

An Assessment of the Implication of Scavenging as an Emerging Enterprise on the Urban Development of Minna Town

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Abstract:- Scavenging is an emergent enterprise that not only provides employment for the teeming youth population, it equally generates wealth and in both latent and manifest ways aid urban expansion and transformation. The paper seeks to discuss the contributions of scavenging as an aspect of informal economy on urban transformation and growth. The pool of existing literature on waste to wealth/scavenging has neglected its role on urbanization. By employing qualitative approach using historical research method data for the study is obtained from both primary and secondary sources. Available literature and oral interview with twenty five scavengers across the town provides data sources. The research will assist in understanding the contribution of scavengers to the economy especially as it affects urban growth. It will contribute to the pool of literature on urbanization, scavenging and informal economy. Finally, the thesis will aid policymakers to formalise scavenging as an emergent and important aspect of the economy in the society.

Keywords:- Scavenging, Waste, Emerging Enterprise, Urban Development, Minna Town.

I. INTRODUCTION

Scavenging as an economic venture has assumed a very lucrative dimension globally in recent times. In this context it implies the picking and accumulation for consumption or trading of useable or recyclable materials discarded by the owners (Srinivas, 2011). It also means the alteration of resources from the background of dejection to that of utility (Kingsley, 2012). In some parts of the world waste is rather seen as material awaiting reuse (Sridhar and Hammed, 2014).

Different terms are employed to describe people who recover used items (waste) for sale or personal use, these include: as reclaimer, informal resource recoveree, recycler, salvager, scavenger, and waste picker (Kingsley, 2012; GIZ and FMECD, 2011). Diverse countries use various terms to denote the activity. The name 'waste pickers' was adopted at the 2008 first World Conference on waste by the participants unanimously. Samson (2008) observed that the term "scavenger" is also commonly used, but not

comfortable with many waste pickers because of its humiliating implication which associates it with animals. Many participants in the scavenging activity take it as fulltime vacation, but there are others that are involve on part time basis (GIZ and FMECD, 2011). Waste picking (Scavenging) is an activity stimulated purely by economic needs and those involved are smiling to their banks as they have found financial liberation and life is better (Nzeadibe and Ajaero, 2010). Such persons own expensive and prosperous properties and investments across Nigeria. Waste picking has been a major driver in the informal sector of the economy (Wilson et al, 2007; Nzeadibe and Ajaero, 2010). Chatarvvedi, 2008; IFC, 2008; Sumpson...2005 observed that in both low and middle income countries scavenging constitute the bane of sustenance of thousands of the population.

Until recently scavengers, waste pickers and related activities are perceived by the society as marginal groups consisting of poor people and in some cases are even seen as out casts (Birkbeck, 1975; Furedy, 1984; Tevera, 1994; Medina, 2000 and Wilson et al, 2006), In different places they are called by various names for instance in Northern Nigeria where Hausa language is predominant they are referred to as "Yangongo or Baban bola". The name gives a negative picture of practitioners as it is associated with filth and refuse.

However, the enterprise is beginning to gain reputation and recognition as an active participant in the development of urban economy, social intercourse and environmental wellbeing (Van de Khunder and Anschutz, 2001; Nzeadibe and Ajaero, 2010). The contributions to different aspects of the society including urban growth and development have been emphasised by Nas & Jaffe, 2004; Wilson et al, 2006; Medina, 2007; Gutberlet, 2008; Nzeadibe and Ajaero, 2010).

It is therefore surmise to see it as an emergent enterprise hence its prominence in the aspect of the informal economy. An enterprise is a complex and vastly integrated systems that comprised of processes, organisations, information and technologies with multifaceted interdependencies and interrelations (Nightingale, 2000, Purchase, et al 2011). Therefore, the term enterprise

encompasses a holistic and complex system of interconnected network of stakeholders for the achievement of a common significant goal.

Different ways of waste management has been practiced in the past, but its current dispensation has been construed as an enterprise which started during European industrialization in the nineteenth century and spread to other parts of the world within short period especially the third worlds following urbanization (Wilson, et al, 2005; Martin, 2007). Gowan (1997) therefore argued that it has led to the massive increase number of Scavengers worldwide particularly in developing countries and equally in the industrialized nations as well.

Existing works on scavenging, waste recycling and management majorly focus on solid and liquid waste management, challenges of waste management and health and environmental effects of waste (Kingsley, 2014; Nabegu, 2010, Egun, 2010; Gowan, 1997). Research on the economic significance of scavenging has been scanty while works on its effects as an enterprise on urbanization has been fallow. This work therefore, investigates the contributions of scavenging on the urban development of Minna Town.

