



GSJ: Volume 13, Issue 8, August 2025, Online: ISSN 2320-9186

[www.globalscientificjournal.com](http://www.globalscientificjournal.com)

**ASSESSMENT OF WASTE-SCAVENGING ACTIVITIES IN THE FEDERAL CAPITAL CITY OF ABUJA, NIGERIA**

**Jamila Shehu, BELLO<sup>1</sup>, & Idris Nasiru, MEDUGU<sup>2</sup>**

**Department of Development Control, Federal Capital Territory Administration, Abuja, Nigeria.<sup>1</sup>**

**Department of Urban and Regional Planning, Faculty of Environmental Science, Nasarawa State University Keffi, Nigeria.<sup>2</sup>**

**ABSTRACT**

The function and actions of waste scavengers in Abuja's urban waste management environment are examined in this study. Even though they are informal and frequently ignored, waste scavengers play a vital role in recycling initiatives and lessen the strain on the city's official waste disposal systems. They are still left out of the main frameworks for waste policy and urban planning, despite their significance. The study uses a mixed-methods approach, integrating qualitative information from oral interviews and field surveys with quantitative data from structured questionnaires. The study distributes questionnaires to 100 scavengers, 20 waste dealers, and one AEPB official in key areas of Abuja, such as Jabi, Deidei, Zuba, Apo, Lugbe, Mpape, Nyanya, Gwarimpa, Karmajiji, and Lokogoma. The results are intended to shed light on waste scavengers' socioeconomic circumstances, means of subsistence, and environmental contributions. As important participants in the urban waste ecosystem, scavengers must be acknowledged and supported by inclusive waste management policies, according to the research. In order to lessen stigma, attract investment, and establish scavenging as a valid urban economic activity, it suggests formalising it through government regulations. In addition to better access to credit, training, and business support, the establishment of specific locations and warehouses for waste collection and sorting can boost the sector's expansion. Scavengers can be further incorporated into sustainable urban development through tax-based inclusion, regulatory oversight, and workshops on waste-to-wealth opportunities. In order to fully realise the potential of Abuja's informal waste sector for both environmental and economic transformation, the study recommends strategic intervention.

**Keywords:** Waste Scavengers, Informal Waste Management, Urban Sustainability, Recycling, & Policy Integration

**1.0 Background to Study**

Over the past seven to eight decades, solid waste has emerged as a major global environmental concern, especially in areas that are rapidly becoming more urbanised. Although efficient waste management has long been a problem in developing nations, informal waste scavengers have shown their worth in collection, sorting, and recycling operations. These scavengers, who are frequently disregarded and underappreciated, are vital in lowering landfill loads, protecting the environment, and encouraging sustainable waste reuse; they frequently outperform official waste

agencies in these areas (Escamilla-García, 2024). Their operations, which include recycling collection, reuse, and resale, have a major socioeconomic impact in addition to positive environmental effects, particularly in cities like Abuja, Nigeria.

Population growth, high rates of consumption, and the ineffectiveness of the Abuja Environmental Protection Board (AEPB) all contribute to Abuja's waste crisis. After Nigeria's capital was moved from Lagos in the late 1980s, the city saw a sharp increase in the number of migrants seeking employment. Waste scavenging became a common source of income for many people who were unable to find formal employment. Through resource recovery and recycling, these scavengers make a significant contribution to solid waste management despite operating informally, unregistered, unregulated, and without institutional support (Magaji & Dakye, 2011). Despite their significant contributions, little is known about them and how well they are incorporated into official waste policies.

In many Nigerian cities, scavenging has grown in popularity as a source of income for young people and a source of raw materials for construction and plastics industries. Around 2% of people in developing nations, according to a World Bank report, depend on scavenging for their livelihood, and cities profit millions of dollars each year from these activities (Medina, 2000). Abuja's recycling process still heavily relies on the informal recycling sector, which includes waste pickers, itinerant waste buyers, and informal collectors (Imam *et al.*, 2008). However, its full potential for sustainable urban development is limited by the absence of official recognition and support.

This study aims to assess the activities of waste scavengers in Abuja and explore ways to enhance their contributions to urban waste management. The objectives are to examine the socio-economic characteristics of scavengers, evaluate their role in city cleanliness and sustainability, and understand how scavenging supports livelihoods in the Federal Capital City (FCC). Through this, the study seeks to highlight the critical importance of integrating informal waste actors into formal waste management frameworks.

