

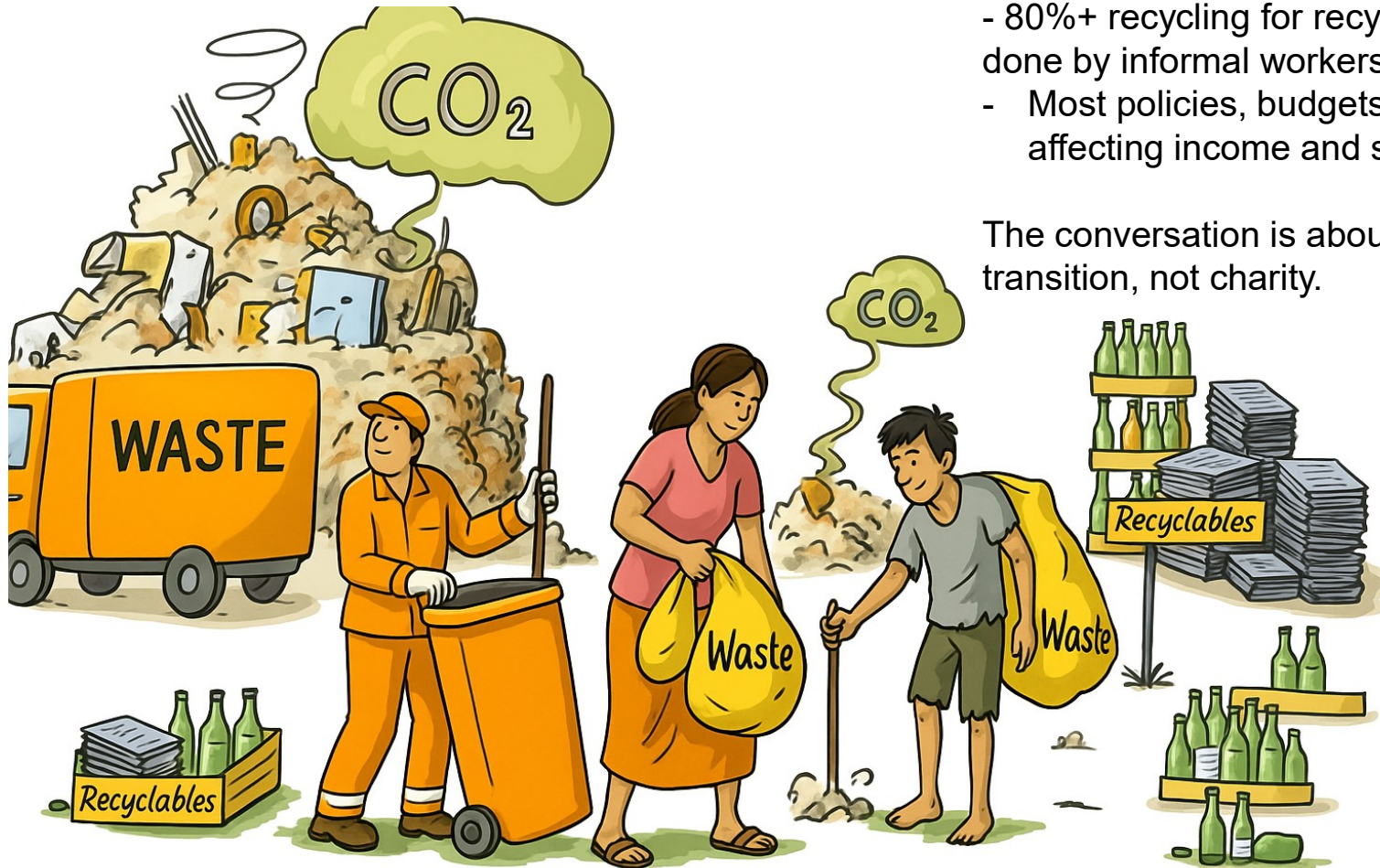


## Inclusion of Informal Waste Pickers in Urban Solid Waste Management Ecosystems

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**Rachna Arora**

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH



India's cities recycle more than they realize — not through infrastructure, but through people.

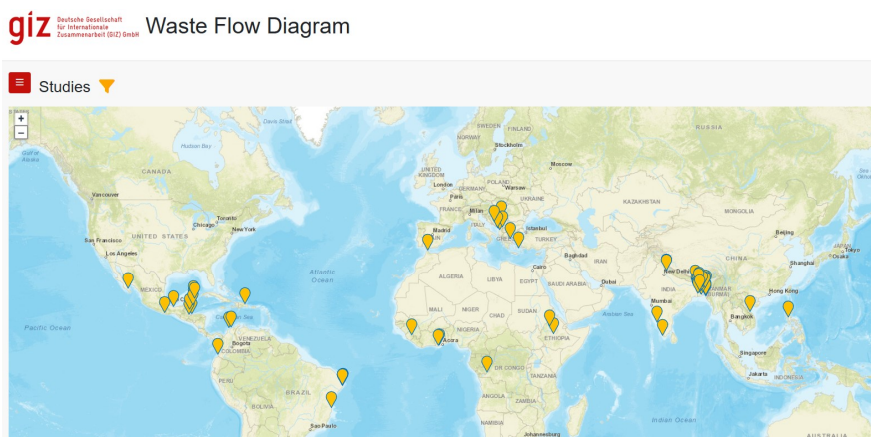
- 80%+ recycling for recyclables like PET, E-waste is done by informal workers
- Most policies, budgets, and systems exclude them, affecting income and security

The conversation is about equity, efficiency, and transition, not charity.

