The Invisible Workforce: Informal Waste Pickers and the Challenges of Sustainable Waste Management in Freetown, Sierra Leone

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Informal waste pickers are crucial to municipal solid waste management in urban areas where formal collection systems remain inadequate. In Freetown, Sierra Leone, waste pickers contribute to recycling and resource recovery, reducing landfill overflow and promoting the circular economy (Wilson, Velis & Cheeseman, 2006; Gutberlet, 2021). However, their labour occurs within a context of extreme precarity, characterised by hazardous working conditions, economic marginalisation, and a lack of institutional recognition. Waste pickers are subject to economic exploitation, social stigma, and occupational health hazards since they remain excluded from formal waste governance systems, despite their crucial contributions to waste valorisation (Ezeah et al., 2013; Asare & Bailey-Morley, 2023).

Based on constructivist grounded theory, this study critically analyses the interplay between social exclusion, occupational hazards and governance inadequacies in the informal waste sector in Freetown. Drawing on 34 semi-structured interviews and four observational studies conducted over 2.5 months, it offers new insights into how governance deficiencies exacerbate the risks faced by waste pickers. While previous studies have documented the dangers of informal waste work globally, this research highlights how these hazards are intensified in Freetown due to weak institutional frameworks and a lack of policy integration. Waste pickers in Freetown operate in disorganised and dangerous environments, frequently exposed to sharp objects, toxic waste, and hazardous materials, leading to chronic illnesses, severe injuries, and premature death (Binion & Gutberlet, 2012; Made et al., 2020). The following table summarises the key occupational hazards identified in this study, illustrating the multifaceted nature of the challenges faced by waste pickers in Freetown:

Table 1: Occupational hazards in Freetown

Hazard Type	Summary
Environmental	Exposure to toxins, faecal waste, and accidents in unsafe locations
Ergonomic	Physical strain from heavy lifting, extreme weather conditions
Mechanical	Injuries from sharp objects, lack of PPE, unsafe work practices
Social	Psychosocial stress, violence, harassment, and social stigma

Furthermore, their absence from municipal planning procedures is reinforced by stigma and prejudice, and governance systems fail to take into consideration their contributions to sustainable waste management. Waste pickers play an essential role in the waste value chain, their economic precarity is exacerbated further by exploitative power relations with intermediaries and waste buyers who have greater control over price and market access, limiting waste pickers' earning potential. In addition, the majority of waste pickers in Freetown lack adequate personal protection equipment (PPE), which makes them more susceptible to occupational diseases and accidents. The following table summarises PPE usage patterns:

Table 2: PPE usage

PPE Type	Usage Among Waste Pickers	

Gloves	Rarely used due to difficulty obtaining them
Face Masks	Used sporadically but often avoided due to discomfort
Boots/Shoes	Most wear slippers or go barefoot, few have boots
Protective Clothing	Some wear long sleeves/trousers for protection
Nothing	Majority report using no PPE at all

Waste pickers exhibit agency despite these systemic injustices through collective action, self-managed healthcare practices, and informal support networks. These coping strategies, however, are still insufficient to lessen the wider consequences of marginalisation and poor governance. This study highlights the pressing need for a more inclusive approach to waste management in Freetown by situating the lived experiences of waste pickers within wider debates on governance reform, social equity, and circular economy approaches. Policy recommendations include integrating informal waste recovery methods into municipal waste management frameworks, formalising waste picking associations, and establishing protective guidelines. In increasingly urbanising low-income contexts, closing these gaps is crucial to promoting sustainable, socially equitable waste governance.

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