waste as well. And there is the ick factor of 'My god, organic waste smells - it's going to rot!' That's much more challenging than a cultural taboo."

- Harshad Barde, SWaCH, Pune, India

Decentralized operations that residents can experience directly are sometimes the most effective form of organic waste education:

When we started the project in Bonyokwa, it was sometimes difficult to influence people to accept because some of them thought that maybe it can pollute their environment and sometimes bad smells arise from organics. But as time went on, they realized that when organic waste is well managed, it doesn't produce smells and doesn't pollute the environment."

- Marco Dotto, Nipe Fagio, Dar Es Salaam,Tanzania

Examples in environmental education on organics include the work of RUO and FACCyR waste picker cooperatives in Buenos Aires, Argentina, which demonstrates the full cycle from food waste to food production. RUO created a park in their neighborhood, reforesting it with native plants to create an ecological corridor, as well as an orchard and vegetable garden where they directly use compost generated in their operations. The space also provides community composting for neighbors including local residents, schools, and clubs, who also benefit from free access to compost.[18]

The proximity of in-situ operations can also provide an optimal setting for learning, increasing both worker performance and user compliance:

> When people are composting in their own premises, they tend to segregate very well because they feel the impact of non-segregation in three days. So they have to take much better care by themselves."
>
> - Harshad Barde, SWaCH, Pune, India

Specific public policies and instruments for new infrastructure

Regardless of which organic waste treatment technique is used (see section "Techniques and Technologies" below), the collection and management of the organic waste stream requires a different set of infrastructure than recyclables. This includes specialised machinery such as chippers, sieves, or biogas units, as well as equipment such as thermometers, buckets or kitchen pails for users. Governments can support this infrastructure adaptation in many ways, including grants and and other financial instruments, direct provision and coordination with the private sector.

Doorstep collection works better than drop off

Evidence shows far greater user compliance with doorstep collection than when users are required to drop off their organic waste. In La Plata, Colombia, doorstep collection takes place six months of the year, when public financing provides jobs for door-to-door outreach and separate organic waste collection. The doorstep collection team also conducts follow-up to address separation compliance issues, as well as data collection, including the weighing of organic waste. These jobs are suspended during the remainder of the year due to the lack of public funds. During this period, users are expected to bring their organic waste to community composting bins in public parks; however, compliance is low.

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[18] Natan, P. et al (2024) *Green and community waste composting Western Urban Recyclers Cooperative (RUO)* - Buenos Aires Federation of Cardboard Collectors, Cart Collectors and Recyclers (FACCyR).

Frequent collection and management yields optimal results

In Pune, SWaCH waste pickers collect and manage organic waste six days a week (partly due to Pune's tropical climate):

> You have to do [collection] every day, there's no choice. If you don't do that then organic waste rots, there's already hydrogen sulfide and methane that's starting off in it, and it becomes troublesome to handle. If you don't do it every day, segregation issues start multiplying."
>
> - Harshad Barde, SWaCH, Pune, India

Daily doorstep collection gives waste pickers the best opportunity to identify and resolve contamination issues at the source before they escalate. Face-to-face interaction also improves compliance. In Accra, residents appreciated the frequent organic waste collection during the GWPCS composting pilot, particularly after experiencing delays from private waste management companies that hauled their mixed waste to the dumpsite:

> And most importantly, the organic waste would sometimes be in households for a week or two when the trucks did not come for it. So it helped the community when we collected organic waste properly [in a timely manner]."
>
> - Johnson Doe, GWPCS, Accra, Ghana

Fresh produce markets and other large generators: the low-hanging fruit

Large organic waste generators (more than100kg per day) are an ideal entry point to establish organic waste schemes with sufficient volume to give waste pickers a degree of operational sustainability. For this reason, many waste picker groups serve commercial and institutional clients including food businesses, fresh produce markets, and government or school canteens. In Buenos Aires, Argentina, RUO managed the food waste of all 21 franchises of the Burger King fast food chain.

Waste pickers' frequent organic waste collection schedules are also attractive to these clients, as they help keep their premises clean by preventing prolonged storage of of rotting food waste and the associated pests and odors:

> Bars and restaurants are involved. They are the ones who reach out to us most often to manage their waste, because the garbage truck comes every three days, but when the project is in place, organic waste is collected every two days, and that creates synergy and a smooth understanding."
>
> - Juan Carlos Niño, Oikos Vida, La Plata (Colombia)

On-site management is also an option for large generator clients with sufficient space, such as fresh produce markets. Nipe Fagio operates frequent, five-day-a-week collection and on-site composting of waste for a fresh produce market in the Mawasiliano district of Dar Es Salaam, Tanzania, which generates 2.5 tonnes of organic waste daily. On-site composting avoids the need to store food waste for several days:

> Waste was taking a long time to be taken to the dumpsite. [...] Now vendors use the organic waste bins every day, and waste collectors take the waste to the composting facility 5 days a week."
>
> - Mariam Shadrack, Nipe Fagio, Dar Es Salaam, Tanzania

Anaerobic digestion plants are also a good alternative for large organic waste generators, especially facilities such as canteens, which can benefit from the use of biogas. In Mumbai, SMS operates anaerobic digestion units that treat between 500 kg and 1 ton of waste per day in campuses and other private and public institutions. While more expensive, these plants reduce energy costs and support users' energy self-sufficiency.

The gold standard: a holistic policy approach

Crafting an integrated national plan for source-separated waste management with waste pickers that supports local government and includes legal requirements, targets, dedicated staff, and funding is the most effective approach.

Brazil's current policies provide a strong example in this regard. Brazil's federal government is currently conducting consultations on a Municipal Organic Waste Plan (Planaro)[19] developed with the support of the Instituto Pólis. It aims to increase composting with waste pickers, with a target to divert 33% of municipal organic waste from landfills by 2030 and 77% by 2050, alongside a detailed action plan to reduce methane emissions from waste through food waste prevention and organic waste recycling.

