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RESEARCH ARTICLE

From margins to mainstream: policy interventions and cultural realities of the informal waste sector in Nigeria

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Abstract
Rapid urbanisation and rising consumption patterns have increased waste volumes across Nigerian cities, intensifying pressure on municipal systems and heightening environmental concerns. At the same time, informal waste workers continue to recover a significant share of recyclable materials, despite operating without formal recognition or institutional support. This study examines how cultural norms, social networks and indigenous practices shape the organisation of Nigeria's informal waste sector and influence its relationship with emerging policy frameworks. Using a qualitative, interpretive research design, the study draws on recent literature, policy documents and field-based accounts to explore the cultural foundations of informal recycling, assess the implications of current reforms and identify opportunities for more inclusive governance. The analysis shows that informal waste work is embedded in kinship ties, gendered labour roles, neighbourhood institutions and local authority structures, all of which enable system resilience and high recovery performance. However, policy interventions that prioritise Western-derived models or large private concessions often marginalise informal workers and undermine recycling outcomes. The study recommends a culturally responsive policy approach that includes legal recognition, participatory governance platforms, negotiated access to waste materials, targeted social protection and market-stabilisation mechanisms. Integrating these measures would support livelihoods, strengthen circular-economy outcomes and reposition the informal waste sector "from margins to mainstream" within Nigeria's waste governance landscape.

Keywords: circular economy; cultural practices; informal waste; Nigeria; recycling; urban governance

Introduction

Rapid urbanisation and shifting consumption patterns have intensified waste generation across Nigerian cities, placing municipal systems under increasing pressure to manage collection, disposal, and the growing volume of plastics (Kaza et al., 2018; Ezeudu et al., 2024). Recent assessments highlight that Lagos, Abuja and several fast-growing secondary cities now struggle with mounting waste flows, limited infrastructure and inconsistent enforcement, resulting in significant environmental and public-health concerns (World Bank, 2024; Reuters, 2024). Within this context, the informal waste sector (IWS) has become a crucial component of everyday urban sustainability. Waste pickers, itinerant buyers and scrap dealers recover large quantities of recyclable materials, supply low-cost inputs to local industries and sustain thousands of livelihoods, yet they remain largely

unrecognised in statutes and policy frameworks (Nzeadibe, 2009; Oguntoyinbo, 2012; WIEGO, 2023). As several recent analyses suggest, engaging informal collectors is not only socially necessary but also essential for strengthening circular-economy outcomes and enhancing resource recovery (Solaja, 2024; Cook et al., 2024). This paper examines how cultural realities including kinship networks, gendered labour practices, indigenous knowledge and neighbourhood-based institutions shape the organisation and resilience of informal waste work in Nigeria. The central aim is to provide an analytical account that links these cultural dynamics with contemporary policy reforms, particularly the National Policy on Plastic Waste Management (Federal Republic of Nigeria, 2020) and emerging forms of extended producer responsibility. By focusing on the intersection between cultural practices and regulatory change, the study addresses a key gap in Nigerian waste governance research: most previous studies describe the contributions of informal actors but offer limited analysis of how culturally grounded approaches might support their meaningful integration (Mbah, 2017; Heinrich Böll Stiftung, 2018). Methodologically, the study adopts a qualitative, interpretive approach drawing on peer-reviewed literature, field-based testimonies and policy documents produced between 2018 and 2025. The analysis follows thematic procedures outlined by Braun and Clarke (2022), enabling the identification of recurring patterns relating to exclusion, adaptation, and the institutional possibilities for inclusive waste governance. Further details of the methodological process are provided in Section 3.

The contribution of this paper is threefold. First, it foregrounds the cultural embeddedness of informal recycling in Nigeria and demonstrates why policy models transplanted from Western contexts often fail to reflect local realities. Secondly, it synthesises recent empirical evidence and policy developments to identify practical inclusion tools that can support the transition towards a more equitable waste system. Finally, it develops a framework for repositioning the informal waste sector "from margins to mainstream" by emphasising recognition, representation, remuneration and risk protection. The remainder of the paper is structured as follows: Section 2 reviews existing literature; Section 3 outlines the methodology; Section 4 presents the findings; Section 5 discusses policy implications; and Section 6 concludes with recommendations for research and practice.

Literature Review

This study advances the literature by linking cultural practices with policy frameworks to propose context-sensitive inclusion models for the informal waste sector a dimension rarely explored in Nigerian waste governance research.

