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NEW APPROACHES OF SOLID WASTE MANAGEMENT IN LAGOS.

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1. Introduction

In the last few years, there has been an improvement in the solid waste management practice in Lagos, most especially within the informal private sector participants.

The activities of informal private sector in solid waste management streams in Lagos State have been very vital and overwhelmingly significant in the overall integrated solid waste management practice in the State and the Country at large.

The sector, which encompasses all aspects of, integrated solid waste management practice vis-à-vis collection, transportation, recovery, recycling and merchandise of both recovered and recycled materials is an Institution on it's own right. They have established a very high network of operation and distribution of their valuables both within and outside the country.

2. The cart pushers

These are the group of informal private sector involved in the house-house waste collection at a fee, using specially built carts. They were brought into the industry by the ineffectiveness of the government owned agencies responsible for the collection, transportation, and the disposal of waste. At one stage, they were collecting over 70% of the total waste generated in the State, this they do by house-house collection and transportation of the collected waste to transfer bins strategically placed by government agency. Figures 1 and 2, shows typical carts when empty and when filled with waste respectively.

This group is also involved in waste recovery; as they go from house-to-house collecting waste at an agreed fee, they also sort and recover reusable and recyclable materials from the waste before disposing the residue.

The non-formalization of the activities of the group has made it almost impossible to have accurate data/records of their activities within the waste management industry. However, they cart away several hundred tons of waste per day and make an average of two thousand six hundred naira (US \$20.00) per day, where as the average basic salary of government staff is about seven thousand five hundred naira (US \$ 53.57) per month.

In Lagos State alone, it is estimated that over five thousand (5,000) cart pushers are operating within the industry.

3. The cart builders

This is another group of locals who are also playing a major role in the operations of informal private sector in integrated solid waste management. Though very small in number, they are the one that invest their money in the construction of the carts being used by the cart pushers. The number of carts constructed and put for lease/ hire to the cart pusher by individuals ranges from 5 to 50 depending on the financial capacity of each individual involved in the business. The business venture is a very

lucrative one with very high return on investment; the cost of renting each cart is between N150.00 (\$1.07) and N250.00 (\$1.78) per day, depending on the area and locality, whereas the cost of constructing a standard cart is put to between N15, 000 and N20, 000. Within six months of construction, each cart would have repaid the investment cost with reasonable profit with little or no overhead.



Figure 1 A typical cart pusher, pushing an empty cart



Figure 2 A typical pusher on his way to the disposal site

4. The scavengers.

This is the only group /organization so far identified in Lagos State that is involved in both on-site and off-site waste/ resource recovery, they recover re-usable and recyclables materials like plastics, aluminum, glass, paper, scraps metal, animal wastes like horn, bones etc. Some of them go from door-to-door to recover re-usable and recyclable materials, while majority limit their operation to the waste brought to the disposal sites. In some cases, the scavengers also process some of the recovered waste before selling either to the resource merchants or directly to the recycling industries. The processes include washing, burning, etc. Figure 3 shows a scavenger burning recovered electrical cables/ wires to retrieve copper.

Majority of the scavengers live in a shanties or makeshift houses built on and around the disposal sites. Figure 4 shows an aerial view of the houses of the scavengers at one of the government disposal site Olusosun in Lagos state.



Figure 3 Waste processing (burning) by scavenger to add more value before sales



Figure 4 Aerial view of the houses of scavengers at Olusosun disposal site in Lagos

It is a common sight within this community/ neighborhood to see heaps and mountains of recovered materials waiting to be purchased or transported to the recycling companies. Several million-naira worth's of materials are recovered yearly by over four thousand scavengers within this constituent of informal private sector in integrated solid waste management in Lagos state.

An investigation show that only about 50% of the recovered items serves as raw materials to the industries within Lagos state and the entire country, the remaining 50% is exported to some other countries in Africa like; Ghana Togo, Cameroon, Mali, Republic of Niger, Sudan etc, for both industrial and personal use. (Recycling and Re-use)

5. The resource merchants

This group is made up of traders (merchants) involved in the purchase of all recovered recyclable and re-usable materials from the scavengers. Some members of this group are retired scavengers who cannot scout for materials on the site again due to either age or advancement in financial capability.

They are so wealthy that some of them are involved in the exportation of some of the recovered resources to other countries thereby earning foreign exchange; they are also very influential that they get Local Purchasing Orders (LPOs) from companies to supply recovered materials.

Figures 5 & 6 show tons of recovered materials ready to be supplied by the resource merchants for industrial consumption.