Medina (2008), opined that Scavengers play significant role in the informal economy by enhancing the social, ecological, and economic life of settlements and equally helping in the mitigation of global warming. Their contribution in many cities in the area of waste collection service is immeasurable, yet they encounter both social and psychological challenges like; stigmatization, misuse by middlemen, and hazardous working and living conditions (Scheinberg and Anschutz, 2007).

For the urban poor in developing countries, informal waste scavenging and its recycling is a common way to earn income (Nzeadibe and Ajaero, 2010; Medina, 2008; Agunwamba, 2003; Moreno-Sanchez and Maldonado, 2006). Reliable estimates of the number of people engaged in waste picking and its economic and environmental impact are quiet few and scarce (Wilson et al, 2006). However, studies have suggested that when organized and supported, waste picking can spur grassroots investment by poor people, create jobs, reduce poverty, save municipal money, improve industrial competitiveness, conserve natural resources, and protect the environment (Medina, 2008).

II. METHODOLOGY

There are two major approaches of conducting a scientific research namely; quantitative and qualitative (Mujis, 2010). This research employed the qualitative approach therefore; the research data based on this approach are not in the form of numbers (Punch, 1998). It is an approach whereby researchers study things in their natural settings, attempting to interpret phenomena in terms of the meanings people have for them. Accordingly, qualitative researchers employ a wide range of interconnected methods so as to understand and analyse the object of the study

(Denzin & Lincoln, 1994). This research prefer to employ the historical interpretive method due to the fact that information obtained is not only from different sources but it has a veritable means of corroboration of data for better analysis.

For effective data collection and interpretation, the research utilizes the semi-structured oral interview as primary source among twenty five people directly linked with subject of the study. These are: the Scavengers, Middlemen, Officials of Urban Development, Niger State Environmental Agency, households and the Industries. The results were corroborated with the existing literary works obtained from academic journals, textbooks and Newspapers which served as secondary source materials. On that basis analysis and conclusions are arrived at.

Minna Town is the capital city of Niger State in Nigeria a position it attained following the 1976 State creation in the country. It lies at latitude 9.37^{0N} and longitude 6.33^{0E}. It is located in the Central Nigeria area very close to the new federal capital city of Abuja. The town covers an area of 22.74_{sq}^{km} with an estimated population of 264,169 in 2014 (Niger State Bureau of Statistics Minna, 2014). Its centrality of location serves as corridor of people's movement across the country thus various people with different economic activities troop to the ever expanding town (Ibrahim, 2017). Among the various groups of people that entered the town some found self employment in scavenging either as waste pickers or at a more advanced level as middlemen.

III. LITERATURE REVIEW

Scavenging is carried out by both the poor and marginalised social groups who resort to waste picking for income generation and some even for everyday survival (Agunwamba, 2003; Moreno-Sanchez and Maldonado, 2006; Kingsley, 2012 and Ayua et'tal, 2013. The enterprise is common in urban places of the developing world with up to 2% of the population in Asian and Latin American cities dependent on scavenging for their livelihood but also practiced in rural areas as well (Medina, 2000; Wilson, Velis & Cheeseman, 2006).

The transformation of Waste into useful and desired materials implies making wealth out of waste. The process in manufacturing involves the use of energy while in economics it depends on factors of production (Sridhar and Hamed, 2014). The salient issue here is that "waste" in itself can never be wealth otherwise it wouldn't have been discarded in the first place. Likewise, wealth is created through a process that has cost implications which the market forces conceive as the price. By implication some wastes are not of any potential benefit. Therefore, scavenging which is a process in the transformation of "waste-to-wealth implies that waste management operations go beyond delivery of service to provision of goods and services or value like energy.

The wealth of a society is reflected on the composition of its wastes thus, Rotich et al (2006) acknowledged a hopeful intercourse at household level between income and the quantum of waste generated given the fact that high income earners use more of packaged products which brings about increased percentage of inorganic materials such as: metals, plastics, glass, and textile. Differences in seasons also affects and determine nature of waste and that affects income level of Scavengers, population, social behaviour, and industrial production which is directly connected to the size of markets for waste materials and the extent of urbanization (Hoorn weg et al., 1999).