Global Perspectives on Inclusive Waste Governance

Urban waste management has undergone significant conceptual shifts over the past decade, with global debates increasingly foregrounding inclusive models that recognise the contributions of informal waste workers. The World Bank's global assessment emphasised that sustainable recovery outcomes are strongest where cities acknowledge informal recyclers and integrate them into service design (Kaza et al., 2018). More recent studies have advanced this argument by demonstrating the measurable role of informal collectors in mitigating plastic leakage and supplying secondary materials to local and regional markets (Cook et al., 2024). WIEGO (2023) similarly highlights the importance of worker-led participation in shaping viable circular-economy transitions, stressing that exclusionary approaches undermine both social protection and material recovery. Despite this global recognition, the translation of inclusive principles into practical policy remains uneven. Comparative work shows that high-performing systems in low- and middle-income countries tend to rely on co-produced arrangements where waste picker cooperatives, municipalities and private-sector actors collaborate under

negotiated access rules, clear occupational-health provisions and fairer pricing structures (Scheinberg, 2012). Such evidence suggests that sustainable waste governance cannot be achieved through technical solutions alone; rather, it requires institutional reforms that take account of local practices and the people who sustain them.

Informal Waste Systems in African Cities

Across African cities, informal recycling networks have long been a vital component of waste management. Research consistently demonstrates that informal collectors often outperform formal systems in terms of recovery efficiency, cost-effectiveness and adaptability (Wilson et al., 2006). In West Africa in particular, informal chains supply valuable feedstock to industries while providing income for large numbers of urban residents who operate with minimal state support (Baba et al., 2023). Recent studies highlight the dynamic character of these systems. Solaja (2024), for instance, documents the rise of women-led plastics cooperatives in Ogun State, showing how organised groups can negotiate better prices, improve occupational safety and strengthen market access. Similar observations are made in cross-country analyses emphasising that informal recyclers play a central role in mitigating environmental harm associated with plastics, especially where municipal infrastructure is weak or inconsistent (Cook et al., 2024). This body of evidence demonstrates that informal actors remain indispensable to recovery in most African cities, and exclusionary policies can destabilise entire recycling chains.

Cultural Dimensions of Informal Waste Work in Nigeria

Informal waste work in Nigeria is deeply embedded in social and cultural life. Kinship arrangements, ethnic ties, gendered labour practices and neighbourhood associations shape entry, control, labour allocation and collective action within the sector. Early work by Nzeadibe (2009) and Mbah (2017) documented how family networks, apprenticeships and local authority figures influence the allocation of routes, trade partnerships and dispute resolution in Enugu and other urban centres. More recent field-based accounts illustrate that many of these practices remain central today, enabling workers to absorb market shocks and adapt to policy changes (Solaja, 2024; WIEGO, 2023). Cultural practices also intersect with persistent stigma. Waste workers, particularly those operating on dumpsites, often face discrimination, harassment and poor social status. Heinrich Böll Stiftung (2018) showed that reforms in Lagos under the Cleaner Lagos Initiative marginalised many informal collectors, partly because policy narratives framed them as obstacles to modernisation rather than contributors to environmental sustainability. These cultural and social barriers shape workers' ability to organise, negotiate and participate in governance, and therefore must be considered in any inclusive policy design.

Limits of Policy Transplants and Western-Derived Models

One of the recurring criticisms in the literature is the tendency of Nigerian states and municipalities to adopt Western-inspired waste management models that assume strong institutions, robust public funding and uniform compliance. Wilson et al. (2006) and Oguntoyinbo (2012) both noted that these assumptions often do not align with the realities of Nigerian cities, where enforcement capacity is low, settlements are diverse and informal service provision remains essential. This mismatch has practical consequences: large private concessions and capital-intensive landfill upgrades have frequently displaced informal workers and delivered mixed service outcomes (Heinrich Böll Stiftung, 2018). Cook et al. (2024) further argue that policy transfers that overlook embedded informal systems risk weakening recycling flows and inadvertently increasing environmental

spillovers, particularly in rapidly expanding cities. Recent national policies, including those addressing plastics and extended producer responsibility, offer new opportunities but remain ambiguous about how informal actors will be recognised and compensated (Federal Republic of Nigeria, 2020; World Bank, 2024). This uncertainty highlights a broader structural issue: without explicit mechanisms for integration, policies risk reinforcing exclusion even while aiming to strengthen sustainability.

Synthesis and Emerging Gaps

Across the literature, three common threads stand out. First, informal waste workers are widely acknowledged as integral to recycling systems in Nigeria and across the Global South. Secondly, informal systems are not simply economic arrangements but deeply cultural, shaped by relationships, identities and local institutions. Thirdly, although current policy reforms demonstrate growing attention to plastics, circularity and extended-producer responsibility, clear frameworks for integrating informal actors remain limited.