Techniques and Technologies

[19] Ministério do Meio Ambiente e Mudança do Clima, Plano Nacional de Redução e Reciclagem de Resíduos Orgânicos Urbanos (Planaro), Versão Preliminar para consulta pública. This plan comes on the heels of earlier federal policy and regulations integrating waste pickers, including the Pro-Waste-Picker Program for Popular Recycling that supports the preferential funding and contracting of waste pickers for recycling services including organics, and the commitment to privilege waste pickers in Brazil's 2017 federal composting regulation. See Presidência da República, Decreto No 11.414, de 13 de fevereiro de 2023, Programa Diogo de Sant'Ana Pró-Catadoras e Pró-Catadores para a Reciclagem Popular and Ministério Do Meio Ambiente, Conselho Nacional Do Meio Ambiente, Resolução Nº 481, de 03 de outubro de 2017. Estabelece critérios e procedimentos para garantir o controle e a qualidade ambiental do processo de compostagem de resíduos orgânicos, e dá outras providências.

Choice of technique and technology is context-dependent

The choice of organic waste management technique stems from an effort to meet different needs and constraints, including the input profile (e.g. ratio of food to garden waste, raw vs. cooked food), cost (some processes involve costly additives, labor, or machines), available space, and time to maturity (with shorter processing times reducing space requirements).

Using food waste for human use when appropriate, and otherwise for **animal feed**, sits at the top of the organic waste management hierarchy as the most environmentally beneficial approach to managing organic food waste. It is a long-established informal practice among waste pickers in many countries, especially women, who feed livestock which they rear at a household level, and sell to supplement their income. However, it is also a practice under increasing threat from regulatory barriers to livestock rearing. Supporting household-level livestock rearing not only diverts food waste efficiently but also improves nutrition and provides supplemental income for low-income families, while generating manure that can be used as a high-value input for compost production.[20]

In Pune, SWaCH uses **pit composting** for household or office kitchen waste and leaf waste (mostly uncooked food and leaves, with no oil). For its government and school clients, whose organic waste is mostly leftover cooked food, SWaCH offers composting with additional coco peat to absorb the high moisture and additives and maintain the appropriate pH balance.

Using **heap composting** has allowed Nipe Fagio to process household organic waste in Dar Es Salaam at a lower cost and within a 40-60 day timeline, compared to the 90-day chamber composting technique they initially adopted. Since raw fruit and vegetable market waste composts faster than household kitchen waste, a different technique combining pit and heap composting is used at the fresh produce market they serve, to produce compost that is ready for harvest in 40 days. In both operations, dry leaves and saw dust are used to absorb excess moisture, while ash is used to mitigate odors.

In Buenos Aires city, RUO uses **windrow composting** to manage organic waste collected from various sports and leisure clubs, schools, hospitals, a museum, government offices (garden waste), and food businesses (food waste). In contrast, organic waste dropped off by local residents goes to smaller **compost bins** ($1m^3$ capacity).

Waste pickers, including a majority of women, have also been pioneering **biogas** production from organic waste in Mumbai (Stree Mukti Sanghatana) and other Indian cities. SWaCH is also increasingly offering modular biogas using anaerobic digesters for Pune government canteens, as this technique is well suited to their organic waste generation profile and takes up relatively little space. Biodigesters need a well-

[20] J. Otte, A. Costales, J. Dijkman, U. Pica-Ciamarra, T. Robinson, V. Ahuja, C. Ly and D. Roland-Holst. (2012) Livestock sector development for poverty reduction: an economic and policy perspective, FAO

established microbial community to run smoothly, which usually takes 90 days, after which they can handle organic waste, especially cooked food, effectively. Pune's government canteens operate daily and generate kitchen and cooked food waste consistently, allowing biodigesters to function reliably, unlike schools that close for a month and a half in the winter and again in summer. The biogas produced by the biodigesters is directly piped back into the canteen kitchens for use as cooking fuel. SWaCH offers 10kg input biodigesters, with the ability to flexibly scale up to a total capacity of 100kg, depending on the quantity of organic waste generated.

> There are problems because unlike composting, there is now a machine that's involved - there's technology and piping and things like that. But this is a no-electricity machine. There's no shredding involved, there's no pumps or anything like that. It's a static machine. So you put the waste in, the gas goes through a pipe directly into a balloon that is weighted down with physical weights that create pressure, and the machine connects to the flame as close as possible. That's something that's been working out quite well."
>
> - Harshad Barde, SWaCH, Pune (India)

For SWaCH, the choice of **on-site management** also aligns with the needs of its workforce, which is mostly made up of women, as it allows for flexible schedules that are compatible with the care work that many women workers also perform for their families in addition to paid labor.

While not being yet widely implemented by waste picker organizations yet, the use of **black soldier fly (BSF)** to process organic waste offers economic advantages such as revenues from the sale of BSF derived products such as larvae and frass, which can be used as animal feed and soil enhancer. This technology is being deployed extensively, especially at small and medium scales, and is gaining increased recognition as a methane abatement strategy in the waste sector[21].

[21] For more information on black soldier fly, read Climate and Clean Air Coalition (2025). Transforming Organic Waste with Black Soldier Flies: A Guide for Decision-Makers, Entrepreneurs, and Implementers to Unlock the Organic Waste Potential of Black Soldier Fly Systems. Paris.

Low-tech, low-cost, and durable custom builds work well

Over the years, SWaCH/KKPKP designed a streamlined, effective, and affordable aerobic pit composting process, combining infrastructure custom-built from durable materials with a process that requires only low-cost inputs and does not require machine turning. Their custom-built brick-and-mortar composting pits last up to 15 years, compared to plastic drums that deteriorate much sooner.

They initially relied on locally developed microbial composting cultures and composting additives, but found that the logistics of procuring and paying for multiple composting additives was too burdensome. Their process now uses a coco peat medium[22] and old compost as a starter. Supervisors only use cultures occasionally to remedy composting challenges. Costs are further cut by reusing the coco peat medium for 2-3 years, and using 50% of the compost output instead of external starter culture inputs.

Machines: automation vs. human labor, and the challenge of repair

Appropriate technology helps waste pickers reduce the intensity of manual labor as well as speed and scale up their operations. For instance, RUO in Buenos Aires uses a loader to move and turn compost and chippers to cut down woody waste, and it aims to acquire a Trommel screener to separate debris and larger wood chips from finished compost, replacing manual sieving.


Biogas Machine.
© Parisar Bhagini Vikas Sangh / SMS

This form of automation can help scale operations and support a more diverse and inclusive workforce, taking into account age, and, in some instances, gender-related challenges associated with strenuous manual labor. To achieve this benefit, machinery training and operation must be made accessible to waste pickers across genders, and not reserved for workers identified as male.