## **1.2 Scope of the Study**

The foundation of this research is the idea that waste can be turned into wealth in the framework of environmental and socioeconomic sustainability. Waste scavengers are putting the 3Rs waste management hierarchy to the test, and this study aims to increase their contributions to reimagining the 3Rs in urban environmental management. The study emphasises how important it is to

comprehend the waste scavengers' activities in Abuja, the federal capital, in terms of their contributions to resource recovery, waste management, wealth creation, and job creation, among other areas. Understanding how these roles are performed is another aspect of this study. The study does not cover the entire territory; it is limited to the FCC. The study's focus within the FCC is on the Phase II districts of Utako and Gosa, and it encompasses all of the dumpsites in these two residential areas. The study looks at waste scavengers' activities in these dumpsites between 2018 and 2024.

## **2.0 Literature Review**

### **2.2.1 Waste Scavengers and Environmental Sustainability**

Scavenging contributes significantly to the cleanliness of cities. It improves the city's aesthetic appeal and benefits residents' health (Singh, 2021). According to Ogwueleka and Naveen's (2021) analysis of waste scavengers' activities in Port-Harcourt, the majority of them are between the ages of 21 and 40, and they work between 10 and 12 hours. Most of the scavengers are men. Every day, the scavengers sort 19.76 kg of recyclables per person. It is estimated that 133,688 kg (133.688 tonnes) of recyclables are produced daily. The recovery and sorting of recyclables from secondary waste is facilitated by the actions of stakeholders, as acknowledged by the authors. Recycling waste has several advantages, including reducing greenhouse gas emissions and boosting local economies by generating jobs and tax income. Recycling initiatives are the foundation of sustainable, expanding communities and can also help to improve the quality of the air and water (Wilson *et al.*, 2015). Almost 1.2–2.4 million tonnes of newspapers, 2.4–4.3 million tonnes of cardboard and mixed paper, more than 1.3 million tonnes of glass, more than 2.6 million tonnes of metal waste, and 4–6.2 million tonnes of other recyclable materials are recovered annually by India's households, itinerant waste dealers (Raddiwalas), and waste collectors combined, according to studies. According to Nandy *et al.* (2015), approximately 100% of glass bottles, 50% to 80% of plastic, and 30% to 60% of all paper and cardboard produced in India are recycled. According to a recent study conducted in India, approximately 3.36 million tonnes of plastic waste are generated annually, of which 2–2.35 million tonnes are recycled. Nonetheless, research on the material flow of waste indicates that India recycles between 6.5 and 8.5 million tonnes of plastic annually. The fact that a significant portion of plastic waste is recycled informally by waste pickers and kabadiwala associations and is not included in the official waste management

chain may be the cause of the disparities in the numbers. This demonstrates the extent to which the informal sector's involvement in the waste chain has made it possible to recycle plastic waste fractions (Singh, 2021).

In developing nations, the majority of waste recycling is done informally. In some cities without official systems, waste collection is handled by the unorganised sector. Items being scavenged include bottles, plastics, iron electronics, aluminium, and other materials, according to Magaji and Dakyes (2011). In addition to reducing the quantity of solid waste that needs to be disposed of, scavenging helps preserve the natural resources that support sustainable development. Recycled waste provides a living for thousands of people in developing cities. One of the main issues with solid waste management in developing nations is livelihood, working conditions, and waste strategies to enhance Millennium Development Goals and recycling rates for poverty reduction. The United Nations Sustainable Development Goals pertaining to livelihoods, poverty, public health, and environmental protection in low- and middle-income nations are significantly impacted by municipal solid waste management. In many developing nations, waste collection is a common occurrence that can be found on the streets or in landfills (Rockson *et al.*, 2013). The World Bank acknowledges the role the unorganised sector can play in providing alternative services to the impoverished (World Bank, 2004). Through the recycling market, the unorganised sector contributes to the creation of local added value while lowering environmental pollution and the quantity of waste that is dumped in landfills (Scheinberg *et al.*, 2010).

Although it has not received much recognition and is therefore regarded as unlawful, the informal private sector has always been a significant part of India's municipal solid waste management system (Masood & Barlow, 2013). In the majority of developing nations, waste collection activities surely aid in waste management (Rockson *et al.*, 2013). Around 15 million people around the world are employed in the informal waste sector (Binion & Gutberlet, 2012). Regretfully, little attention has been paid to the informal sector's role in solid waste management (Li, 2002). The role that waste stakeholders play in recycling waste has been emphasised by developing nations (Li, 2002). High-value plastics (PET, etc.), scrap metal (iron and ferrous), textiles, glass, and aluminium cans are among the materials that scavengers recover (Magaji & Dakyes, 2011).