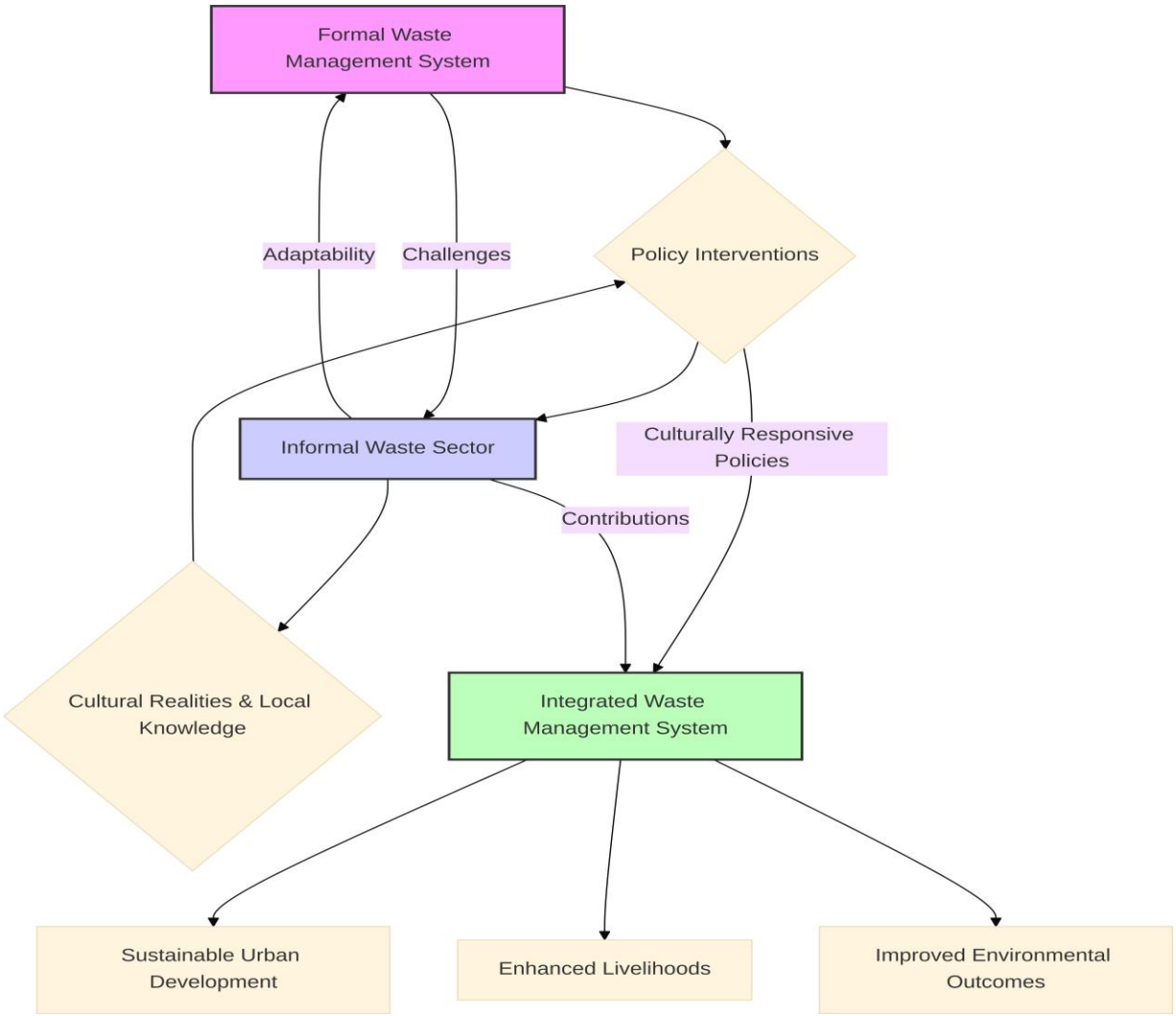

Figure 1: Interaction between Formal and Informal Waste Management Systems
Sources: Developed for the Paper 2025

What is still missing and where this paper intervenes is a culturally grounded analysis that links these social realities with practical policy design. While previous studies document contributions, constraints and governance gaps, few have synthesised cultural practices, informal institutions and policy reforms into a coherent framework that can support integration. This review therefore establishes the conceptual basis for examining how informal actors might be moved "from margins to mainstream" in a way that reflects Nigeria's social, cultural and economic contexts.

The diagram sets out a framework for bringing Nigeria's informal waste sector into a more inclusive urban waste management system. At the top of the model is the formal waste management system**,** which reflects government-led methods of collection and disposal. These approaches are usually structured and regulated but continue to struggle with limited resources, weak infrastructure, and a lack of flexibility in addressing local social and cultural realities (Wilson, Velis, & Cheeseman, 2006; Oguntoyinbo, 2012). Running alongside it is the informal waste sector, which has become central to recycling, recovery, and income generation for many low-income households. Although its contribution is visible on the ground, policies have often sidelined informal actors because they do not fit easily within formal administrative frameworks (Medina, 2007; Mbah, 2017). The diagram underlines the point that the sector can only thrive if waste policies are adapted to cultural contexts, recognising community practices, local norms, and traditional knowledge as part of the management process (Nzeadibe, 2009; Heinrich Böll Stiftung, 2018).

