











Key findings from research among a small sample of informal women waste pickers working in the plastics recycling supply chain in Indonesia, with recommended actions for the private sector to address gender-specific risks and opportunities.



About This Research

The Fair Circularity Initiative

The Fair Circularity Initiative (FCI) brings businesses together to work on a common aim of ensuring the human rights of workers within the informal waste sector are respected and their critical role in circular value chains is recognised.

At the heart of the FCI are the Fair Circularity Principles, which apply the expectations and responsibilities outlined in the UN Guiding Principles on Business and Human Rights to waste pickers and other informal waste sector workers.

The Fair Circularity Principles include a commitment by FCI members to: "Apply a gender lens in efforts to address human rights impacts in the informal waste sector."

Principle 6 states: "Women waste pickers face particular vulnerabilities. Human rights impacts, including those affecting personal safety and security, discrimination and harassment, and further impacts on livelihoods should be analysed and addressed with an intentional gender lens. This requires meaningful engagement with women waste pickers, or credible proxies for their views, in order to understand how human rights impacts are experienced by them and how they should best be addressed."

This research was undertaken in pursuit of Principle 6. The aim of the research was to hear directly from women waste pickers in two urban locations near Jakarta, Indonesia, about their lives, livelihoods, and how they experience human rights impact.

BSR, serving as the Secretariat for the FCI, produced this report, which synthesizes key findings from research supported by the FCDO-funded Work and Opportunities for Women (WOW) programme and Yayasan CARE Peduli (YCP). The original research was conducted by Nehik Sri Hidayati, and the report was edited by BSR's Dr. Felicity Butler. The final report was reviewed by BSR, WOW, Tearfund, Unilever, Women in Informal Employment: Globalizing and Organizing (WIEGO), and the International Alliance of Waste Pickers.

The objectives of the research were to obtain a clear picture of the situation women waste pickers face, focusing on working conditions, human rights risks, and gender inequality; and to provide recommendations to businesses for interventions to address their challenges.

The Work and Opportunities for Work (WOW) Programme

We are grateful to the UK's Foreign, Commonwealth and Development Office (FCDO) for their funding and support via the Work and Opportunities for Women (WOW) programme.

The WOW programme is the UK Government's flagship women's economic empowerment programme. The objective of the WOW programme is to improve economic opportunities for women working in global value chains, increasing participation and ensuring dignified, equal and empowering work. The seven-year programme, running until March 2025, aims to enhance the economic empowerment of women by supporting businesses, organisations and programmes that are ready and willing to take action.

It will enable these stakeholders across the supply chain ecosystem to make progress and influence the global agenda on women's economic empowerment.

The programme is being delivered by an alliance of experts at the cutting edge of women's economic empowerment research, programme design and delivery. PwC leads this alliance, working with CARE International UK and Social Development Direct. Business for Social Responsibility (BSR) and the University of Manchester were members of the alliance between 2017 and 2020.

Introduction

Waste Management and Informal Sector Challenges

Indonesia generates 56.6 million tonnes of waste annually, with 52% being organic and 19% plastic¹ amounting to approximately 10.75 million tonnes of plastic waste. However, only 10–15% of this — roughly 1.08 to 1.61 million tonnes — is recycled, as many areas lack formal waste management systems and rely heavily on informal waste pickers.

It is estimated that there are 3.7 million waste pickers (known as 'Pemulung') in Indonesia². These workers often earn less than a living income, which is the amount needed for all the components essential for a decent life. They also lack formal labour protections or access to social benefits³.

A key challenge is the lack of formal recognition and inclusion of informal workers. Only 11% of informal workers have access to social protection, leaving many vulnerable to economic instability⁴.