Figure 5 A merchant sorting heaps of shredded paper waste before supply



Figure 6 Tons of plastic waste recovered and waiting to be transported

6. The recyclers

This is another component of informal private sector that include both the micro and the small scale recycling companies, they converts recovered waste materials like paper, aluminum, animal by-products, plastics scrap metals etc, to valuable materials and raw materials for the consumption of the industrial sector.

The recycling sector is a multi- million-naira investment, where some specialized equipment and machines are used for the conversion of the recovered items to finished products or raw materials that are also used in several other applications. For instance a company in Ikeja area of the state uses the materials in Fig. 5 to produce tissue papers and exercise books as finished products, while another company utilizes the materials in Fig. 6 to produce recycled plastic pellets used in further production of new plastic product like; hangers, toys, plastic hose etc.

Some of these recycled products and raw materials are exportable products through which foreign exchange is obtained.

These industries provide more than Two thousand job opportunities for different cadre of work force.

7. Unique features of the informal private sector in ISWM in Lagos

- The operators cut across every known nationalities in Nigeria, unlike in some other countries where the entire operatives of the informal private sector in waste management industry is made up of people with the same cultural and religious background.
- About 20% of this group went into the venture to raise some start-up capital for other businesses. Some even sponsor themselves through secondary and tertiary schools.

8. Key points

- ❖ **Employment opportunities:** The paper showcases huge employment opportunities created by this informal private sector in Lagos, Nigeria.
- ❖ **Foreign Exchange earning:** The activity of this informal private sector in solid waste management industry in Lagos has brought about foreign exchange earning from the exportation of the recovered materials to other African countries.
- ❖ **Poverty reduction:** About 20% of this group went into the venture to raise some start-up capital for other businesses.
- ❖ **Education:** A large percentage of this group equally sponsor themselves through secondary and tertiary schools to enhance their quality in life (escape poverty).

9. Assisting the informal sector move closer to MDGs

1. I have conducted several researches and surveys on their operations, living conditions with a view of improving it.
2. I have worked and still working with some NGOs like Development Initiatives Network (DIN) and Civil Liberties Organization (CLO) on the documentation of their roles and also championed advocacy programme for their recognition.
3. My organization, RICHBOL ENVIRONMENTAL SERVICES LTD., is also presently providing employment for some informal sector in waste management in Lagos state.
4. I am currently working on the facilitation of the following :
 - a) Training of the resource recovery personnels (RRPs) a.k.a waste pickers or scavengers on how to enhance their activities/productivities.
 - b) Training on how to effectively manage their income (Finances) in such a way that it can be re-invested into recycling and other small and medium scale enterprises (SMEs) projects
 - c) Facilitate the provision of safety and protective working tools and clothing (PPEs) to the informal operators

I am presently seeking partnership/sponsorship of other NGOs AND Foundations in the facilitation of the 4th item above. The particular merits of the 4th item include

- Increase their income and financial management capabilities.
- Enhance their reputation.
- Increase the knowledge base of the operatives / informal sector in waste management.
- Increase job creation opportunities through waste management.
- Improve the quality of life, health and safety of the operatives

Both DIN and CLO with whom I collaborate equally have well documented reports on the activities of the informal sector in waste management in Lagos. DIN in particular had submitted this report to Ford Foundation West Africa office since 2003.

10. Lessons from experience

- Various researches showed that the group plays a major role in job creation, poverty reduction through integrated solid waste management practice in Lagos, Nigeria.
- They also ensure environmental sustainability through waste recovery, recovery, recycling and re-use.
- Their activities through recycling also bring about industrial growth, by provision of raw materials for industrial consumption.
- They also stimulate national economic growth.
- Based on several advocacy programmes embarked upon, the government is equally planning to formalize the activities of the informal sector and also accord them the much needed recognition within the waste management industry
- The operatives also formed themselves into groups and association to cater for members' welfare.

11. Conclusions

Having highlighted the all important roles being played by all the components that is involved in effective and efficient integrated solid waste management in Lagos, Nigeria, it is equally pertinent to indicate that all the identified components of informal private sector are all sources of employment, job creation, wealth creation, and distribution, foreign exchange earnings, poverty alleviation and reduction and environmental sustenance through reduction in the quantity of waste to be landfill. In line with United Nation's Millennium Development Goals (MDGs) of sustainable development of the environment and reduction of world poverty level to half by year 2015, the same year that Lagos may become the 3rd largest mega city in the world.

Acknowledgement

I will like to use this medium to acknowledge the efforts of NGOs like **Development Initiatives Network (DIN)** and **Civil Liberties Organization (CLO)** at championing advocacy programs for integrated private sector participation which seeks to create roles for both the formal and informal players in integrated solid waste management in Lagos, Nigeria.

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