In the middle, policy interventions act as the connecting link**.** Where such policies are inclusive and context-sensitive, they help to bridge the gap between the two systems. This creates an integrated framework that combines the authority and regulation of the formal sector with the adaptability and resourcefulness of the informal sector, improving efficiency, waste recovery, and community participation (Kaza, Yao, Bhada-Tata, & Van Woerden, 2018).

At the foundation of the framework, the integrated system produces three main outcomes:

1. Sustainable urban development – better waste management supports cleaner, safer, and more resilient cities (World Bank, 2024).
2. Improved livelihoods – when informal actors are recognised, they gain access to more reliable incomes and social protection (Baba, Hassan, & Ajayi, 2023; Solaja, 2024).
3. Environmental benefits – higher levels of recycling, reduced pollution, and stronger resource recovery lessen environmental damage and strengthen circular economy practices (Cook, Velis, et al., 2024; Ezeudu et al., 2024).

Overall, the diagram emphasises that the successful integration of Nigeria's waste management system depends on policy inclusivity, cultural responsiveness, and active recognition of informal contributions**,** aligning environmental goals with socio-economic development

Research Methodology

This study employed a qualitative, interpretive research design to explore the cultural dynamics and policy frameworks shaping Nigeria's informal waste sector. A qualitative approach was considered appropriate because the research sought to understand meanings, social practices and lived realities rather than measure variables or produce statistical generalisations. As Creswell and Poth (2018) argue, interpretive qualitative methods are particularly suited to investigations concerned with context, subjectivity and complex systems of

interaction. This study therefore prioritised depth, reflexivity and contextual sensitivity in examining how informal waste workers navigate cultural norms, institutional barriers and policy reforms.

Data Sources and Selection Criteria

The analysis drew on diverse secondary materials published between 2018 and 2025. These included national and state policy documents, such as the National Policy on Plastic Waste Management (Federal Republic of Nigeria, 2020), policy briefs from international organisations (World Bank, 2024), practitioner reports (Heinrich Böll Stiftung, 2018; WIEGO, 2023) and peer-reviewed academic studies on Nigeria's informal waste sector (Nzeadibe, 2009; Mbah, 2017; Solaja, 2024). Comparative literature from Africa, Asia and Latin America was incorporated where relevant to illuminate broader patterns of informal recycling and inclusive governance (Wilson et al., 2006; Scheinberg, 2012; Cook et al., 2024). Documents were selected using three criteria. First, relevance: materials had to discuss informal waste work, cultural practices, governance arrangements or policy reforms. Secondly, currency: priority was given to recent publications (2018–2025) to ensure alignment with current debates, especially around plastics and extended-producer responsibility. Thirdly, credibility: only publications from recognised academic journals, governmental agencies and reputable organisations were included.

City-Level Case Materials

Although the study did not generate new primary data, it made extensive use of existing field-based accounts and policy experiments across several Nigerian cities. Lagos, Ogun, Enugu and Abuja were included because they feature prominently in documented waste governance reforms and have relatively rich empirical coverage in the literature (Heinrich Böll Stiftung, 2018; Solaja, 2024). These cities also illustrate contrasting approaches—from large-scale privatisation drives to cooperative-led materials recovery—which provided a useful basis for identifying policy tensions and opportunities. Other cities with more limited empirical documentation were noted but not analysed in depth, consistent with the evidence available in the secondary sources.

Analytic Strategy and Thematic Procedures

Data analysis followed the six-phase thematic approach set out by Braun and Clarke (2022). First, familiarisation involved repeated reading of the selected documents while making preliminary notes on recurring issues of culture, exclusion, governance and adaptation. Secondly, initial codes were generated, capturing patterns such as kinship networks, gendered labour, access negotiations, policy gaps and forms of marginalisation. Thirdly, codes were collated into candidate themes that reflected broader conceptual categories, including "cultural embeddedness", "policy displacement", "institutional adaptation" and "opportunities for integration". In the fourth phase, themes were reviewed to ensure coherence and accurate representation of the data, while the fifth phase involved refining and naming themes with clearer definitions and boundaries. Finally, the themes were woven together into a narrative that connects cultural practices with governance challenges and emerging policy pathways. This systematic process supported analytic transparency and allowed the study to highlight areas of consensus, tension and innovation across the literature. The approach also aligns with recommended standards for trustworthiness in qualitative analysis, including clarity, reflexivity and internal consistency (Nowell et al., 2017).