### **2.2.2 Contributions of waste scavengers to economic sustainability**

Millions of people around the world make a living by gathering, classifying, and recycling trash, items, goods, or materials that are discarded in their local communities. According to WSCSD (2005) estimate, up to 2% of people in third-world nations make their living by recycling waste. According to Singh (2021), informal recyclers not only reduce the amount of solid waste and environmental pollutants, but they also boost the economy and generate employment opportunities. According to Ogwueleka and Naveen (2021), in Abuja, a waste picker makes between N1000 (\$2.8) and N1500 (\$4.2) per day, itinerant dealers make between N1500 (\$2.8) and N2000 (\$5.6) per day, and scrap dealers make between N10, 000 (\$27.77) and N15, 000 (\$41.67) per day." Burcea (2015) asserts that the informal sector supports a community's local economy. In order to assess the viewpoints of the informal waste sector, the author examined the recycling of waste through informal activities conducted by individuals or businesses engaged in the extraction of recyclable materials from generated waste. The author came to the conclusion that they contribute to environmental, social, and economic sustainability.

According to Medina (2007), over 2% of people in developing and underdeveloped nations engage in informal waste collection activities with the stated goal of supplying the bare necessities of life. According to Eurostat (2014), it is challenging to estimate the size of the informal sector because official census and statistics both local and national do not account for this phenomenon. As a result, it is impossible to obtain specific data regarding the number, size, and contribution of informal recyclers at the community level. In terms of economic, social, and environmental viability, informal waste collection and recycling practices are unquestionably superior to formal waste activities, claims Burcea (2015). Tong *et al.* (2021) found that the informal waste collection sector contributes significantly to waste recycling and income diversification for the impoverished, but it is not acknowledged in any official government policies and is typically undervalued in Vietnam's Mekong Delta.

According to Diaz (2000), scavenging is a well-known and common practice in developing nations. Scavenging is actually a source of employment, so attempts to outlaw it in some cities have encountered fierce opposition. Some scavengers operate at disposal sites, while others search the streets for objects that can be reused. Scavengers typically have a contract with a middleman, who is a person with a contract with end users and who can process, prepare, and sell the quantities of materials that users want. In exchange, the middleman gives the scavengers money and, in

certain situations, a vehicle for collection (such as a cart). Scavengers' families and social backgrounds are such that scavenging is their only source of income. Scavenging was crucial to the financial survival of several industries, including steel, pulp, and paper, in the majority of developing nations.

The function of waste scavengers in the waste recycling process in Ilorin, Nigeria, was investigated by Adeyemi *et al.* (2001). It is shown that this type of recycling is profitable using plastic waste as an example. Scavengers have made a substantial contribution to the provision and separation of recyclables for the recycling industries, according to the preliminary findings reported; additionally, they are conducting their activities in an informal setting. Poor people can find work by scavenging. At last, they suggested that the waste scavenger be officially included in the recycling procedure. According to Ado's (2018) research on the economic significance of solid waste in Kano City, scavengers who purchase recyclables from households typically make 50% of the purchase price (for example, if they purchase a recyclable for N1.00, they will make N50,000). He continued by drawing the conclusion that scavenging gave previously unemployed youth jobs; in addition, these scavengers were in charge of sorting waste and, in certain situations, improving it by washing it for the recycling sectors.

Adisa (2000) investigated 60 respondents in an attempt to examine the recycling practices of Kano's industries and discovered that, despite their lack of formal organisation, scavengers in Kano State make a substantial contribution to the state's economic development. There are two types of scavengers: primary and secondary scavengers. In exchange for the materials being weighed and priced appropriately, the secondary scavenger gave the primary scavenger a small sum of money to purchase recyclables from nearby locations. The average cost of a kilogramme of plastic or rubber shoes is between N22 and N30. Companies that recycle these materials include balley plastic and regular plastic. Since a secondary scavenger typically hires six or more primary scavengers, the profession employs a large number of young people. Regarding the issue that scavengers face He discovered that the government offers no support to scavengers, and worse, it imposes high taxes on secondary scavengers, who are primarily salvage dealers. According to Medina (2000), impoverished and marginalised social groups that turn to scavenging and waste picking as a means of making money and for some, even just to survive on a daily basis are the ones who engage in informal waste recycling. He demonstrates the pervasiveness of informal recycling in developing world cities. Up to 2% of people in Asian and Latin American

cities, he continued, rely on waste picking as a source of income. According to Nzeadibe & Iwuoha (2008), a significant portion of the urban population in developing nations finds work opportunities in recycling and recovering materials from waste. According to Nzeadibe & Anyadike (2010), waste recycling in Nsukka gives vulnerable groups employment and a means of subsistence, particularly given their low educational attainment.

When it comes to the collection, transportation, recovery, recycling, and merchandising of recovered and recycled materials, Olugbenga (2006) pointed out that the informal recycling sector is crucial to integrated waste management practices. Recycling of informal waste gives people, especially the impoverished, jobs and additional income. Family members are encouraged to separate materials from waste in exchange for cash through scavenging, which also provides raw materials for numerous recycling businesses, increasing employment opportunities for people, particularly for young people who predominate in the field. Economic and environmental benefits of scavenging include giving unemployed people money, giving businesses cheap raw materials, and lowering the need for waste collection, transportation, and disposal. Additionally, scavengers speed up material recycling, which has a smaller impact (Magaji & Dakyes, 2011). The recovery and recycling of materials from municipal solid waste (MSW) provides a living for a sizable portion of the population in developing country cities. As a result, the informal sector frequently drives waste recycling in low-income nations with little assistance from government agencies. Waste pickers and other groups, including itinerant waste buyers (IWBs), intermediary recycling companies that engage in recovery, processing, transformation, and trading of materials recovered from waste, generally engage in informal recycling activities (Wilson *et al*, 2006; Nzeadibe & Iwuoha, 2008). According to Olugbenga (2006), informal recycling is crucial to reaching the MDGs. He came to the conclusion that the informal private sector contributes to employment, job creation, wealth creation and distribution, foreign earnings, poverty alleviation and reduction, and environmental sustainability through lowering the quality of waste that ends up in landfills. According to him, these benefits align with the Millennium Development Goals (MDGs) of the United Nations, which include reducing global poverty by half by 2015 and promoting sustainable environmental development.

Gonzenback and Coad (2007) shared this opinion, stating that employment in economically beneficial activities, rather than reliance on government handouts, is the answer to poverty. Numerous job opportunities in waste collection, street sweeping, and the recycling of valuable

materials are offered by solid waste management. They show that since many of the manual jobs in solid waste management don't require any initial funding or specialised knowledge and training, they are available to anyone who wants to work in informal waste recycling. As a result, recycling and house-to-house collection give many people the chance to make a living. They contend that profits are made from the processing and sale of recyclable materials in addition to their collection and exchange.

According to development researchers, there is a direct correlation between the informal sector's recycling efforts and the Millennium Development Goals (MDGs) (Medina, 2005; Olugbenga, 2006). In Gwagwalada, Abuja, scavengers make between N4000-N13000 (81.9%) and N14, 000-N24, 000 (Magaji & Dakyes, 2011). Wheelbarrows, carts, and tricycles are used by household waste collectors in Abuja to collect waste. The cost of garbage collection ranges from N20 (\$0.06) to N50 (\$0.14) per bin; there is no set fee (Magaji & Dakyes, 2011). Sorting separates recyclables and resells them, which lowers the overall amount of waste by roughly 40%.

### **2.2.3 Roles of Waste Scavengers in Social Sustainability**

According to Magaji and Dakyes (2011), among the main issues facing informal recyclers are molestation, exhaustion, illnesses, injuries, and waist pain. The social effects of recycling and solid waste recovery in Hanoi, Vietnam, were investigated by Nguyen (1999). According to his research, traders, buyers, and collectors made up the recovery system. Three categories of sources are used by collectors: public areas (itinerant scavengers), dumping sites (dumpsite scavengers), and households (itinerant junk buyers). At dumping sites and in the city, a group of depot operators purchase materials from scavengers and junk buyers. In the scavenging field, there are roughly 6000 workers. The majority of them were from rural areas. Adult males (31%) and females (44%) make up the largest segments of the labour force, followed by those under 20 (25%). The system mobilises every member of the family to work, generating jobs and additional revenue. However, a drawback of the recovery system is that it promotes the illegal migration of rural residents into urban areas, where they live in substandard conditions and are therefore more susceptible to illnesses and epidemics.