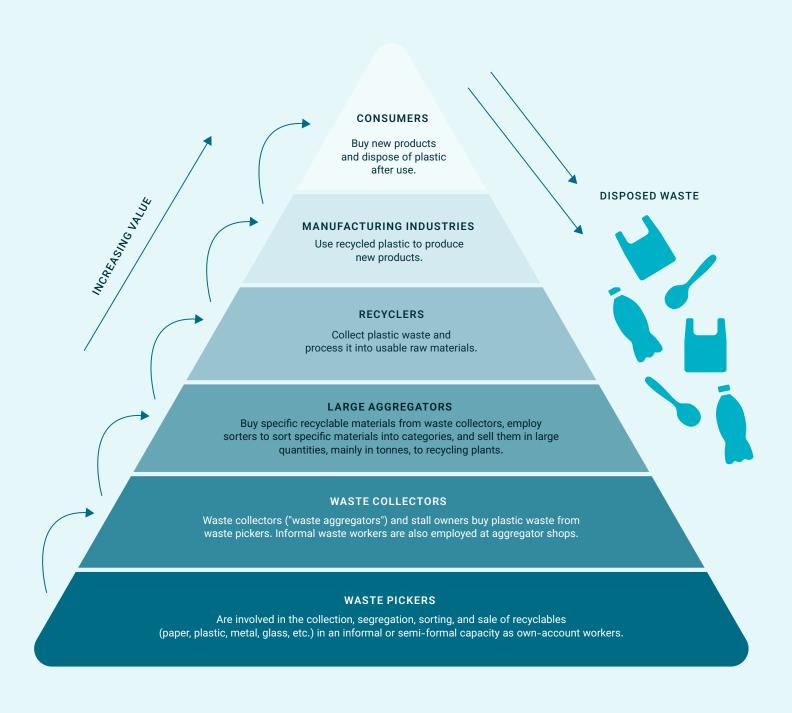
Finally, there are significant health and safety concerns related to waste picking due to hazardous conditions in informal work environments.

- I. Source: IPSN-Solem Informasi Pengelolaan Sampah Nasional, 2023
- 2. Source: Ikatan Pemulung Indonesia, 2020
- 3. Source: A Living Income for the Informal Waste Sector
- 4. Source: BPJS Ketenagakerjaan, 2024



The Plastic Recycling Value Chain

The plastics recycling value chain is hierarchical in nature, with different stakeholders contributing at various levels, as visualised in the diagram below. While usage of stakeholder terms varies across contexts, this report adopts the following:



Research Approach and Methodology

The research uses a qualitative approach to understand the gender disparity that underlines women waste pickers' work. It also uses two gender frameworks to analyse the data and form recommendations.

The research involved field visits to six locations in two cities, Bekasi and Depok, near the country's capital, Jakarta.

Participants

A total of 150 people (73 women and 77 men) in waste picking-related roles were selected to participate in the research. The majority were waste pickers. Eleven focus group discussions were conducted with 133 of the participants. These discussions served as the main method to gather findings.

In-depth interviews - both in-person and online – were conducted with the remaining 17 participants to review and validate findings.

Breakdown of Research Participants

Participants	Women	Men
Waste Pickers	68	65
Waste Collectors	1	5
Small-scale enterprise owner	-	1
Ikatan Pemulung Indonesia (waste workers' union)	-	3
Woman leader from Ciketing Udik village	1	-
Informal workers' network	1	-
Government representatives	2	2
NGO representative	-	1
Total number of participants	73	77

Gender Frameworks

The research uses two frameworks:

FCDO's Women's Economic Empowerment Framework

To assess women's economic empowerment among women waste pickers, the research applied the UK's FCDO's Women's Economic Empowerment Framework, which identifies three key domains of change:

- Access to decent work and control over work-related decisions
- 2. Access to and control over key economic assets
- 3. Gender-specific constraints and enablers

CARE's Gender Equality Framework

CARE's Gender Equality Framework recognises that achieving gender equality requires change across all aspects of women and girls' lives. This means addressing the root causes of gender inequality, so that women and girls see lasting change in their power and choices, rather than just a temporary increase in opportunities. The framework guides efforts to promote change in all areas of women's lives through building agency, changing relations, and transforming structures.

Research Locations: Key Statistics







Jaya Community, Bekasi

Location: Informal settlement in the city centre; waste pickers live on the riverbank

No. of waste pickers living in the community: 50

Average longest working hours per day (not including non-paid care work): Women: 5; Men: unknown

Weekly income (women): USD \$1-\$3

Weekly income (men): unknown

Percentage of women who receive income directly (not via husbands): 100

Tirtajaya Community, Depok

Location: Unused state land, rented informally; waste pickers live in temporary settlements provided by business owners

No. of waste pickers living in the community: 15 families or husband and wife couples (50 per cent women)

Average longest working hours per day (not including non-paid care work): Women: 11; Men: 11

Weekly income (women): USD \$13-\$20

Weekly income (men): USD \$10-\$33

Percentage of women who receive income directly (not via husbands): 91

A waste mound is the height of the waste at a landfill. Waste pickers have to climb these mounds to obtain recyclables, which can be hazardous and tiring.