Reflexivity and Researcher Positioning

Because the study relied entirely on secondary materials, the researcher's role centred on interpretation rather than direct engagement with participants. Reflexive attention was given to how the selection of documents, prior assumptions and the broader discourses on informal work might shape analysis. To mitigate potential bias, sources from different institutional standpoints government, NGOs, academic researchers and international agencies were examined to ensure a balanced perspective. Where conflicting accounts appeared, the analysis sought to understand the reasons for divergence rather than impose uniform conclusions.

Ethical Considerations

No new human data were collected. The study relied on previously published materials that had been subject to their own ethical review processes. Care was taken to represent informal waste workers respectfully, avoiding language that reinforces stigma or deficit narratives, in line with recommendations from organisations working directly with waste workers (WIEGO, 2023).

Limitations

As a secondary-data study, the research is limited by the availability and uneven distribution of existing literature across Nigerian cities. Lagos and Ogun are comparatively well documented, while cities such as Makurdi, Kano and Sokoto remain under-represented. Additionally, the study could not capture emerging grassroots practices that have not yet been formally published. Nevertheless, the synthesis offers a rigorous and contextually grounded foundation for understanding the cultural and policy dimensions of the informal waste sector and for identifying areas where future primary research would be most valuable.

Findings and Discussion

This section presents the main themes that emerged from the analysis and discusses them in relation to existing scholarship and policy debates. Four interconnected themes were identified: (1) cultural embeddedness and social networks; (2) gendered roles and indigenous knowledge; (3) local institutions and traditional practices; and (4) stigma, adaptation and negotiation. Each theme illustrates how informal waste work in Nigeria is shaped by cultural norms while also revealing the implications for policy development.

Cultural Embeddedness and Social Networks

Findings indicate that informal waste work in Nigeria is deeply rooted in social and kinship structures. Entry into waste picking, the allocation of routes, the circulation of market information and the management of disputes often rely on family networks, ethnic affiliations and neighbourhood associations. This aligns with earlier research that documented the value of such social structures in shaping everyday waste practices in Enugu and other cities (Nzeadibe, 2009; Mbah, 2017). More recent reports reinforce this view, emphasising how trusted networks provide access to credit, labour support and protection from harassment (WIEGO, 2023; Solaja, 2024).

The findings therefore support the argument that informal waste work cannot be understood solely as an economic activity. Rather, it is a social institution embedded in collective identities and survival strategies. Attempts to impose standardised, technocratic policy models especially those transferred from Western contexts

can overlook these cultural dynamics, resulting in low compliance or outright displacement (Oguntoyinbo, 2012; Heinrich Böll Stiftung, 2018). There is thus a strong case for culturally responsive frameworks that recognise the role of kinship and local authority structures in regulating waste economies.

Gendered Labour and Indigenous Knowledge

Women play a significant role in Nigeria's informal recycling economy, particularly in sorting, processing and managing small-scale plastics trading. Evidence from Ogun State shows that women-led cooperatives have successfully strengthened bargaining power, improved safety and increased recovery rates (Solaja, 2024). This is consistent with broader regional analyses which underline the gendered nature of labour in informal recycling systems and the barriers that women routinely face, including limited access to finance and persistent social stigma (Baba et al., 2023).

Indigenous knowledge also shapes operational practices. Many workers possess detailed understanding of seasonality, material flows and recovery techniques gained through apprenticeships or intergenerational teaching. This contradicts policy assumptions that informal workers lack technical expertise or efficiency. Instead, the findings, consistent with studies of plastic waste flows in Nigeria (Ezeudu et al., 2024), highlight that local knowledge contributes directly to recycling performance and system resilience. The discussion suggests that policies seeking to integrate informal actors should recognise women's central role and support gender-responsive interventions. Measures such as targeted training, microfinance and representation in policy forums would strengthen both livelihoods and recovery outcomes.

Local Institutions, Collective Practices and Traditional Authority

Communal clean-up practices, neighbourhood-based labour contributions and the involvement of traditional leaders remain visible in many Nigerian cities. Ethnographic accounts from parts of Enugu, Ibadan and Northern Nigeria show that local chiefs and community associations continue to mobilise residents for routine cleaning, enforce sanitation norms and resolve disputes (Mbah, 2017; Okotie et al., 2022). These local institutions often operate parallel to formal municipal systems, filling gaps created by limited enforcement or infrastructural constraints.

The findings reaffirm that waste governance in Nigeria is multi-layered, with authority dispersed across formal, informal and traditional actors. This supports wider evidence from African cities that culturally embedded practices can enhance participation and legitimacy when properly recognised (Wilson et al., 2006; Cook et al., 2024). However, such practices rarely feature in official policy documents, which tend to prioritise statutory and private-sector arrangements. Integrating community-led initiatives into municipal planning such as formally acknowledging neighbourhood associations or collaborating with traditional leaders on source-separation campaigns could increase public engagement and improve policy uptake.