Nabegu, (2010) maintained that waste pickers scavenge waste directly from various sources in the society in search of any kind of recoverable materials. In so doing, they go into open bargain in the process of transacting useful waste from homes and agencies (Wilson et al, 2006; Kingsley, 2012; Sridhar and Hammed, 2014). Wilson, Velis and Cheeseman (2006) ascertained that the scavengers take the collection to the scrap market where they are sorted, weighed and sold accordingly. The middlemen known as “Waste Traders” (Yangongo) buy from the scavengers and supply the various agents that in turn take upon themselves the responsibility of transporting and supplying these wastes to the various industries which utilize them as raw materials.

The monetary achievement made by the waste picker (scavenger) is consequent upon negotiation of price between waste trader and waste generator and also the circumstance in question. The enormous financial gain from waste picking especially when acquired freely has resulted to their persistent presence at dumpsites with some displaying criminal tendency by taking away valuable materials belonging to either the public or private owners. Medina, (2000) observed that scavengers in some cases steal and transform materials like telephone cables, electric wire, steel, aluminium and other materials owned by the community for sale to others.

Waste varies (solid and liquid) and originates from different sources; domestic, agricultural and industrial activities. Some of the wastes are friendly while others are hazardous to both human and environmental health hence the need for a sound knowledge of waste; its nature, problems and effects and how to dispose it off hygienically is necessary (Wilson Velis & Cheeseman, 2006). Market place for instance generates waste of both organic and inorganic nature originates especially agricultural products. Equally the household generates wastes which contain items such as paper, glass, metal, polythene, plastic and other forms of wastes that are degradable like; vegetables, foodstuff and many others in the category and some of which are excellent raw materials used for various industries (Hammed, 2011). However, some waste products largely from the industries or healthcare centres are hazardous and infectious to the public and as such inimical to health and as such should be treated with caution.

Most of the major cities in Nigeria are threatened by the challenges of waste management as in the case of Lagos, Port Harcourt, Kano, Ilorin, Ibadan and Minna. However this development have been linked to economic expansions, population increase and the inability of local governments to handle the result of the increase in both domestic and industrial waste. Weaknesses in industrial set up, increase urban expansion, poverty and the lack of proficiency in the municipal administration are taken as reasons for the high level of waste accumulation in major Nigerian cities. Ogbonna et al, (2002), noted that some of the ways proffered to manage wastes (landfill in particular) are catastrophic to the environment leading to unprocessed waste being dumped in places that it can contaminate waterways and underground water.

Scavenging as a major source of raw materials for recycling helps the individual and also the local industries (Medina, 2000 and Nabegu, 2008). Currently industries are faced with the scarcity of raw materials hence the need for recycling of waste as raw materials. One successful way for recycling is to start its processing at household level. The separation of paper, plastic, aluminium, iron, wood and glass into different places will make things easier for the cleaner and less will be paid for such services while some money will be made for the sale of the recyclables. There are many industries that recycle these materials in many parts of Nigeria. Wilson et al, Velis and Cheeseman (2006) observed that Kishi Town in South Western Nigeria alone have over 3000 recycling outfits while Lagos have over 100 plastic recyclers. Minna Town have five plastic grinding machines and practically in every city in Nigeria so are there such industries.

A research institution in Nigeria have conducted several research on recycling that have made significant impact on the waste to wealth initiatives (Sridhar and Hammed, 2014).The results have brought about separation of waste from source in some eight pilot centres in Ibadan and Lagos where they are able to part plastic/nylon, metal and organic materials from the household wastes. Locally fabricated machinery (without any imported component) has been invented to recycle plastic/nylon, metal scrap and organic materials at various production capacities.

It has been shown in the literature that economic activities play significant role in the development of settlement centres (Abu-Lughod, 1991). Recent prospects by scavengers and their middlemen exhibit the economic potentials of the industry. Members of the trade are making part-breaking progress by creating enormous wealth. The venture do not only provide employment the teaming population of youths it also make available at cheaper rate consumables which include building materials like iron rod, roofing sheets, used wood, electrical and plumbing materials that play significant role in the building industry. Government need to intervene by formalizing the practice as it is observed in other parts of the world but above all, to regulate and assist the sector. It is therefore necessary to understand the position of scavenging in the economy and give it the desired attention.