Bantar Gebang Landfill, Bekasi

Site size: 110.3 hectares (the size of 200 football fields)

Daily waste dumped at the site: 6,500-7,000 tonnes

Height of waste mounds: 50 metres

Waste pickers working at the site: 6,000

(40 per cent women)

Average longest working hours per day (not including non-paid care work): Women: 8; Men: 12

Weekly income: Women: USD \$40-\$53; Men: unknown

Percentage of women receiving income directly

(not via husbands): 25



Sumurbatu Landfill, Bekasi

Site size: 19 hectares (the size of 27 football fields)

Daily waste dumped at the site: 900 tonnes

Height of waste mounds: 25 metres

Waste pickers working at the site: 400 (40 per cent

women

Average longest working hours per day (not including

non-paid care work): Women: 8; Men: 12

Weekly income: Women: USD \$17-\$33; Men: unknown

Percentage of women receiving income directly

(not via husbands): 0



Cipayung Landfill, Depok

Site size: 11.2 hectares (the size of 16 football fields)

Daily waste: 900 tonnes

Height of waste mounds: 25-30 metres **Waste pickers working at the site:** 400

(20 per cent women)

Average longest working hours per day (not including

non-paid care work): Women: 9; Men: 9

Weekly income: Women: USD \$9-\$20; Men: USD \$17-\$30

Percentage of women receiving income directly

(not via husbands):100



Beji Community, Depok

Location: Waste picker community run by a business owner buying and selling waste and managing waste disposal services

No. of waste pickers living in the community: 25 (40 per cent women)

Average longest working hours per day (not including non-paid care work): Women: 4; Men: 11

Weekly income: Women: USD \$17-\$20; Men: USD \$10-\$47

Percentage of women receiving income directly (not via husbands): 64



Findings: Working Conditions

The research found that most waste pickers work independently without formal contracts. Some, especially waste pickers coming to work from outside the area, are informally tied to stall owners for housing and support. In exchange, they must sell recyclables to owners at agreed prices.

Waste pickers' earnings are based on the volume of recyclables collected, with prices set by business owners.

Working Hours

Interviews showed that waste pickers work flexible hours. Flexible working hours are valued by women waste pickers as it allows them to balance work with domestic responsibilities and childcare.

Women waste pickers without children at Bantar Gebang and Sumurbatu landfills typically work 8-12 hours daily, with some working nights to avoid the sun and heat stress. In contrast, Cipayung landfill workers, regardless of gender, have consistent 8-9 hour shifts from Monday to Saturday.

Women waste pickers paid by stall owners work 8-11 hours daily. Typically, Tirtajaya waste pickers walk up to 40 km per day and sort goods at night after carrying out household chores.

Men waste pickers work longer hours than women due to the absence of domestic responsibilities. When women no longer have childcare duties, their working hours match those of men.

Price of Recycled Plastic

The research found that waste pickers report declining income due to increased competition, more people collecting recyclables, the rise of waste banks, factory closures during holidays, and plastic waste imports. They also face additional price cuts during the rainy season when water and dirt devalues the goods.

In addition, it is anticipated that a policy of implementing plastic excise as a government revenue target will further affect the decline in waste picker incomes. IPI Bekasi City Management feared that this policy will push companies to use original raw materials over recycled ones, reducing their earnings. The research included an interview with a waste collector who suspected the price for recyclables dropped in December 2023 due to increased parties involved in the value chain.

Income

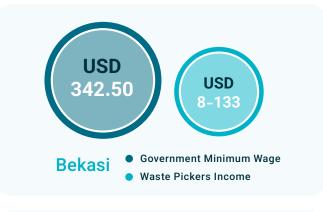
In Indonesia, the provincial government sets minimum wage standards for formal workers, but waste pickers earn significantly less, with men paid more than women.

The research found that the income of waste pickers (they earn what they sell) is influenced by factors such as working hours, market-driven prices for recyclables, age, physicality, experience, gender, and household duties. Income is generally lower for women. Women with childcare responsibilities experience further challenges, including less opportunities to undertake paid work.

Waste pickers who work in landfills are at risk of being hit by heavy equipment and falling waste when seeking to secure more valuable waste and therefore income.

Women waste pickers in urban villages tend to be restricted to that area due to the burden of household responsibilities and a lack of mobility.