Stigma, Marginalisation and Adaptive Strategies

Despite their contribution to resource recovery, informal waste workers frequently face social stigma and are often portrayed as undesirable or unhygienic. This has material consequences: workers risk harassment, unstable access to recyclables and exclusion during reform processes. The Cleaner Lagos Initiative, for example, generated widespread disruption, limiting access to dumpsites and sidelining informal recyclers (Heinrich Böll Stiftung, 2018). Such experiences echo observations elsewhere that when reforms favour private operators or mechanised collection, informal livelihoods may be threatened (Oguntoyinbo, 2012).

Yet, the findings also highlight considerable resilience. Many workers adapt by forming cooperatives, securing NGO partnerships and negotiating new access routes (WIEGO, 2023; Ochogwu, 2024). These adaptive strategies strengthen their visibility and enable collective bargaining, while also improving compliance with safety standards.

The discussion suggests that policy exclusion is neither inevitable nor efficient. Recognition, registration and negotiated access mechanisms could transform precarious work into a more secure and productive part of citywide waste management. Such measures also align with Nigeria's emerging plastics and extended-producer responsibility frameworks, which emphasise the need for better coordination across the value chain (Federal Republic of Nigeria, 2020; World Bank, 2024).

Synthesis of Findings

Across the themes, a consistent picture emerges: informal waste work in Nigeria is embedded in cultural norms, shaped by social institutions and essential to recycling performance. When policy reforms fail to recognise these realities, the result is marginalisation, disruption of recovery chains and diminished environmental outcomes. Conversely, where community practices, gendered labour roles and indigenous knowledge are included, waste systems become more effective, equitable and sustainable.

These findings reinforce international evidence on inclusive waste governance while also offering Nigeria-specific insights that bridge cultural realities with formal policy processes. They provide a strong foundation for the policy pathways developed in the subsequent section.

Policy Interventions – From Margins to Mainstream

This section examines Nigeria's existing waste management frameworks and proposes culturally responsive, inclusive pathways for integrating informal waste workers into urban governance. Drawing on the findings, the analysis demonstrates that policy success depends not only on institutional design but also on cultural legitimacy, social recognition and practical support for the informal systems already sustaining much of the country's resource recovery.

Critical Assessment of Current Policy Frameworks

Over the past decade, Nigeria has introduced several national and subnational policies aimed at improving waste governance. These include the National Policy on Solid Waste Management, the National Policy on Plastic Waste Management (Federal Republic of Nigeria, 2020) and recent state-level measures addressing plastics and extended producer responsibility. While these frameworks signal a clear shift towards circularity and pollution control, they offer limited guidance on how informal actors will be recognised or compensated. As with earlier reforms, including the Cleaner Lagos Initiative, much of the policy language continues to prioritise formal institutions, private concessions and regulatory enforcement (Heinrich Böll Stiftung, 2018).

The findings confirm that this approach risks reproducing exclusions long identified in the literature. Oguntoyinbo (2012) noted that reforms driven by privatisation and technological upgrading often overlook existing informal systems, leading to displacement and weaker recovery performance. Similarly, comparative studies suggest that policies anchored in Western-derived assumptions such as strong municipal capacity or uniform public compliance—tend to perform poorly in contexts where cultural norms and informal networks underpin service delivery (Wilson et al., 2006; Cook et al., 2024). Without explicit inclusion mechanisms, current Nigerian policies risk repeating these patterns.

Why Culturally Grounded Approaches Matter

The findings highlight that informal recycling in Nigeria is sustained by cultural networks, gendered labour arrangements, indigenous technical knowledge and long-standing community practices. Such cultural embeddedness has practical implications: informal workers are often the only actors able to navigate dense settlements, negotiate household participation or maintain flexible collection routes. As Solaja (2024) and WIEGO (2023) show, these systems adapt rapidly to market shocks, regulatory constraints and local disputes. Policies that ignore these cultural realities tend to generate resistance or breakdown. The Cleaner Lagos Initiative demonstrated that large-scale restructuring without adequate consultation can undermine both livelihoods and service efficiency (Heinrich Böll Stiftung, 2018). Conversely, policies that involve cooperatives, community leaders and informal associations are more likely to achieve social acceptance and operational effectiveness. These lessons reinforce global arguments that inclusive waste governance cannot be achieved through technocratic solutions alone but must reflect local socio-cultural dynamics (Scheinberg, 2012).

Culturally Responsive Policy Alternatives

Legal Recognition and Inclusive Registration

Legal recognition remains the foundation for meaningful integration. A low-cost, accessible registration system for waste pickers, scrap dealers and itinerant buyers would formalise their rights to work, protect them from harassment and clarify their role within Nigeria's waste economy. Recognition also provides a basis for occupational safety, social protection and more transparent monitoring of material flows.

Participatory Governance Platforms

Inclusive governance requires platforms where waste picker organisations, women-led cooperatives, NGOs and municipal authorities can participate in decision-making. Evidence from West Africa shows that such forums improve communication, reduce conflict and ensure that interventions reflect actual working conditions (Baba et al., 2023; WIEGO, 2023). In the Nigerian context, participatory structures could support discussions on sorting practices, access to transfer stations and the design of extended-producer responsibility schemes.

Negotiated Access to Waste Streams

Access to materials is central to the livelihoods of informal workers. Policies should establish formal access protocols for dumpsites, transfer stations and material recovery facilities. These measures are consistent with findings that inclusive access agreements help stabilise recycling chains and enhance occupational safety (Solaja, 2024; Ochogwu, 2024). They also align with international recommendations for co-produced service models that integrate informal actors into municipal systems (Wilson et al., 2006; Scheinberg, 2012).

Social Protection and Occupational Health Measures

The hazardous conditions facing informal workers highlight the need for social protection initiatives financed through municipal budgets or extended-producer responsibility levies. These could include health insurance, subsidised protective equipment, pension contributions and training programmes. As the findings indicate,

cooperatives are often well placed to coordinate such interventions, particularly for women and younger workers whose vulnerabilities are more pronounced.

Market Stabilisation and Fairer Pricing

Price volatility in recyclable materials undermines income stability. Extended-producer responsibility schemes offer a mechanism to buffer these fluctuations, especially for plastics and metals. Stabilisation funds could guarantee minimum prices or provide top-up payments during market downturns, thereby supporting livelihoods while strengthening circular-economy outcomes (Cook et al., 2024).

Integrating Cultural Institutions into Municipal Planning

The findings underscore the continuing importance of traditional leaders, neighbourhood associations and faith-based groups in shaping waste practices. These institutions are rarely acknowledged in formal policy documents, yet they play a central role in mobilising communities, enforcing cleanliness norms and supporting waste workers. Incorporating such actors—through joint clean-up campaigns, awareness initiatives or localised sorting projects—could increase public participation and enhance legitimacy (Mbah, 2017; Okotie et al., 2022). This approach also recognises that waste governance in Nigeria is inherently multi-layered, with authority and responsibility distributed across formal, informal and traditional domains. Policies that reflect this complexity are more likely to succeed than those attempting to replace existing community structures.

Towards an Integrated and Inclusive Waste Governance Framework

Bringing Nigeria's informal waste sector "from margins to mainstream" requires a policy agenda that is not only technically sound but culturally informed and socially equitable. The evidence suggests that integration must be built on five interlocking pillars:

1. **Recognition** – granting legal status and protection to informal actors.
2. **Representation** – ensuring meaningful participation in governance.
3. **Remuneration** – establishing fair payment mechanisms and price supports.
4. **Regulation** – introducing clear but enabling rules that safeguard livelihoods.
5. **Risk Protection** – extending social protection and occupational health measures.

These pillars reflect both global best practice and the specific cultural realities of Nigerian cities. By aligning policy interventions with the lived experiences of informal workers, Nigeria can improve recycling performance, enhance urban service delivery and support more inclusive economic development.

Analysis of Current Nigerian Policies and Their Gaps

Over the past decade, Nigeria has launched a series of national and subnational programmes, including the National Policy on Solid Waste Management (2018)**,** the National Policy on Plastic Waste Management (2020)**,** and the Cleaner Lagos Initiative (2016–2018)**.** These frameworks emphasised strengthening regulatory control, building infrastructure, and attracting private investment into solid waste services (Heinrich Böll Stiftung, 2018; Federal Republic of Nigeria, 2020).

While government-led reforms have brought some improvements in waste collection and disposal, they have tended to overlook the informal sector, which still carries the main burden of resource recovery in most Nigerian cities (World Bank, 2024). In practice, informal waste workers are seldom acknowledged in policy frameworks and, in some cases, have even faced eviction from dumpsites or been denied access to recyclables without any form of compensation or alternative means of livelihood (Ochogwu, 2024). Such exclusion raises questions of social justice and, at the same time, weakens overall system efficiency, since the knowledge, skills, and networks of informal recyclers are not being fully utilised in the delivery of urban services.

Table 1: Comparison of Western-Derived and Culturally Grounded Waste Management Policies

Feature/Approach	Western-Derived Policies	Culturally Grounded Alternatives
Primary Focus	Formalisation, privatisation, regulatory control, technological solutions	Integration of informal actors, local knowledge, community participation, social structures
Assumptions	Robust formal institutions, public compliance, readily available financial resources	Recognition of informal institutions, community resourcefulness, adaptive strategies
Implementation	Top-down, capital-intensive infrastructure projects, stringent enforcement	Bottom-up, community-driven initiatives, leveraging existing networks
Impact on Informal Sector	Marginalisation, displacement, exclusion	Empowerment, integration, improved livelihoods, recognition
Key Outcomes	Often limited success in informal settlements, social injustice	Sustainable environmental outcomes, enhanced social cohesion, economic empowerment
Underlying Philosophy	Waste management as a technical problem	Waste management as a socio- cultural challenge

Sources: Developed by the Author, 2025

The table illustrates a clear contrast. Western-derived approaches generally highlight formal structures, regulation, and technical solutions, whereas culturally rooted alternatives draw attention to community participation, inclusion, and sustainability. When local knowledge and informal actors are integrated into waste management, the outcomes tend to be fairer socially and more sustainable environmentally.

Critique of Western-Derived Policies

Waste management models borrowed from Western contexts often assume the existence of strong municipal institutions, steady financial resources, and high levels of public compliance. These assumptions rarely reflect

conditions in Nigerian cities, where limited budgets, weak oversight, and the rapid expansion of informal settlements shape daily realities (Wilson, Velis, & Cheeseman, 2006; Cook et al., 2024). Centralised and capital-intensive strategies such as large private concessions or major landfill upgrades—have not always delivered the expected results. In Lagos, for example, attempts to reorganise waste services through private-sector franchises disrupted ongoing recovery practices, displaced informal workers, and provoked resistance from residents frustrated with poor service delivery (Heinrich Böll Stiftung, 2018). Such experiences highlight that waste management in Nigeria cannot be reduced to a technical or financial exercise. It is deeply embedded in social relations, cultural practices, and local survival strategies that formal models often fail to recognise.

Conclusion

This study set out to examine how cultural realities, informal practices and policy frameworks intersect in shaping Nigeria's informal waste sector. By drawing together recent empirical evidence, policy documents and field-based accounts, the analysis has demonstrated that informal waste work is not a marginal or peripheral activity but a central component of Nigeria's urban sustainability and circular-economy landscape. The paper's contribution lies in showing that the informal sector is deeply embedded in cultural norms, kinship networks, gendered labour patterns and neighbourhood institutions, and that policy interventions which fail to recognise these dynamics risk undermining both livelihoods and environmental outcomes.

Three core insights emerge from the study. First, informal recycling in Nigeria is culturally grounded: family ties, collective labour practices and local authority structures underpin access to materials, organisation of work and navigation of municipal regulations. This confirms earlier findings in several Nigerian cities that informal waste economies function as social institutions as much as economic systems (Nzeadibe, 2009; Mbah, 2017). Secondly, exclusionary or technocratic reforms—particularly those modelled on Western assumptions—tend to displace workers, disrupt recovery chains and weaken overall system efficiency, as evidenced by the experience of the Cleaner Lagos Initiative (Heinrich Böll Stiftung, 2018). Thirdly, where informal collectors are supported through cooperatives, gender-responsive associations and community-based structures, they demonstrate notable resilience, adapting to market shifts and aligning with broader circular-economy goals (WIEGO, 2023; Solaja, 2024).

These insights collectively underscore the need for culturally responsive, inclusive policy pathways. Legal recognition, inclusive registration systems, negotiated access arrangements, participatory governance platforms and social protection instruments can help reposition the informal sector "from margins to mainstream". Such measures are not merely socially just; they also enhance recycling efficiency, stabilise markets and reduce the environmental impacts associated with poorly managed waste. They further align with the objectives of Nigeria's National Policy on Plastic Waste Management and emerging extended-producer responsibility schemes, which stress the importance of improving coordination across all actors in the value chain (Federal Republic of Nigeria, 2020; World Bank, 2024).

The study inevitably has limitations. Its reliance on secondary data means that some rapidly evolving practices—particularly in less-documented cities such as Makurdi, Kano and Sokoto—could not be examined in depth. Additionally, the uneven distribution of empirical studies across Nigerian cities restricts the extent to which findings can be generalised nationally. Primary research involving participatory and ethnographic methods would offer richer insights into the lived experiences of informal workers and the specific mechanisms that shape collaboration or conflict with municipal authorities.

Future research should therefore prioritise three areas:

1. City-level comparative studies that explore how cultural norms shape informal waste practices in under-studied regions;
2. Gender-focused analysis of women's leadership and constraints within the sector; and
3. Assessment of emerging EPR systems to determine whether they genuinely support or further marginalise informal recyclers.

In conclusion, integrating Nigeria's informal waste sector into mainstream policy requires more than formalisation or infrastructural investment. It demands an approach that acknowledges the socio-cultural foundations of informal work, values the knowledge and resilience of its actors, and provides fair and practical mechanisms for participation. If such an approach is pursued, Nigeria stands to achieve not only improved environmental outcomes but also more inclusive urban development and strengthened social cohesion.

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