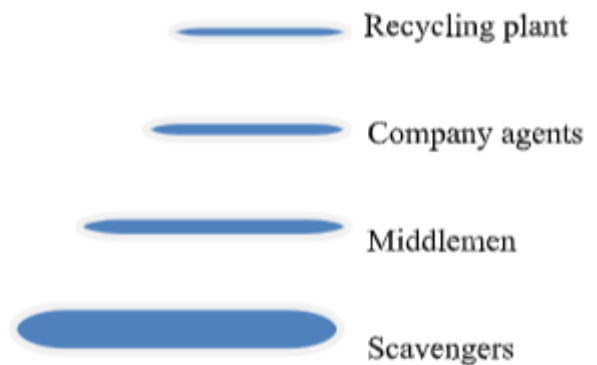
Recycling activities are not very popular however; scavenging is practiced commonly in the urban places. This is done at both legal and illegal places with waste pickers endlessly searching for valuable materials to be either resold to buyers of scraps or direct consumers. Municipal waste composition in Minna Town varies and depends on the level of human and industrial activities taking place in different parts of the settlement i.e. there are variations in residential and industrial wastes. A closer observation shows that there exists a relative homogeneity of residential/ household waste generated across the town, with higher volumes in the city areas which can be attributed to population. In all of these, a common/general component of waste generated in Minna Town is plastics/polythene products, iron scraps, wooden products, electrical appliances and different kinds of domestic and industrial materials. The degree of poverty in the developing countries is illuminated by the high level use of recycled materials with half of it consisting of organic materials.

Waste market in Minna town is presently an informal private sector driven with unregulated activities, which is operated mainly by small enterprises and waste pickers and their middlemen who are driven by poverty and the desire to earn a living. In Minna Town, contrary to what is obtained in the developed nations, scavenging is widespread and pickers can easily be seen at dumpsites hence there no policies and laws that regulate the practice in the town/state.

IV. RESULTS AND DISCUSSIONS

Scavenging as the enterprise is generally referred to, is a worldwide economic practice that deals with different items and serves the society in many areas of need. Oral interview with stakeholders reveals that items that have been disused by others are of high demand by some other people and by supplying such they make a living. Respondents to the interview also maintained that they scavenge waste/disused materials which include among many other things; iron scraps, used aluminium product and corrugated sheets, woods, plastics, vehicle and machinery parts, used doors, gates, windows, plumbing, electrical and electronic parts and scraps, empty cartons and cans and even old newspapers. These items are received by the middlemen who in turn sought and sale to both the immediate end users in retail or as a wholesale to the major agents that supply the recycling plants.

The enterprise is though seen as informal yet it is well organized in simple structure as; Pickers, Middlemen, Company agents and The Recycling plants. No wonder it has been described as a highly connected and dynamic system that is deeply interwoven (GIZ/FMECD).



Source: The Researcher, 2020

Each of the segments is dependent on the others. The pickers are of the view that items collected are used to fabricate, reproduce, produce and even as spare part for machines. The plastics are recycled to produce ecolac boxes, buckets, plastic hangers, plates and other domestic items. Interview with Abdullahi the Chairman of United Metal and Iron Scrap Dealers Association of Minna revealed that animal bones are part of what is collected and resold to those who produce ceramic items like; plates, cups, tiles, kitchen and toilet fittings.

The conduct of waste business in general but scavenging as an enterprise in particular is based on the financial status of individual participants. Some people have huge capital base while others have less. The big time dealers deal directly with the recycling companies where they supply thousands of kilograms wastes worth millions of Naira which takes sometimes, money and effort to achieve. One dealer in scraps highlighted that on the average a middleman makes about 50, 000 in a month but like all other businesses at times it is difficult to predict hence at times one can be lucky to run a deal that brings much money. For instance finding a reasonable quantity of copper wire can easily turn in millions of naira for the scavenger/middleman.

Scavengers who responded to the interview maintained that they are not indigenes of Minna rather most of them are from Katsina, Kano, Zamfara and Jigawa states. They started visiting Minna Town for the vocation since early 1990s but now are settled in the town in their own houses. Inter marriages have taken place between the scavengers and the indigenes thus making their children indigenes of Minna. All these in many ways have contributed to the development of Minna Town as it has aided in the increase of population and spatial agglomeration of the settlement.

Scavenging in many folds contributes to the urban development of Minna as it enhances the urban economy. The large cream of beneficiaries from the sector create enormous wealth that they not only build their own houses but also build commercial structures and invest in other aspects of the economy. The enterprise as observed by an architect contributes to the urban economy in the area of transportation; the tons of scraps collected are usually transported to locations of the recycling plants in different parts of the country hence it improves the transport business.

Apart from the fact that it has brought about increase in population (occupational migration) and consequent urban expansion, it is now a major supplier of raw materials to the building industry. Most individuals constructing their houses or reconstructing part of it patronize the scrap market for such materials like; used iron rod, windows, doors, toilet and electrical facilities at cheaper prices. A Manson asserted that to a large extent it aid the industry as people can afford the used materials easier hence housing becomes cheaper to some degree. Discussions with household members informed the researcher that some of the utensils in use at homes now come from the second hand and scrap markets.