## **3.0 Methodology**

According to Abugu (2014), there are between 500 and 1,000 scavengers working in Phase II of the Federal Capital City (FCC), and there are between 50 and 150 waste dealers. A sample of 100



scavengers and 20 waste dealers—roughly 10% of the total population in both groups was chosen for primary data collection. Questionnaires were distributed at dump sites and junk shops using purposive sampling techniques. The sample size was distributed among the Federal Capital City (FCC), Abuja's ten main scavenger depots. With a total estimated population of 32,500 scavengers, the depots are located in Jabi, Deidei, Zuba, Apo, Lugbe, Mpape, Nyanya, Gwarimpa, Karmajiji, and Lokogoma. A proportionate sample of 120 respondents was drawn from these locations in order to guarantee representative data collection. With 7,000 scavengers, Jabi had the largest sample size, with 26 responders. Due to their comparatively smaller scavenger populations, smaller depots like Gwarimpa, Karmajiji, and Lokogoma had fewer representatives (4, 3, and 3 respectively), while Deidei and Zuba came in second and third with 20 and 18 respondents, respectively. Each depot is fairly represented in the study based on its estimated scavenger population thanks to the proportionate allocation of sample sizes. This approach improves the findings' dependability and makes it possible to more precisely generalise the socioeconomic dynamics and contributions of waste scavengers across Abuja's different depots. These methods were selected to guarantee that every available and willing respondent had an equal chance to take part during the data collection process. Descriptive statistics consisting of tables and percentages were used to analyse the quantitative data gathered for this study. Among other things, frequency, percentages, tables, and charts were used to present the data.

## 4.0 Result and Discussions

### 4.1 The socio-economic characteristics of solid waste scavengers in the FCC

**Table 1: Socio-Demographic Characteristics of the Respondents**

S/N	Socio-Economic	Frequency	Percentage %
<b>1</b>	<b>Sex of the Respondents</b>		
	Male	116	97
	Female	4	3
<b>2</b>	<b>Age of Respondent</b>		
	18 – 30 Years	46	38
	31 – 43 Years	23	19
	44 – 56 Years	21	18
	57 – 59 Years	17	14
	Above	13	11
<b>3</b>	<b>Marital Status</b>		
	Married	103	86
	Single	15	12
	Divorce	-	-
	Widow	2	2
<b>4</b>	<b>Educational Qualification</b>		
	No Formal Education	2	2
	Primary Certificate	11	9
	Secondary Certificate	61	51
	Tertiary Educational Certificate	46	38
<b>5</b>	<b>Numbers of Years in the Business</b>		
	Less Than 5 Years	11	9
	5 – 10 Years	48	40
	Above 10 Years	61	51
<b>6</b>	<b>Monthly Income from Business</b>		
	Less Than ₦50,000	16	13
	₦50,000 – ₦100,000	12	10
	₦100,000 - ₦150,000	18	15
	₦150,000 – ₦200,000	49	41
	Above – ₦200,000	25	21
<b>7</b>	<b>Alternative Occupation other than Scavenging</b>		
	Civil Servant	15	13
	Business Man	40	33
	Farmer	8	7
	Artisan	35	29
	Retired Civil Servant	22	18

**Source:** Field survey, (2024).

The sociodemographic profile of Abuja's solid waste scavengers is compiled in Table 1. The sector is dominated by young people, as evidenced by the fact that 97% of respondents are men and the majority are between the ages of 18 and 30. Many of them have formal education, with 51% having secondary certificates and 38% having tertiary qualifications. A sizable portion (86%) are married. Long-term involvement is demonstrated by the fact that more than half (51%) have worked in the industry for more than ten years. The economic potential of scavenging is demonstrated by the fact

that, although income levels vary, 41% make between ₦150,000 and ₦200,000 per month. Scavenging is also a primary and supplemental source of income for many, as evidenced by the fact that many combine it with other professions like business (33%), artisan work (29%), and civil service (13%).

#### 4.2 Contributions of Solid Waste Scavenging to Urban Management

**Table 2: Contribution of Waste Scavenging to Urban Management**

S/N	Contributions to Urban Management	Strongly Disagreed	Disagreed	Neutral	Agreed	Strongly Agreed	Total
1	Contribution to Resource Recovery	- (0%)	6 (5%)	17 (14%)	24 (20%)	73 (61%)	120 (100%)
2	Reduce the volume of Waste for Landfill	2 (2%)	3 (2%)	15 (13%)	18 (15%)	82 (68%)	120 (100%)
3	Reduce Govt. Spending on Waste Management	1 (1%)	3 (2%)	12 (10%)	26 (22%)	78 (65%)	120 (100%)
4	Value Creation	- (0%)	1 (1%)	2 (2%)	21 (17%)	96 (80%)	120 (100%)
5	Provide Inputs to the Recycle Market	1 (1%)	2 (2%)	4 (3%)	12 (10%)	101 (84%)	120 (100%)
6	Revenue Generation	- (0%)	- (0%)	- (0%)	9 (8%)	111 (82%)	120 (100%)
7	Maintain City Cleanliness	- (0%)	- (0%)	6 (5%)	11 (9%)	103 (86%)	120 (100%)
8	Rid city of wastes free of Charge	- (0%)	- (0%)	4 (3%)	20 (17%)	96 (80%)	120 (100%)
9	Employment Generation	- (0%)	- (0%)	1 (1%)	10 (8%)	109 (91%)	120 (100%)
10	Part of urban development process	- (0%)	7 (6%)	11 (9%)	21 (17%)	81 (68%)	120 (100%)

**Source:** Field survey, (2024).

According to Table 2's analysis, there is broad agreement that waste scavengers are essential to Abuja's urban management. Approximately 68% of respondents stated they lessen landfill waste (Medina, 2007), and 61% agreed they aid resource recovery (Scheinberg *et al.*, 2010). Economically, 80% and 84% recognised their role in value creation and recycling input supply, while 65% reported lower government waste spending (Wilson *et al.*, 2006) (Ogwueleka & Naveen, 2021). Furthermore, 82% and 91% verified income and employment generation, corroborating Burcea's (2015) theory that scavenging is a source of livelihood. According to Imam *et al.* (2008), 80% of respondents stated that scavengers remove waste for free, and a high 86% agreed that they help keep cities clean. Finally, 68% acknowledged their contribution to urban growth. These results highlight the important but frequently disregarded role that the unorganised sector plays in sustainable waste management.

**Table 3: Number of persons employed by waste scavenging business in FCT**

S/No	Scavengers Depots	No of registered members	No of Employees	Total Popn
1	Jabi	5000	2000	7000 (22%)
2	Deidei	3600	1700	5300 (16%)
3	Zuba	3200	1660	4860 (15%)
4	Apo	2500	1500	4000 (13%)
5	Lugbe	2000	1000	3000 (9%)
6	Mpape	2000	960	2960 (9%)
7	Nyanya	1700	700	2400 (7%)
8	Gwarimpa	600	500	1100 (3%)
9	Karmajiji	500	500	1000 (3%)
10	Lokogoma	470	410	880 (3%)
	<b>Total</b>	<b>21,570</b>	<b>10,930</b>	<b>32,500 (100%)</b>

**Source:** Field survey, (2024).

The employment distribution in the waste scavenging industry across ten significant depots in the Federal Capital Territory (FCT), Abuja, is shown in Table 3. According to the data, waste scavenging directly employs 21,570 registered members and creates jobs for an additional 10,930 workers, resulting in a total of 32,500 people actively involved in the industry. Jabi Depot has the most employees (2,000), making up 22% of the total workforce, and the most registered scavengers (5,000). Zuba and Deidei come in second and third, with 16% and 15% of the total population, respectively. Fewer people participate in smaller depots like Gwarimpa, Karmajiji, and Lokogoma, each of which makes up around 3% of the total. This distribution illustrates how labour-intensive waste scavenging is, particularly in places with greater population density and commercial activity. The information emphasises the sector's contribution to livelihood support and unemployment

reduction, especially for low-income groups. Additionally, it illustrates how, with the right assistance, informal waste management can promote economic engagement and job creation.

**Table 4. Level of agreement with contributions of Waste Scavenging to Urban Management across the ten scavengers waste depots in FCT**

Dump sites	Samples	Strongly Disagreed	Disagreed	Neutral	Agreed	Strongly Agreed
Jabi	26 (22%)	-	1 (4%)	2 (6%)	3 (14%)	20 (76%)
Deidei	20 (16%)	-	1 (5%)	2 (10%)	3 (15%)	14 (70%)
Zuba	18 (15%)	1 (4%)	1 (8%)	1 (6%)	2 (12%)	12 (70%)
Apo	15 (12%)	-	-	2 (10%)	2 (15%)	11 (75%)
Lugbe	11 (9%)	-	-	1 (10%)	2 (20%)	7 (70%)
Mpape	11 (9%)	-	-	-	2 (15%)	9 (85%)
Nyanya	9 (8%)	-	-	1 (15%)	2 (20%)	6 (65%)
Gwarimpa	4 (3%)	-	-	-	1 (35%)	3 (65%)
Karmajiji	3 (3%)	-	-	-	-	2 (75%)
Lokogoma	3 (3%)	-	-	-	-	3 (100%)
	<b>120</b>	<b>AV=1%</b>	<b>AV=2%</b>	<b>AV=7%</b>	<b>AV=15%</b>	<b>AV=65%</b>

**Source:** Field Survey, 2022

Using a sample of 120 respondents, the respondents' (solid waste scavengers') degree of agreement with the contributions of waste scavenging to urban management in FCC was assessed across the ten waste scavenging depots. Solid scavenging helps manage the territory's urban areas, according to 76% of respondents in Jabi, 70% in Deidei, 70% in Zuba, 75% in Apo, 0% in Lugbe, 85% in Mpape, 65% in Nyanya, another 65% in Gwarimpa, 75% in Karmajiji, and 100% in Lokogoma. This degree of agreement is substantial enough to conclude that solid waste scavenging aids in FCC urban management. Additionally, 15% of respondents on average agreed with the same postulation. In the Federal Capital Territory of Nigeria, only 2% on average disagreed and 1% strongly disagreed that solid waste scavenging aids in urban management.

**Table 5: Contributions of Waste Scavenging to Livelihood**

Contribution To Livelihood	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Depots are vocational centres	0	0	1	4	115	39.6	0.25
Cost recovery for waste	0	0	4	26	90	37.73	0.52
Market for second hand goods	0	2	6	11	101	38.07	0.62
Source of employment	1	1	2	4	112	39	0.54
Source of foreign exchange	2	3	5	12	98	37.4	0.81
Revenue generation to scavengers	0	0	6	11	103	38.47	0.5
Reduce crime rate	2	4	8	6	100	37.2	0.87

**Source:** Field Survey 2022

According to the data, waste scavenging plays a major role in Abuja residents' quality of life, especially through the creation of jobs, revenue, and skills. Respondents overwhelmingly agreed that scavenging depots serve as both vital sources of employment (Mean = 39.0) and vocational centres (Mean = 39.6; SD = 0.25), supporting Wilson *et al.* (2006)'s findings that the informal waste sector offers low-income populations essential income opportunities. Medina (2007) asserts that informal recycling reduces poverty and promotes resource efficiency. Contributions like cost recovery (Mean = 37.73) and access to second-hand goods (Mean = 38.07) further support the sector's economic value. The greatest degree of variability, however, was found in perceptions of crime reduction (SD = 0.87), indicating differing views on its social impact. These results are consistent with those of Scheinberg *et al.* (2010), who support identifying and incorporating informal waste workers into official systems in order to optimise their contribution to sustainable urban development.

## 5.0 Conclusion and Recommendations

This study emphasises how important waste scavenging is to Abuja's Federal Capital Territory's socioeconomic and environmental conditions. The industry is dominated by young people and men, and many of its members have substantial experience and formal education. In addition to supporting the livelihoods of more than 32,500 people, waste scavenging makes a significant contribution to urban management through resource recovery, landfill reduction, revenue generation, and city cleanliness. Although its effect on reducing crime is still up for debate, it also provides employment, income, and vocational training. The study suggests waste-to-wealth initiatives, increased employment security, infrastructure and financial support, formal recognition of scavengers, and capacity building through vocational training. By taking these steps, waste scavenging could be transformed into a structured, inclusive, and sustainable industry that promotes urban growth and reduces poverty.

## References

- Adeyemi, A. S., Olorunfemi, J. Fand Adewoye, T. O. (2001). Waste scavenging in Third World cities: A case study in Ilorin, Nigeria. *The Environmentalist*, 21 (2), 93–96.
- Adisa, (2000) In: Muktar, M. (2011). *The Economics of Waste Scavenging in Kano State*. Department of Economics, Bayero University, Kano- Nigeria. 4-5.
- Ado (2018): The Economic Importance of Solid Wastes in Kano Metropolis. Online Publication retrieved at [www.globalmethane.org/Data/347-land](http://www.globalmethane.org/Data/347-land).
- Binion E & Gutberlet J. (2012). The effects of handling solid waste on the wellbeing of informal and organised recyclers: a review of the literature. *Int. J. Occup. Environ. Health*, 18: 43-52.
- Burcea Ş. G. (2015). The economic, social and environmental implications of informal waste collection and recycling. *Theoretical and Empirical Researches in Urban Management*, 10(3).
- Diaz N. (2000). The Youth and Waste Scavenging: Implications for Socio-economic and Health Hazards. Online publication of Nigerian at Newspaper.com. [www.Nigerian-newspaper.com/waste-sc](http://www.Nigerian-newspaper.com/waste-sc).
- Escamilla-García, P. E. (2024). Landfills in developing economies: drivers, challenges, and sustainable solutions. In *Technical Landfills and Waste Management: Volume 1: Landfill Impacts, Characterization and Valorisation* (pp. 157-170). Cham: Springer Nature Switzerland.
- Eurostat. (2014). *Building the System of National Accounts – informal sector. Statistics Explained*. Retrieved August 13, 2025, from <https://ec.europa.eu/eurostat/statistics->

[explained/index.php?title=Building the System of National Accounts - informal sector](#)

- Gangaya, E. J., & Mshelia, A. D. (2018). Assessing the Socio-Economic Benefits and Challenges of Municipal Solid Wastes Resource Recovery Practices in Mubi Metropolis, Nigeria. *Journal of Natural Sciences Research*, 8(14), 7-12.
- Gonzenbach, B., & Coad, A. (2007). Solid waste management and the Millennium Development Goals. *Collaborative Working Group on Solid Waste Management in Low-and Middle-income Countries*, St. Gallen, Switzerland, 34p.
- Imam, A., Mohammed, B., Wilson, D. C., & Cheeseman, C. R. (2008). Solid waste management in Abuja, Nigeria. *Waste Management*, 28(2), 468–472
- Li S. (2002). Junk-buyers as linkage between waste sources and redemption depots in urban China: the case of Wuhan. *Reuse, Conserve, Recycle.*, 36 (4): 319-335.
- Magaji J.Y & Dakyes P.S (2011). An Assessment of Socio-Economic Impact of Waste Scavenging as a means of Poverty Alleviation in Gwagwalada, Abuja. *Con J. Env'tal Stud*, 42-56.
- Masood M & Barlow C.Y. (2013). Framework for integration of informal waste management sector Pakistan. *Wasteal sector in Pakistan. Waste Manag. Res.*, 31 (10): 93-105.
- Medina, M. (2000). "Scavenger cooperatives in Asia and Latin America". *Resources, Conservation and Recycling* 31: 51–69. <http://www.sciencedirect.com/science/article/pii/S0921344900000719>. Retrieved 13 November 2011.
- Medina, M. (2005). "Co-operatives benefit waste recyclers". *Appropriate Technology*. Buckinghamshire, U.K. 32 (3).
- Medina, M. (2007). *The world's scavengers: salvaging for sustainable consumption and production*. Rowman Altamira.
- Nandy, B., Sharma, G., Garg, S., Kumari, S., George, T., Sunanda, Y., & Sinha, B. (2015). Recovery of consumer waste in India—A mass flow analysis for paper, plastic and glass and the contribution of households and the informal sector. *Resources, Conservation and Recycling*, 101, 167-181.
- Nguyen, Loan Thi (1999). Solid Waste Recovery and Recycling in Hanoi, Vietnam and Its Social Impacts. <http://www.environmental-expert.com/articles/article311/article311.htm>
- Nzeadibe, T. C., & Iwuoha, H. C. (2008). Informal waste recycling in Lagos, Nigeria. *Communications in Waste and Resource Management*, 9(1), 24–30.
- Nzeadibe, T. C., Ayadiuno, R. U., & Akukwe, T. I. (2010). Solid waste governance in Owerri urban area, Nigeria: problems and prospects. *Waste Management*, 30 (2), 355–357
- Ogwueleka T.C & Naveen B.P. (2021). Activities of informal recycling sector in North-Central, Nigeria. *Energy Nexus*, 2(1).
- Olugbenga, A. O. (2006). The role of informal private sector in integrated solid waste management (iswm) in lagos, nigeria-a developing country.
- Rockson, G. N., Kemausuor, F., Seassey, R., & Yanful, E. (2013). Activities of scavengers and itinerant buyers in Greater Accra, Ghana. *Habitat International*, 39, 148-155.
- Scheinberg, A., Wilson, D. C., & Rodic, L. (2010). *Solid Waste Management in the World's Cities*. UN-Habitat.
- Singh, R. (2021). *Integration of informal sector in solid waste management: Strategies and approaches*. Centre for Science and Environment, New Delhi, 18.



- Tong Y.D, Thi D. X and Tien D. (2021). Understanding the role of informal sector for sustainable development of municipal solid waste management system: A case study in Vietnam. *Waste Manag.*, 1(124):118-127.
- Wilson, D. C., Rodic, L., Cowing, M. J., Velis, C. A., Whiteman, A. D., Scheinberg, A. & Oelz, B. (2015). 'Wasteaware' benchmark indicators for integrated sustainable waste management in cities. *Waste management*, 35, 329-342.
- Wilson, D. C., Velis, C., & Cheeseman, C. (2006). Role of informal waste sector recycling in waste management in developing countries. *Habitat International*, 30(4), 797–808.
- World Bank (2004). Making Services Work for Poor People. The World Bank Development Report.
- WSCSD, (2005). *Solid waste management in a developing country. Towards a sustainable solution.* Retrieved November 30, 2012, from [http://www.wscsd.org/ejournal/article.php3?id\\_article=194forum57](http://www.wscsd.org/ejournal/article.php3?id_article=194forum57)