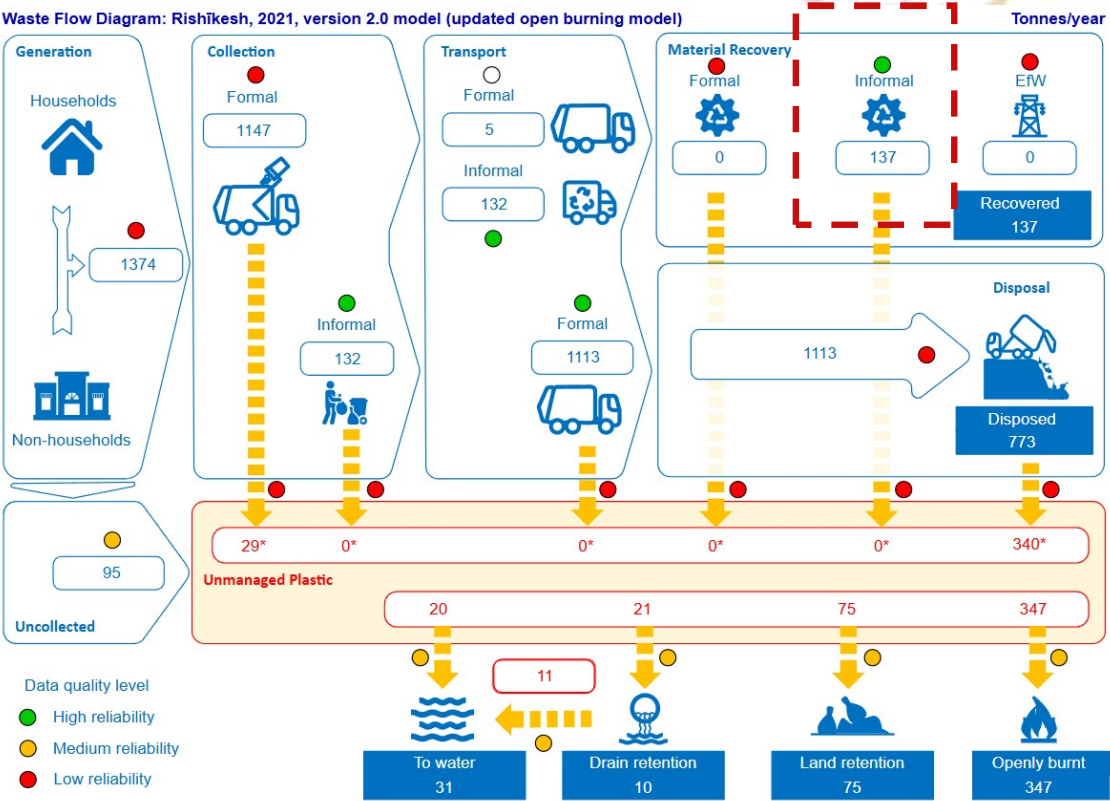


# Contribution of the Informal sector –

## Insights from GIZ's WFD tool on informal handling of plastic waste



Managed by informal actors		
City	% waste collected	% Waste Recovered
Mangalore	27	27
Haridwar	10	10
Rishikesh	10	10
Trivandrum	40	53



# What Enables Integration: GIZ's Global Learning



Cooperation  
& Organization



Cooperatives,  
Unions, inclusion  
of women waste  
pickers



Social  
Acceptance



Health,  
Insurance,  
Dignity



Political  
Will



Local  
champions,  
policy  
convergence



Legal  
Recognition



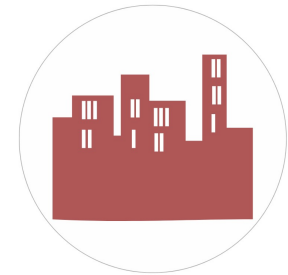
IDs, rights to  
collect,  
MoUs with  
ULBs



Skilling and  
Entrepreneurship



From pickers  
to processors  
to service  
providers



Private Sector  
Partnerships



EPR model  
Formal –informal  
partnerships





## **Our stance: To ensure the Circular Economy**

### **Recognise, empower, and integrate waste pickers with dignity**

- Recognition before regulation
- Value creation before formalisation
- Inclusion as a just transition



Source: CES Project, GIZ

## Access to Segregated Waste → Higher Income

- Enhancing access for waste workers to high-quality dry waste through source segregation
- Creating entrepreneurs out of informal waste workers by supporting in setting up the Dry Waste Collection Centre

### 📍 Alag Karo (Gurugram)

- +₹2800/month in additional income
- 3 DWCCs operated by waste workers
- Monthly income from centres: ₹50,000

*Note: To learn more about these results, visit: [Alag Karo Impact Assessment](#)*

## Lesson: Access = Prosperity



Kanika Mondal, Wasteprenuer in Ward 32, Gurugram

Learn more about Kanika's story on: [Alag Karo](#)

## Skilling + Placement → Employment

- Identification and mapping of informal waste collectors
- Training on work readiness skills, communication with waste generators, components of waste, waste characterization, wet waste management (composting), and safety at work.