Government Monthly Minimum Wage Versus Waste Pickers Monthly Income





Many women waste pickers who work with their husbands don't receive individual incomes. A husband's control over combined earnings is a common practice in areas such as Bantar Gebang and Sumurbatu. Women see themselves as helpers while men are viewed as the breadwinners. In other regions, men and women work independently and receive their earnings separately.

Health Services

Few waste pickers have access to free health services. Despite efforts by waste picker organisations to support/ encourage their access, administrative barriers – such as a lack of updated ID cards and documents – prevent many from accessing the government's national health insurance. This leaves most having to rely on paid services at local clinics.

Social Security

Findings from the research showed informal waste pickers are covered under different social security laws in Indonesia than formal workers. Social security programmes for informal workers vary regionally. The research highlights the complexity of these variations. It has been noted elsewhere that, even though the Indonesian government has established a Social Health and Employment Insurance Program (BPJS), its implementation has been sporadic and dependent on the agendas of respective local governments⁵.

Waste pickers at Bantar Gebang landfill, for example, have received employment social security from DKI Jakarta's Regional Revenue and Expenditure Budget Amendments. This has benefited 4,131 workers, 40 per cent of whom are women.

However, this support is not available to waste pickers in other areas, and many still face challenges such as a lack of ID cards and limited understanding of what's available and how to obtain it.

⁵ Source: Ocean Plastic Prevention Accelerator, 2021

Representation

Most women waste pickers have had no contact with unions or membership-based organisations. While some initiatives have been launched, women's involvement in decision-making within waste picker organisations remains minimal.



Childcare Support

Most waste pickers lack access to childcare, with only the Sumurbatu community offering a free childcare centre. Many women stop working to focus on childcare, while others bring their children to the landfill (in some instances to do labour), adding to their burden and putting their children at risk of injury in a hazardous environment.

Work Place Risks

Interviewees reported that work accidents, such as being hit by heavy machinery or being injured by sharp objects, can impact women in different ways. They are at risk of dangers related to reproductive health, including miscarriages from lifting heavy loads or being struck by falling waste and heavy machinery. Some women are forced to return to work shortly after childbirth, leading to severe health issues such as uterine prolapse.

She miscarried when she was hit by a bunch of rubbish. She was already four months pregnant when she suddenly got hit by a bunch of rubbish from the dumpster, and it fell on her. I also had a miscarriage four months ago. When the trash came, a whole container. Bam! Miscarriage. The risks are serious. If you're not brave enough, you get nothing.

Woman Waste Picker, Sumurbatu

Findings: Economic Assets

Property Rights

Most migrant waste pickers in Bekasi and Depok live in temporary housing or rented rooms, with few owning land or property. Local waste pickers generally own property and land, often inherited from their parents.

A lack of property rights can leave women waste pickers in vulnerable situations, with some facing eviction notices due to government land use plans.

Assets

The findings from the research showed that most waste pickers own motorbikes, often purchased on credit, with ownership in the hands of the husband. Both men and women use equipment such as hooks, baskets, and carts, with ownership dependent on their working conditions and whether they work individually or in groups. The research found that it is common for waste pickers working in landfills to use additional gear such as boots, hats, face coverings, and head torches.

Financial Management

All women waste pickers interviewed for this research manage household finances and daily needs. Some men agree that women are better at handling money, though major spending decisions are often made by men. Despite this, many women live with financial stress and struggle to meet basic needs, debt repayments and school fees. They often rely on occasional loans or supplemental income from odd jobs, such as making and selling sacks and long hooks (tools designed to sort through and retrieve recyclable materials from piles of waste or landfill sites) for other waste pickers, to boost income.

Mobile Phone Use

While most waste pickers have mobile phones, few use them for economic purposes, with women in Bantar Gebang being more likely to do so. Five women participants had TikTok accounts, and two of them were quite active; some even tried to earn money through their accounts, although there were no visible results.

In interviews, it emerged that women waste pickers are notably engaged with social media and online shopping apps for personal and educational needs, whereas men typically use phones for communication and field work, with limited use of digital financial services.

Phones are more commonly used as a means of children's education, communication with traders and collectors to sell goods, and communication with family members.

Loan Trap

Interest-free loans from collectors and high-interest daily bank loans (short-term loan used by low-income individuals to cover urgent household needs) offer short-term relief, but they can trap waste pickers in a cycle of debt. Daily bank loans with high interest rates are more common among men. Women often struggle to meet collateral requirements and manage repayments, though an initiative by the waste workers' union lkatan Pemulung Indonesia aims to improve access and support for waste pickers.