[22] Coco peat is a powdery by-product from the processing of coco coir (fiber) from coconut husks.

Valquiria Cândido Silva of COOPERPAC, São Paulo, Brazil, emphasized how machinery adapted to organics operations can support women's leadership in this work:

> "I think we need to increasingly equip our workers to ease manual labor. [...] Because we are working with women aged 50 and above."

At the same time, technology brings technical and cost challenges related to initial acquisition and skilling, and especially maintenance and repair. Machine-dependent operations can stall when breakdowns occur and funds, skilled repair labor, or spare parts are not immediately available. Smaller-scale machinery is a good fit for community-scale operations and can be more financially accessible, although it remains scarce in many markets (with China being an exception).

Unfortunately, in some cases, instead of proposing technology that is in service of workers, machine vendors promise to eliminate the need for human labor, appealing to buyers who seek to fulfil legal composting requirements or appear environmentally friendly while reducing labor costs. However, some of these machines are marketed with unsubstantiated claims of producing finished compost in very short timeframes, when in fact they only generate pre-compost that still requires significant time, space, and labor to mature.

As the scope of their operations grew, SWaCH began accepting requests to operate 24-hour or continuous-rotation machines installed by real estate developers seeking to minimize space allocation while still complying with local regulations.

> We've been forced into trying our hand at them. In the last four years, every single site that has shut down has been a 24x7 machine or one of these rotational machines that eventually fail (.) Honestly, the learning is, we're being foolish: there's really no point, they do shut down at some point in time."
>
> - Harshad Barde, SWaCH, Pune (India)

Sustained technical support makes the difference

Thorough capacity-building and continuous technical support are essential for the successful management of organic waste - much more so than for the management of dry recyclables. This can represent a significant barrier to entry for waste pickers who lack prior experience or adequate support.

> In composting there is a certain amount of science, a little bit of skill and a much higher level of discipline that's required to manage the composting process. Failure to collect dry recyclables for two days means that somebody gets irritated with you, but failure to compost for two straight days means that the entire composting pit can fail"
>
> - Harshad Barde, SWaCH, Pune (India)

While workshops are useful, continuous technical support is most valuable for effective real-world organic waste management operations. Technical support should aim to build waste picker expertise and autonomy, while also providing troubleshooting assistance. For example, COOPERPAC in São Paulo has experience managing raw fresh produce waste and requires technical assistance to expand into managing meat waste from potential commercial clients:

> For example, there is iFood [food delivery company], which involves meat waste, and we received lots of it. What must be done to make sure this doesn't cause problems in the soil?"
>
> - Valquiria Cândido Silva, COOPERPAC, São Paulo (Brazil)

Often, NGOs or universities provide technical support, but over time there is a need for waste picker organizations to develop their own expertise in organic waste management. For instance, in Mumbai, SMS partnered with a University to provide training, and currently the organization supports waste picker cooperatives in identifying and hiring staff who can provide ongoing technical support.


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Worker Health and Safety

Providing adequate personal protective equipment

Personal protective equipment (PPE) including adequate gloves, masks,boots, and other protective wear, is the first line of defense for waste pickers, and must be provided for the management of organic waste as well as other waste fractions. PPEs require more frequent cleaning or replacing for wet organic waste than for dry recyclables.

Special attention should also be given to PPE used by pregnant people, as standard equipment is not designed for this population. Considerations include comfort in a changing body, as well as reducing and, when possible, avoiding PPE containing harmful substances such as endocrine disruptors and heavy metals.

Reduced injuries from sharps

The waste picker workforce is particularly exposed to occupational hazards, including injuries from sharps during waste sorting. In many geographies, women waste pickers are primarily responsible for sorting mixed waste. Introducing source separation of organic waste greatly reduces the volume of mixed waste requiring sorting and reduces the contamination of dry recyclables, directly reducing the incidence of cuts and wounds from sharps, as experienced by the Zabaleen waste pickers in Cairo, Egypt.[23]

Sharp tools or materials are not typically used in organic waste management operations, reducing injury hazards which are common in the sorting of dry recyclables.

Designing operations to prevent workplace accidents and heavy labor

Waste picking is manual labor that involves a significant walking, pushing carts, and lifting. Women make up most of SWaCH-KKPKP's workforce. Over the years, SWaCH/KKPKP has designed its composting infrastructure and process to avoid strenuous work. Their in-situ composting also uses shallow pits that reduce the risk of workplace accidents. They also rotate the pits so that turning and harvesting compost is only required every 15 days.

[23] GAIA-IAWP workshop *Assessing Opportunities for Waste Pickers to Work with Organic Waste,* Africa/Europe regions, 20 August 2025.

> There are harder ways of doing it which require lesser space, much more mechanization, with much more hard labor required with higher pits, which maybe would convince fewer women to do that work, but we try to design it so that it doesn't end up happening that way."
>
> - Harshad Barde, SWaCH, Pune, India

Specific considerations for pregnant people

The design and allocation of tasks within the workspace is essential for pregnant people, including avoiding heavy lifting, as well as prolonged sitting or standing, and addressing other posture-related challenges associated with the work. Mental and physical fatigue generally increase during pregnancy and after birth; therefore, avoiding exposure to stressors such as extreme temperatures or noise should be minimised.

Solving the Space and Transportation Challenge

Flexibility in the space requirement

Depending on the technique, organic waste management can be more or less space-intensive. At the same time, there are often high barriers to land access in the largest urban centers where much of the organic waste is being generated, complicating the allocation of adequate space for composting. Smaller and mid-sized cities do not face these constraints and, in some countries, have seen a flourishing of waste-picker-led organic waste management where cooperatives already have access to spacious facilities (notably in Brazil, including cooperatives such as Cooperpac in Sao Paulo, COOPERCICLI in Caetité and CENTCOOP in Brasilia)[24].