To a very large extent scavengers greatly help in the urban development of Minna Town as they remove waste and unwanted sight from the streets (NISEPA, 2019). The waste pickers remove any abandoned or disposed property in the neighbourhood thus reducing the rate of the rubbish and garbage around which to some extent help in urban sanitation and consequent development. In addition, it helps in saving the environment through the its recovery of landfills (GIZ/CWG, 2011).

Scavenging is now a popular economic activity irrespective of the biases against it. Findings by the researcher have revealed the economic viability of the venture and socio-economic significance in the society. Through our oral interview with participants it is educative to know that on daily basis those involved in the enterprise (scavenging) make an average of N1000 per day (\$40). Research shows that those involve in the trade seem to be enjoying nippy business and even better financial life than most civil servants in the town. The table below shows a comparative income distribution between civil servant and scavengers in Minna Town.

A Comparative income table between the scavenger and the Civil Servant in Minna Town per day

1	Scavenger/Picker	100-500 pd	1	Civil Servant GL 1-6	300-600 pd
2	Middleman	1500-5000	2	Civil Servant GL 7-10	750-1500 pd
3	Company Agent	100,000+-	3	Civil Servant GL 12-15	200-5000 pd
4	Recycling Plant	Millions	4	Civil Servant GL 16-17	10,000-15,000

Source: The Researcher, 2020

Scavengers and their middlemen make brisk business and the sources of raw material continued to expand with growing population. This is contrary to the assertion in some writings that it will soon wither away because the materials to scavenge are becoming faint (Olu-Olu and Omotosho, 2007). It is therefore our discovery that the industry being accommodative provides employment for the teeming youth

population in Minna and Nigeria at large. Thus more people came to Minna town with the desire to earn living which they take solace in scavenging. Many settlements in Minna are occupied by scavengers mostly Hausa speaking people from the Northern states of Kano, Katsina and Niger republic.

However, a major challenge to the enterprise is the health hazard which many of the practitioners face. The pickers are more vulnerable to the danger of disease infection, wound, exposure to harmful conditions and atmosphere GIZ/CWG (2011). Some of the health peril scavengers are susceptible to include; H I V, cholera, diarrhoea, Tuberculosis, skin diseases, eye problem as well as waist pain. This observation has also been corroborated with the works of Olu and Omotosho (2007), Sekyere (2014) and Nyathi, Olowoyo and Oludare (2018).

It is observed that the scavengers in this part of the world do not use any form of protection such as uniform, jacket, boot, hand-glove or face-mask Abel (2012), GIZ/CWG (2011) Olu and Omotosho (2007). Respondents to the question on safety replied that uniform or life-jacket, gloves and mask are not the ultimate means of protection rather they agree it is simply the question of destiny to be infected by any disease or harmed by any danger. To them harmed can only happen if Allah has ordained it upon. It is therefore a common site to find pickers, the middlemen and even the agents having direct torch with all kinds of filth. Although there is no statistical data on the health condition of scavengers in Minna in particular no Nigeria in general, participates face various challenges in that area.

V. CONCLUSION

Many people in developing countries depend on scavenging, waste picking and in general recycling of materials for their livelihood. The industry has to a great extent aid in different facets of the economy and more importantly in the development of Cities and Towns as it do not only provide livelihood but also it is a major means of providing both industrial raw materials and domestic utensils for the populace. Although the pickers are sometimes found splitting the waste in the bin on the streets of the neighbourhoods, yet the practice have stopped the unhealthy keeping of mountains of solid waste in the house as they are now sold to the scavengers. In some ways government and concerned agencies can help mitigate some of the challenges.

Government need to be more involved in the affairs of the venture as it is a source of generating huge amount of revenue for municipal administration. Government will do well to make the enterprise more viable and attractive through proper education of the citizenry. Organization of the sector into a formal outlook will reward the government and people at large.

A necessary step for the authorities is to recognise the economic, social and environmental importance of scavengers/waste pickers. Both government officials and the

general public need to appreciate the group for its emerging role as key employer and provider of raw materials in the society. The group need to be encouraged and organised into small and medium scale industries so as to integrate and add value to their (recycled) materials before selling. It is evidently clear that incorporating existing informal groups in the formal organisational systems can lead to a lot of benefits.

Finally, it was observed that most of the people involved in the scavenging and waste picking are illiterates that need to be given some amount of education. The effort will educate them on their health and better conduct of their activities.

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