Bank Savings

Most women and men waste pickers have bank accounts yet lack savings due to limited income and debt. Some waste pickers save money by collecting and selling valuable recyclables such as copper. Interviews found that waste pickers used savings to, for example, help fund their children's education, or visit relatives.

Findings: Access to Services

Social Protection Services

Waste pickers lack access and information to health, reproductive health and social protection services.

Men and women waste pickers who have government health insurance through BPJS Kesehatan (social security agency) in their local area can get free health and inpatient care, including reproductive health. However, BPJS Kesehatan will not cover the costs of pregnancy prevention and implanting contraceptives for women.

Local women with ID cards receive free childbirth assistance, though some still incur costs. Migrant women, however, must cover the high cost of giving birth, often leading to debt. Health issues such as prolapse and haemorrhoids go untreated due to poor outreach.

BPJS Ketenagakerjaan (social security agency for employment) provides guaranteed benefits for registered workers in the event of a work accident or a work-related death for family members.

Digital Platforms

Digital platforms are being used to help collect recyclable waste in some places, although most waste pickers don't receive training on how to use them. There are no signs of collaboration between waste pickers and digital platform developers in all research locations.

There is no free internet network available at waste disposal sites in all three landfills, leaving waste pickers having to pay to access the internet.

Education and Training

Waste pickers do not have opportunities to receive education and training to increase their expertise and skills in sorting and recycling plastic.

None of the participants had information regarding opportunities to take part in training from Ikatan Pemulung Indonesia (waste workers' union), the government, or other external parties.

However, some women in Bantar Gebang have learned and developed skills at home, such as creating TikTok content, sewing, learning Arabic, how to ride a motorbike, and making long hooks for other waste pickers.



The waste pickers sector has practically nothing [in terms of access to welfare and security]. The social security scheme prepared by the government can only be received by Contribution Assistance Recipients if they have a permanent domicile. Trouble is, waste pickers move from place to place, and their ID and residential address don't match.

- Director of Trade Union Rights Centre, Jakarta

Findings: Gender Norms

The research found that women are responsible for all domestic chores. Some men stated that men performing domestic chores is 'pamali' (forbidden) according to local culture. Some stated there are exceptions, however, especially around childbirth.

Strict gender division of labour in the household influences the time for various roles in daily life. Some women with children under five have the burden of caring for children while working as waste pickers or doing housework.

Division of Time Use between Men and Women

The research showed that the average time spent on paid work is approximately 8 hours for women and 12 hours for men. On average, women spend close to a quarter of their day (5.6 hours) on unpaid care and domestic responsibilities, compared to less than half an hour for men. Not surprisingly, therefore, women in the sample spent close to 4 hours a day less than men on paid work. Flexibility around working hours is one of the reasons cited by several women for why they take on informal waste work, as it allows them to fulfil their other, unpaid duties.



It takes 30 minutes to get to the top of the waste mound. After we get to the top, we rest first. The walk is exhausting, especially with kids. It leaves us gasping for breath."

- Woman Waste Picker, Sumurbatu



Male-Breadwinner Culture

The research reveals that the concept of men being the main breadwinner and women as contributors of supplementary income is a deeply ingrained view among both men and women in waste picker families.

When women are considered as additional breadwinners, they do not have access and control over the overarching finances, even when they earn more than their partner.

Women view work as important. Their perception of paid work as a waste picker is to help their husband and supplement his income.



Be a wife who can help her husband and be a good parent to our children. That's how we help our husbands. Being unemployed at home is not good. It's better to work to supplement our husband's income."

- Woman Waste Picker, Bantar Gebang

Child Labour

The research mentions that data provided by BPS (Statistics Indonesia) show a decline in the number of child workers in Indonesia, from 1.05 million in 2021 to 1.01 million in 2022. Local leaders in the Bantar Gebang and Sumurbatu villages declared that children working in the waste sector is increasingly rare.

Around Bantar Gebang and Sumurbatu, formal and free elementary, middle and vocational school education facilities can be accessed easily. However, free education does not always provide a solution to economic problems; uniforms, pocket money, and transportation are expensive for waste picker families.

Child Marriages

40 per cent of the women waste pickers interviewed married before they turned 18 years old. Some of them were married off by their parents before they even had their first menstruation, at the age of 10-12. Others were married off by their parents at the age of 15, having been promised a certain amount of money by the husband's family. Cases of early marriage often occur secretly, usually due to unwanted pregnancies.

The impact of child marriage mainly includes low education levels, poor reproductive health, and child labour.

Sexual and Gender-Based Violence

The research found that violence against women and girls in waste picker communities is predominantly physical, such as beatings and other forms of physical violence committed by husbands. Cases of harassment against women are still often considered 'joking behaviour'.

There are no gender-based violence services accessible to women waste pickers in the research locations.



They're still kids, they shouldn't be able to get married yet, but for some reason they do."

Chairman of Waste Workers' Union Ikatan
 Pemulung Indonesia, Bekasi

Actionable Insights

This report has sought to apply a gender lens to the analysis of human rights impacts in the informal waste sector in Indonesia. Findings from this research highlight the challenges faced by women waste pickers in this context and the importance of a focus on gender equality and women's economic empowerment.

Based on the research findings, WOW and the FCI have consulted with stakeholders to develop some recommendations for the private sector to create long-term change for women working in the informal waste sector. These recommendations flow from the research that was done in Indonesia, but many are applicable in other countries where informal waste workers face similar challenges – although adjustments for the specific local context will of course be needed.

To support women working as informal waste pickers, companies should:

Implement the Fair Circularity Principles with a specific focus on Principle 6, which states that signatories should 'apply a gender lens in efforts to address human rights impacts in the informal waste sector'. This includes embedding equity and inclusivity by actively promoting women's leadership, participation, and decision-making, improving access to work, creating pathways to build skills and resources, and addressing harmful social norms that limit their participation and progression. By doing so, companies will foster a more sustainable and equitable circular economy for all.



10 Actions Companies Can Take

- 1. Use the Harmonized Responsible Sourcing
 Framework for Recycled Plastics developed by
 The Circulate Initiative (TCI) to improve responsible sourcing practices, which includes a key focus on gender equality.
- 2. Foster partnerships between buyers, suppliers, trade unions, workers and local governments to create collaborative solutions that specifically support women waste pickers. This could include jointly advocating with governments for better access to social protection, ensuring fair wages, and promoting safe working conditions; as well as addressing systemic barriers such as harmful social norms and gender discrimination.
- 3. Support capacity building and initiatives designed for gender-specific needs. These could include training for waste pickers on financial and digital literacy; raising awareness about gender and social norms; education on women's and workers' rights; safety training and equipment; and childcare support. Training could be facilitated by informal savings groups and cooperatives.
- 4. Promote women's leadership within broader waste picker organising efforts, addressing economic and social barriers to empowerment and challenging norms that limit their roles. This could be achieved by supporting the formation of women's groups and collaborating with relevant unions (such as IPI in Indonesia), civil society organisations, associations and cooperatives to promote women's representation within the waste picker community.
- 5. Use the company's platform and leverage to advocate with government to create enabling environments for rights-respecting business practices and to ensure waste pickers' access to health services and social security.
- 6. Promote decent livelihoods for waste pickers through policies such as Extended Producer Responsibility, which should be designed and implemented inclusively to enable waste pickers to earn living incomes from their collection and wastepicking activities.

- 7. Support women waste pickers to gain access to and control over their income, by supporting digital payments systems and providing associated digital and financial literacy training where needed.
- 8. Support women waste pickers in advancing up the value chain by providing training, resources, and mentorship to enable them to take on roles such as aggregators. This can help women develop new skills, increase their earnings, and enhance their leadership within the waste management sector.
- 9. Support waste pickers to become micro businesses or to join cooperatives where these exist, as a means to access business support such as microcredit. This can enable women to negotiate better prices for their materials and invest in their businesses, contributing to their long-term economic resilience.
- 10. Facilitate the creation of market linkages for waste pickers by supporting cooperatives and leveraging lessons from their market access successes. Companies can help connect waste pickers to broader markets, which could help them secure fairer prices and more sustainable income opportunities.

Support Groups for Waste Pickers:

There are a few civil society organisations in Indonesia working to strengthen the protection of informal sector workers and waste pickers. These include:

Waste Workers' Union:

Ikatan Pemulung Indonesia (IPI)

Indonesian Women Homeworkers' Network: Homenet

Non Govermental Organisations:

Trade Union Rights Centre, Yayasan Pemerhati Sosial Indonesia, Mitra Wanita Pekerja Rumahan Indonesia, Bitra Indonesia, National Advocacy Network for Domestic Workers

Civil Society Organisations:

Dinamika Foundation and Al Ikhlas Foundation











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