Using green spaces and urban dumping grounds

Governments can help overcome the space challenge by supporting waste picker use of green spaces (La Plata, Colombia), urban dumping grounds (Dar Es Salaam, Tanzania), disused railway grounds (Buenos Aires, Argentina), and other underutilized public spaces to operate organic waste management. This approach

[24] For more information on waste picker organizations working with organic waste in Brazil, read Novos Modelos de compostagem nas cidades: integrando reciclagem, agricultura e moradia, Instituto Pólis, 2023.

best for decentralized, neighborhood, or community-level operations. When composting is the chosen modality, compost can be directly used in green spaces to improve soil health. Having municipal officials personally witness successful organic waste management is also powerful way to secure their support for accessing public space:

> The mayor of Zanzibar had an opportunity to visit the Philippines in places where they implement the zero waste model. He went there and learned best practices and the role of government in making sure that zero waste implementation is successful. It was a milestone for us to be sure to access lands for an MRF."
>
> - Marco Dotto, Nipe Fagio, Dar Es Salaam (Tanzania)

Decentralization to cut down on transportation costs and pollution, increases access

Decentralized organic waste management can be a solution to avoid the costs, labor, and pollution associated with transporting organic waste that is typically sent over long-distances to landfills in diesel trucks.

This applies to community-level composting, and even more so to on-site management (as is done for all user profiles in Pune or for large generators in Dar Es Salaam):

> Transportation to the dumpsite had a high cost. Before we composted at Simu2000 market, they were taking the waste to the dumpsite three times a week, but now they only need to take it once a week or once every two weeks."
>
> - Mariam Shadrack, Nipe Fagio, Dar Es Salaam, Tanzania

Decentralized composting is also a solution for peri-urban informal settlements that often face high levels of waste dumping because the lack of adequate roads prevents the passage of collection trucks. In addition, decentralized operations are more accessible to women waste pickers in countries where they are less likely to have access to commercial vehicle driving licenses, and instead rely on public transit or micromobility.

RUO Cooperative: Nurturing nature and community in urban centers

The RUO Cooperative's composting work is located in the Caballito neighborhood, a very densely-populated area in the heart of the city of Buenos Aires. RUO's work is uniquely integrated within the urban and social fabric of Argentina's capital city. Its composting space is located on railway grounds that the cooperative de-paved to create a park for the neighborhood that functions as an ecological corridor and includes an orchard and vegetable garden, as well as free community composting and compost and plants sale for neighbours, and a materials recovery facility were recyclable materials are processed. [25]

RUO even offers its organic waste collection services free of charge to a local hospital, a natural science museum, and a local citizens' club, helping to build community acceptance. This level of rootedness in the social fabric of a capital city contrasts with operations that manage organics on the edges of larger cities where access to land is easier, but distance from communities is greater. The proximity to the community also strengthens confidence in Buenos Aires' recycling system, as citizens and students who visit the facilities can see that the materials they separated at home are actually being recycled and sustain many jobs. [26]

Likewise, closing the loop between organic waste and organic food production is at the heart of COOPERPAC's work in São Paulo[27], which they hope to maintain as they transition to a new space:

> Our center had space for a vegetable garden, for agriculture. And our workers were trained to work the land. In 2015 we sparked this idea of taking recyclable waste and exchanging it for organic produce, as a way of doing environmental education."
>
> - Valquiria Cândido Silva, COOPERPAC, São Paulo, Brazil

[25] Natan, P. et al (2024) *Green and community waste composting Western Urban Recyclers Cooperative (RUO)* - Buenos Aires Federation of Cardboard Collectors, Cart Collectors and Recyclers (FACCyR).
[26] For more information about RUO's program, visit www.instagram.com/ruooeste/ and read Allen, C. and Moon, D. (2025) Building Community Resilience and Green Jobs through Organic Waste: Climate Benefits and Economic Model of Just Organic Waste Management in Buenos Aires City. GAIA.
[27] https://cooperpac.com/

Working Towards Gender Equality

Women represent a significant share of the waste picker workforce. While there are no global statistics, studies indicate that women represent about 80% of waste pickers in India, 56% in cooperatives in Brazil[28], 97% in Da Nang, Vietnam[29]. Other studies report figures of 47.5% in New York City, United States, and 31% in Bogotá, Colombia[30].

The gender perspective is not new in the waste pickers sector. Women in Informal Employment Globalizing and Organizing (WIEGO) has 30 years working with movements of workers in informal employment, including waste pickers, and hosts a pioneering waste and gender programme. The Mumbai-based organization Stree Mukti Sanghatana (SMS) - "Women's Liberation Organization"- has been working with women waste pickers for over 25 years. However, the rights of women and gender-diverse people remain largely invisible and unaddressed, and analysis of gender imbalances are still limited.

[28] Frequently Asked Questions about Waste Pickers. WIEGO, 2024.
[29] Mapping of waste pickers in Vietnam. IAWP.
[30] Chikarmane, P. and Narayanan, L. (2024) Statistics on Waste Pickers: A Case Studies Guide. WIEGO.

Gender Imbalances in the Waste Sector


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Many imbalances and vulnerabilities for women and gender minorities in the waste pickers sector have been identified in various studies[31]. These include:

- overlapping vulnerabilities: as women and gender minorities who are poor, waste picker and in some cases members of disadvantaged communities (such as lower castes in India);
- the additional burden of unpaid care work, as women are more likely to take care of children, elders and others;
- exposure to air pollutants and unsafe working conditions due to inadequate protective equipment and limited access to health care, with particular risks to reproductive, maternal, and foetal health for pregnant people;
- gender-based violence in the workplace;
- gender-based domestic violence;
- limited access to training, credit, or technologies;
- threat to livelihoods when landfill methane capture projects restrict access to the site without providing alternatives;
- barriers to employment in the formal waste sector;
- disparities in earnings and barriers to access higher income materials;
- lack of recognition of their role and leadership;
- underrepresentation in decision-making and negotiation spaces.

Women waste pickers also experience specific violations of their sexual and health rights compared to men when working informally at landfills, notably due to the lack of access to bathroom facilities, exposure to infectious diseases during pregnancy when immunity is lowered, and to an increased threat of sexual harassment when negotiating access to materials[32].

[31] Climate and Clean Air Coalition (2025). Towards Gender-Transformative Action on Super Pollutants. Paris. https://www.ccacoalition.org/resources/towards-gender-transformative-action-super-pollutants; Sonia Dias at Women waste workers as key climate actors: Lessons from Brazil and South Africa webinar, CCAC, 2026.

[32] Dias, S. and Ogando, A. (2019) From Theory to Action: Gender and Waste Recycling, WIEGO.

> Contractor models typically end up hiring males and displacing the people who traditionally did the work. We strongly felt that a person who has been doing the work for so long brings in the knowledge, experience, and intelligence to handle the material in a particular way, and should be the first claimant of that work, and she should then also have the first right of refusal. We wanted a PPPP – a pro-poor private public partnership." [33]
>
> - Lakshmi Narayan, co-founder of SWaCH cooperative and KKPKP trade union

Creating spaces to recognize gender differences and build collective power

Several organizations highlight the importance of creating spaces for women and gender minorities to discuss gender roles, analyse differences and build trust and a shared vision towards gender equality. Trust-building is seen as essential in a sector marked by overlapping vulnerabilities and harassment, as women or gender minorities, as poor people, and as waste pickers. Examples of such initiatives include the "neighborhood sisters" program run by SMS in Mumbai (see box) as well as gender committees established by movements such as the National Waste Pickers Movement in Brazil.

Entering decision-making spaces

Differentiated representation in decision-making spaces is one of the gender imbalances identified within the waste picker organizations. Actions at different levels are being taken, including within their highest organizational bodies. In 2024, the International Alliance of Waste Pickers voted on a resolution on the Rights of Women Recyclers at its first elective congress. The resolution[34] states that the Alliance will:

- guarantee the participation of women and non-binary people in the decision-making of the International Alliance by defining standards that ensure non-discrimination;
- guarantee the participation of women in decision-making in all affiliated countries of the International Alliance and in their organizations;
- develop prevention and response protocols against acts of violence and discrimination against women;
- promote training and communication actions on the importance of women's role.

[33] Waste collection is green work': how a pro-poor partnership created jobs and cleaned a city" The Guardian. May 22, 2025. https://www.theguardian.com/environment/2025/may/22/waste-collection-green-work-pro-poor-partnership-pune-india
[34] https://globalrec.org/document/rights-women-recyclers/

Stree Mukti Sanghatana (Women's Liberation Organisation)

SMS is a global pioneer in gender work in the waste sector. The organization has been working on women's rights in Mumbai, India, since 1975, and in 1998, started a program to train women waste pickers as "parisar bhaginis," or "neighborhood sisters". The training includes topics such as the principles of zero waste, waste management, composting and biogas operations and gardening, and spaces for trust-building.

SMS supports women waste pickers in organizing themselves and assists in the creation of cooperatives. It currently works with six cooperatives -each comprising around 30-40 women- who specialize on different services, such as separate waste collection and management, manufacturing compost buckets, and others.

SMS's work for women's liberation includes running 11 centers of counseling on domestic violence, and adolescent program, theater initiatives, a magazine that has been active for 40 years, as well as producing around 25 books on women's issues and much more. Their training programme includes 24 modules, with topics ranging from women's rights and waste management to nutrition, health, how to run self-help groups, and how to manage domestic budgets and savings, amongst others.

The work with the women waste pickers -many of whom are illiterate women from the lower castes- has led to structural social changes. Some of those changes include:

- Building trust and confidence among women through self-organized groups
- Increased schooling of waste pickers' daughters and a reduction in child marriage;
- Economic empowerment and greater independence for women
- Reduced domestic violence

"...the violence was reduced now. As women were working alone roaming on the roads they used to fight with other women for a plastic bag, but now with a settled group they were united and the husbands were also scared that if I beat her somebody else will come. She's not alone. This was also important. This has given them a lot of strength".

– Jyoti Mhapsekar, SMS, Mumbai, India.[35]

[35] https://streemuktisanghatana.org/

Incorporating a Gender Perspective in Public Policies and Programs

In the waste sector in particular, but also across all areas of governance, there is much that governments can do to incorporate a gender perspective into the design, implementation and monitoring of public policies. Several measures have been identified in a guidance document[36] to advance gender-responsive approaches in sectors that emit super pollutants[37], including the waste sector:

Funding for gender-transformative action

For the waste picker sector, this could include dedicated funding to analyze gender imbalances within the sector and to promote gender equality. Funding for day-care centers and scholarships for children of waste pickers is one example. Specific funding for the creation of gender committees and training for the waste picker cooperatives is another.

Gender-disaggregated data

This includes incorporating gender indicators into data collection and research, for example examining the specific risks of climate change to women and gender minorities, as well as health risks related to exposure to air pollutants among pregnant people working in landfills and dumpsites.

Gender targets in policies

This could include quotas and targets for the participation of women and gender minorities in funded-projects, training programmes, negotiation roundtables, and other decision-making spaces.

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[36] Adapted from Climate and Clean Air Coalition (2025). Towards Gender-Transformative Action on Super Pollutants. Paris. https://www.ccacoalition.org/resources/towards-gender-transformative-action-super-pollutants

[37] Super pollutants is a term referred to a group of pollutants that have a larger climate change impact than CO_2. These include: methane, black carbon, hydrofluorocarbons (HFCs), and tropospheric ozone.

Gender and power analysis in program design

This involves integrating gender and power analysis into the design of programs and policies to better understand inequalities, decision-making dynamics, and barriers faced by women and gender minorities, and to ensure more equitable and effective interventions.

Access to emissions mitigation resources

This includes providing subsidies for the acquisition of technologies by women and gender minorities, as well as ensuring access to capacity building and financial instruments that support their participation in emissions mitigation activities.

Transformative Leadership for Women's Rights

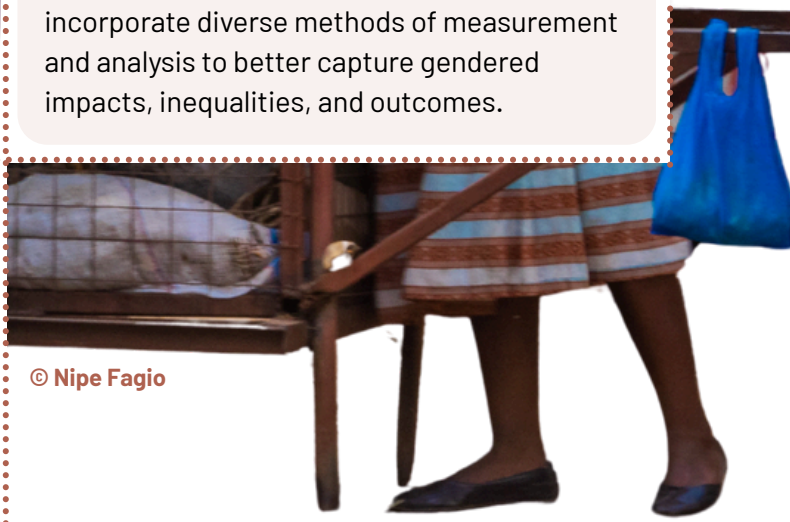
This includes support and partnerships with feminist and gender sensitive organizations to not only improve public policies through a gender perspective, but also to promote gender equality across all areas in a transversal manner.

Gender-transformative Monitoring, Evaluation, Accountability, and Learning

This involves systems that not only track indicators and areas that are specific to women and gender minorities, but also incorporate diverse methods of measurement and analysis to better capture gendered impacts, inequalities, and outcomes.

Narrative Shift

This involves placing government public communications at the center of efforts to build a narrative that makes patriarchy visible and open to question, promotes gender equality, and strengthens recognition of the role of waste pickers.



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The Economics of Organic Waste Management

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Financing Needs

Public funding for a public service

Historically, municipal taxes have been the primary source of funding for solid waste management. Together, recyclable and organic waste make up 70-80% of the municipal solid waste stream.[38] This importance must be reflected in local government spending on doorstep source-separated collection, transportation and processing of recyclable and organic waste, as well as on the disposal of any contaminants or residuals. Governments are uniquely positioned to offer the stable, predictable financing necessary to make organic waste management successful at scale and over time. Moreover, diverting organic waste from final disposal generates cost savings in both transportation and final disposal.

In addition to adapting local budgets to prioritize recycling and recovery of organic waste, national governments support is essential to drive systemic change. Brazil is taking encouraging steps in this regard, with its federal Ministry of Environment and Climate Change funding cities to implement organic waste recycling with waste pickers. Several mechanisms have been established for this purpose. Three funds launched by the Ministry support recycling efforts and include a ranking system that favours those projects working on organic waste recovery and also those engaging waste pickers. These three funds are targeted respectively at waste picker cooperatives and associations (with 21 out of the 24 funded projects including organic waste treatment), cities working with waste pickers, and associations of municipalities. Another financing mechanism involves tax exemptions for companies investing in recycling or organic recovery systems, where . interested companies can apply by submitting an annual plan. These financial mechanisms mobilize millions of Brazilian reais to improve recycling and composting systems, prioritizing operations involving waste pickers.

[38] Kaza, S. et al (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050, World Bank.

Provide start-up financing then possible shift to subscription fees

Capital investment for the waste picker sector is usually publicly financed or donated in-kind, including the acquisition of space and equipment. Several groups interviewed have accessed public start-up financing to support organic waste management as a public service that generates cost savings from final disposal (RUO and FACCyR in Buenos Aires; Oikos Vida in La Plata). Public start-up financing, especially from national governments, is particularly important for waste pickers, who typically lack access to private investments and depend on their daily earnings for survival.

> Economics-wise, when you're into composting and you don't have any support or any external funding, you will not be able to set it up easily as a beginner. As long as we can't have reliable earnings, it will be difficult for us economically."
>
> - Johnson Doe, GWPCS, Accra (Ghana)

> We need investments in people, because projects usually invest in equipment. People who are working daily need better wages."
>
> - Valquiria Cândido Silva, COOPERPAC, São Paulo (Brazil)

Once operations scale and mature, a shift to subscription fees can be considered, particularly for commercial clients, since citizens' ability and willingness to pay subscription fees varies. A hybrid model combining public capital investments with operational costs covered through subscriptions - complemented by continued public funding - has proven to be an effective approach.

> As this work is a public service, it must be financed in the short term, during this implementation phase, by the government, but in the medium and long term, from the same tariff framework, i.e., payment by users in their waste bills."
>
> - Juan Carlos Niño, Oikos Vida, La Plata, Colombia

In Pune, India, organic waste management by waste pickers is largely financed through service fees paid by users. The user fee for organic waste management ranges from 30-45 rupees per household per month (about USD 0.37-0.42). The service-provision model has helped build trust of local citizens:

> "Most people are burnt by vendors who come to sell them machines or something like that and then disappear. The fact that we were interested in service provision and not trying to sell an item and walk away, convinced a lot of people to start composting."
>
> - Harshad Barde, SWaCH, Pune (India)

In Bonyokwa, Tanzania, waste pickers of the Wakusanya Taka Bonyokwa Cooperative collect a flat, integrated waste management fee from households that includes organic waste services, in addition to the collection of recyclables, hazardous waste, and residual waste. The fee level is set by the government and is currently at TZS 3,000 (about USD 1.1) per household per month.

Real cost coverage for scale

Public financing that is sufficient to cover real costs is decisive for successful operations at scale.

Costs must be adequately covered for both infrastructure and labor, while infrastructure investments are essential to expand community-level schemes to whole-city, municipal operations.

Operations surveyed for this study rarely achieved sufficient levels of cost coverage. In some instances, equipment was publicly funded, but labour was not paid, and waste pickers had to attempt to subsidize those costs through other waste management activities (RUO - Buenos Aires[39]). In other cases, labor was covered but there was insufficient funding to acquire the skilled personnel or equipment needed to scale operations further (Nipe Fagio - Dar Es Salaam and Zanzibar, Tanzania).

[39] Natan, P. et al (2024) Green and community waste composting Western Urban Recyclers Cooperative (RUO) - Buenos Aires Federation of Cardboard Collectors, Cart Collectors and Recyclers (FACCyR).

Private sources alone not adequate

Core aspects of organic waste management operations require sustained financing, making public funds a better fit than other sources, which are often piecemeal and short-term in nature.

GWPCS's composting pilot: Solution to landfill access issues, long-term support needed

Following the COVID pandemic, waste pickers in Accra, Ghana, faced days-long queues to access the local dumpsite in order to dispose of largely organic residual waste from their recyclable waste collection and sorting operations. This motivated them to secure their own waste storage and sorting space through an NGO grant, where they piloted organic waste collection and composting as an additional livelihood stream:

> We had no idea of how to do the compost – but because now we had our own space, we wanted to try it as a pilot and see what could we do with it and where to sell it."
>
> - Johnson Doe, GWPCS, Accra (Ghana)

While a lack of funding led the cooperative to end its composting pilot in early 2024, the waste picker cooperative remains interested in pursuing organic waste management in the future if it can secure adequate financial and technical support. Their experience is mirrored in many other locations, where waste pickers trialled composting operations without financial or technical support, and remain interested in continuing despite initial obstacles.

Loans not a good fit

None of the groups interviewed has used loans to finance their organic waste management operations. Indeed, solid waste disposal is a municipal responsibility for which taxes are collected to finance both infrastructure and operations. It would neither be fair to ask waste pickers to take financial risks, nor feasible, since organic waste management does not generate revenue profiles that are compatible with loan repayment schedules.

A role for philanthropy in complementing startup funds and assisting scaling

Private funds and international financing can also play a role in filling public finance gaps, as shown by the experience of SWaCH in Pune, Nipe Fagio in Dar Es Salam, and GWPCS in Accra.

A philanthropic grant to SWaCH allowed them to provide a financial incentive to citizens to enter new composting contracts of at least three years, in the form of a one-time start-up costs subsidy of up to 500 rupees (about US$4.50) per household. While the subsidy amount was modest, both in comparison with the long-term contract cost and to the income of many of the households that signed up, it provided a signal to prospective clients that institutions were invested in the program, and increased their user base.

Additional income stream for waste pickers

Organic waste management can provide an additional income stream for waste pickers, complementing the income they derive from the collection and management of dry recyclables, and is often located in areas that waste pickers are already servicing.

> For most waste pickers, it's an additional source of income. There's only about 15 or so waste pickers out of 165 for whom this is their principal source of income, and they do multiple locations. Most other waste pickers are doing their collection work, and this additional work that they do during the day in about an hour, hour and a half."
>
> - Harshad Barde, SWaCH, Pune (India)

This additional income could have several sources, such as:

- government contracts or additional budget lines from the organic waste collection and processing services,
- payment for the environmental education and community engagement work,
- user fees for collection of organic waste, particularly from large organic waste producers,
- user fee for the set up and maintenance of in-situ composting or anaerobic digestion systems,
- sales of various products such as compost, mulch, black soldier fly larvae and frass, worms, and other related outputs.

Waste pickers need direct access to funding

Waste pickers often struggle to access public funding or grants due to prejudice against them, lack of formal status and legal recognition, or limited administrative capacity. Directly funding waste picker cooperatives or associations, who have extensive expertise in waste management, is most effective, as it eliminates intermediaries and supports stronger control over resources. It also requires building waste picker capacity to directly apply for funding, manage budgets, and report to funding institutions.

Ensuring that waste management funding reaches the right actors also means including waste pickers in the policy discussions that shape funding decisions, with equitable gender representation.


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Municipalities can save money and landfill space

In the experience of SMS in Mumbai, India, organic waste management so far has had more environmental benefits than economic ones. This could change if governments recognized the savings that decentralized, on-site organic waste management brings in terms of reduced landfill space requirements, lower transportation costs, and decreased methane emissions. SMS's main driver today for carrying out composting and biogas operations is creating zero waste areas, but they also believe there should be compensation for the organic waste management service as well.

In Durban, South Africa, for instance, the local organization groundWork conducted a cost-benefit analysis of a composting program they operate, processing the food waste from two fresh food markets and the local botanical garden. Their analysis shows that diverting waste from landfill into composting can generate an overall net benefit for the city of R18 million (USD 1 million) over a 10-year period, with a Net Present Value of R10.5 million (USD583K) for these three sources alone. The savings are related to avoided transport and disposal costs, landfill space extension, and avoidance of purchase of compost for public parks and landscape maintenance.[40]

Monetizing Outputs

Output sales provide complementary income at best

Many operations donate compost to the community and use it locally in gardening (Oikos Vida, SWaCH, RUO) or reforestation activities (RUO). Oikos Vida donates compost to local users, explaining that it is unfinished and still requires curing. SWaCH uses biogas outputs to index fees for large generators but not for small ones. RUO sells plants grown at its materials recovery facility. Biogas is also competitive with fossil gas when used at the point of generation, while the costs of storage and transportation are not competitive.

Commercial and non-commercial approaches are not mutually exclusive: donations can be made until outputs reach commercial quality, or a portion can be sold while the rest is donated to build community acceptance.

Scale also matters: when Colombian waste pickers previously operated a composting plant serving three cities, the scale of their operations was sufficient to successfully generate and sell certified compost fertilizer in Colombia. In contrast, their current community-scale operations do not allow for compost sales.

[40] Jones, P. Fleetwood, T. and Erwin, K. (2025) Making Cents of Composting. A Municipal Savings Model for Diverting Organic Waste from Landfill. groundWork, DUT and LUMEC.

Longer timelines to produce compost, no mature markets

In many geographies, governments are underspending on the separate collection and management of dry recyclables, with waste pickers providing extremely low-cost services at the expense of their working conditions and livelihoods. At the same time, parts of the dry recyclables market are able to generate revenue streams that cover part of those waste management costs in some countries.

In contrast, compost takes longer to produce and does not have comparable markets at present. Compost is a soil amendmentthat delivers longer-term benefits, including improved soil structure, enhanced nutrient content, and carbon sequestration in soils[41]. It is not subsidized, and its application is labor-intensive. In contrast, petrochemical-based fertilizers can be formulated for specific crops, deliver immediate results, and are heavily subsidized. In addition, agriculture machinery is designed to easily dispense synthetic fertilizers, making it difficult for compost to compete:

"Even though the market for recyclables is cyclical and prices are always depressed, there is a market that allows for subsistence. [...] The market for compost products is still in its infancy, with low market share and a competitive disadvantage compared to commercial fertilizers."

- Juan Carlos Niño, Oikos Vida, La Plata, Colombia

However, farmers who sell their products in markets where organic waste is managed are a potential entry point for expanding compost markets:

"To get more income through selling our compost, more education is required, especially for farmers. For instance, at Simu2000 market, most people who are market vendors and traders are farmers. So I was trying to give them more education on how to use this compost instead of using artificial fertilizers. They wanted to see the results they can get from using the compost, to convince them to buy it."

- Mariam Shadrack, Nipe Fagio, Dar Es Salaam (Tanzania)

Amateur gardeners are also often more able to pay a fair price for compost than farmers (e.g. in Brazil). Cities can also procure compost from waste pickers for use in public green spaces.

[401] Nair, S. (2022) Back to Earth: Composting for various contexts, GAIA.

The challenge of achieving commercial-grade compost

Obtaining certification for compost sales is required in some countries and can be onerous (e.g. Argentina). Oikos Vida (La Plata, Colombia) is certified to produce and sell compost and is familiar with the requirements for generating commercial-grade finished compost. The ability to cure compost to maturity at stable humidity and oxygen levels is key, and requires significant space, time, and labor year-round.

In Pune, SWaCH's commitment to minimizing the strenuousness of operations has led them to adopt a process that does not generate large amounts of compost. Their choice of highly decentralized on-site treatment at 287 locations over 500km^2 also makes it challenging to centralize, package, and sell the compost that is produced.

> We harvest every 15 days and cure the compost for 50-60 days. Regularly taking the compost out means a little extra effort on a regular basis, but you no longer have to jump into the pit and empty out the entire thing and work for hours to do it. But what this also means is that the amount of compost that you get at any point of time is limited (.) This has meant that there's really not much market or potential for being able to sell the compost. (.) It's a massive city spread all across. You can't really get all the compost back together to try and package it and sell it."
>
> - Harshad Barde, SWaCH, Pune (India)

A role for government: lightening administrative burdens

Governments can take several actions on the national and local scale to empower waste pickers to manage organic waste more effectively.

Obtaining composting certification, as well as organic waste management licenses and permits can be overwhelming for waste picker cooperatives, with limited administrative capacity and no spare financial resources to hire lawyers. Laboratory testing of compost quality is also costly. Governments can address these barriers by simplifying these administrative requirements, lowering or waiving fees, as well as making compost laboratory testing accessible through subsidies or collaboration with universities. Governments can also protect and refrain from over-regulating household-level livestock rearing, which is a traditional outlet for municipal food waste.

Conclusion and Recommendations

With climate-change-fuelled extreme weather events causing unprecedented destruction and harm, the imperative to reduce anthropogenic greenhouse gas emissions is more urgent than ever. As governments develop specific legislation and roadmaps to reduce methane emissions from the waste sector, and as increased funds are directed to this purpose, it is essential that waste-picker-led systems are recognized as recipients and key players of these policies and programmes.

Waste-picker-led organic waste management with source separation constitutes a practical, achievable mitigation strategy implementable by governments and cities across the globe, building on the unparalleled experience of waste pickers and the pioneering work already happening across multiple continents. This zero waste approach to what in many geographies still constitutes the largest fraction of municipal waste is long overdue and has co-benefits for poverty-alleviation, local economies, and gender equality, if implemented well.

Following are some of the recommendations to advance toward the overall recognition of waste pickers' role and the incorporation of the organic waste stream into their services.

Recognition of waste pickers role and integration into organic waste management

- Recognize waste pickers as workers and service providers, guarantee their labor rights, and formally define waste pickers in public policy;
- Prioritize waste pickers in organic waste management and ensure their access to waste streams;
- Include waste pickers in initiatives promoting composting and other forms of organic waste management.


© RUO

Setting up a successful organics management run by waste pickers

- Require organic waste separation at source, starting with large generators;
- Contract waste pickers to manage organic waste from all public green spaces;
- Partner with waste pickers to develop city-level policies and assign dedicated staff;
- Consider auditing providers to identify high-performing operators and techniques, while excluding fraudulent operators and failing technologies;
- Allow organic waste treatment in public parks and underutilized public spaces;
- Facilitate the set up of new infrastructure
- Provide continuous technical support
- Collect data and conduct monitoring to optimize operations.

Working towards gender equality

- Provide funding for gender-transformative action in public policies and programs;
- Incorporate gender-disaggregated data into baseline assessments, research, monitoring of public policies;
- Set specific targets to advance gender equality in policies and programs, such as inclusion of women and gender minorities in funded projects, negotiations, training;
- Incorporate gender and power analysis in program and policy design.
- Provide access to resources that women or gender minorities do not typically receive, including access to technology and training, funding, etc.
- Support leadership and organizations working towards women's rights to promote gender equality and improve public policies;
- Implement gender-transformative monitoring, evaluation, accountability, and learning systems;
- Promote a narrative shift in public communications that make patriarchy visible and advances gender equality.


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Adapting funding and finance to organic waste management

- Clarify and simplify administrative requirements to manage organic waste and sell compost and other outputs, and assign dedicated staff to liaise with waste pickers on these processes;
- Lower or waive fees for permits, licenses, and certification required to manage organic waste and commercialise outputs;
- Subsidize the cost of laboratory testing for compost or collaborate with universities to provide low-cost testing services;
- Expand municipal procurement of compost from municipal organic waste management for use in public green spaces; and
- Protect household-level livestock rearing as an outlet for municipal food waste, as well as a source of manure inputs for high-quality compost applications in the agricultural sector, and a poverty alleviation strategy for waste picker families.
- Recognize that private funders, multilateral, and bilateral aid providers may help cover gaps in public financing for organic waste management, particularly for time-bound interventions such as start-up funds.

"***Everyone wins.*** The citizen is happy, the waste picker is happy, and the city is also happy because now they're not getting the organic waste which they would otherwise have to deal with. The waste pickers are also happy because the recyclables are cleaner."

- Harshad Barde, SWaCH, Pune (India).

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About GAIA

GAIA is a network of grassroots groups as well as national and regional alliances representing more than 1000 organizations from 101 countries. With our work we aim to catalyze a global shift towards environmental justice by strengthening grassroots social movements that advance solutions to waste and pollution. We envision a just, zero waste world built on respect for ecological limits and community rights, where people are free from the burden of toxic pollution, and resources are sustainably conserved, not burned or dumped. **www.no-burn.org**

About IAWP

The International Alliance of Waste Pickers (IAWP) is an international union committed to advancing the rights and strengthening organizing of waste pickers. IAWP is integrated by 54 waste picker organizations representing more than 460,000 workers across 34 countries. **www.globalrec.org**

Managing Organics With Waste Pickers: A Briefing for Policymakers

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