📍 Trichy, Bengaluru, Varanasi

- 127 individuals employed
- Across RWAs, DWCCs, composting units

**Lesson: Skilling must align with informal realities (flexibility, income)**



Project: Waste Solutions for a Circular Economy in India



## Skill building → Waste Entrepreneurs

- Identification and mapping: informal waste collectors, socio-economic conditions, skill gaps and entrepreneurial opportunities
- Handholding for formation of SHG groups to avail MSME benefits, connecting them with existing businesses to explore partnerships
- Capacity development w.r.t. business management

📍 Varanasi, Patna, Trichy

- 16 new businesses (MRFs, cleaning agents, textile upcycling)

**Lesson: Need for capital, market linkages**



Waste Solutions for a Circular Economy in India project

## Gender-Responsive activities → Inclusion

📌 Patna – Pink MRF

- Identification and mapping of female informal waste collectors
- Training on work readiness skills, communication with waste generators, components of waste, dry waste characterization and sorting, pricing of dry recyclables
- Linking them with formal urban waste management facilities

**Lesson: Tailor models to women's needs and working conditions**



## Linkage with Government Social Schemes

- Identification and mapping of informal waste collectors
- Identification of relevant schemes
- Technical support and handholding to access the social security schemes

📍 Varanasi, Patna, Trichy

- 305 linked to schemes (Ayushman Bharat, Jan Dhan, Insurance)

**Lesson: Trust in system = Integration**





## Technology + Capacity building → Formal

### 📌 GHANA

- CT and IoT-based technology were used to map transactions within the informal waste infrastructure
- Training on e-waste sorting and processing
- Enabling informal waste collectors to link directly with waste generators and recycling facilities

### Results:

- 230 informal waste collectors were trained and integrated into the formal waste management system
- **40% rise in the collection and processing of e-waste materials**

## Lesson: Recognize and Empower Before Formalizing



# Inclusion with EPR

## Challenges observed in GIZ CES Project

- EPR systems have largely bypassed waste processing by informal workers due to their design, which requires engagement with formal/registered entities, thereby risking the livelihoods of the informal sector.
- Excessive bureaucracy, registration requirements, and technological expectations are often beyond the reach of informal workers.
- Price information for recyclables is often controlled by intermediaries, limiting income for informal workers.

## Case example from Brazil

ASMARE – Association for informal workers

- It provides member waste collectors with dedicated sorting spaces, equipment, and scales, records the weight of recyclables brought in, and pays each member for the materials they deliver.
- Under the Pro-Waste Pickers Program, the association makes contracts and sells Recycling certificates to Brands



Partnerships between different stakeholders can optimize Solid Waste Management

## Learnings on the way forward with EPR –

Adopting an adaptive, locally relevant EPR framework by creating inclusive joint ventures or cooperatives and channelling EPR funds toward the inclusion, capacity building, and technological empowerment of informal sector workers.

*In the Indian case, imagine a cooperative becoming PWP – Ensuring Job security*

Source: GIZ. 2021. *Handbook Recycling and Beyond: EPR Models & Innovating Packaging Technologies*. Bonn, Germany: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

## What Needs to Change: Barriers to Inclusion

Increased waste workers' income does not ensure improved working conditions

When employed - Frequent migration of workers leads to limited retention of staff at MRFs

Limited funds, resources, and infrastructure hinder the transition to entrepreneurial ventures

Limited proactivity and trust in social security schemes results in fewer people accessing benefits

Fixed working hours and salary scales limit interest in capacity development and skilling programs

Adoption and sustained use of digital tools and technology

“If India must go circular, it cannot afford to leave behind the people who’ve been circling our economy all along.”

### Recommendations -

Mandate inclusion indicators

Co-create a support framework

Ensuring informal workers are provided with the means of living

Pilot scalable models

Fund systems, not pilots



# Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices, Bonn and Eschborn

Friedrich-Ebert-Allee 32 + 36

53113 Bonn, Germany

T +49 228 44 60 - 0

F +49 228 44 60 - 17 66

Dag-Hammarskjöld-Weg 1 - 5

65760 Eschborn, Germany

T +49 61 96 79 - 0

F +49 61 96 79 - 11 15

E [info@giz.de](mailto:info@giz.de)

I [www.giz.de](http://www.giz.de)



**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH