PERCIEVED IMPACT OF INDISCRIMINATE DUMPING AND MANAGEMENT OF SOLID WASTE ON REAL ESTATE VALUES IN EGBEDA LOCAL GOVERNMENT, IBADAN

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ABSTRACT

Generation of waste is inevitable in almost activities of human beings. However, effective disposal and management of waste should be given priority attention to ameliorate the negative impact of improper waste management. The problems posed by this act emanated from the absence of functional waste disposal and management agencies, lack of enabling policies, poor public enlightenment and lack of dedicated waste dumps. This paper investigates the perceived impact of indiscriminate dumping and management of solid waste on real estate values in Egbeda Local Government Area, Ibadan Oyo State. Random sampling technique was used to administer One hundred and three (103) questionnaires among Estate surveyors and valuers and residents in the selected Neighbourhood. Frequency table and percentages were used in analysing the data collected from the respondents. It was observed that indiscriminate dumping of solid waste and formation of dumpsites has negative impact on level of demand for real estate properties and their values. The study recommends that public enlightenment and awareness programmes should be carried out frequently by the Government through various media to sensitize the people on health implications and environmental dangers of improper dumping of solid waste and offenders should be penalized as this will eradicate the habit of indiscriminate dumping of refuse.

Keywords*: Solid waste, real estate, indiscriminate dumping, values.*

1.   INTRODUCTION

Generation of waste is a continuous process in human daily activities. In Nigeria there has been increasing cases of indiscriminate dumping of solid wastes resulting from increasing urban population and urbanization (Jimoh et al, 2018). However, one of the major environmental problems faced by developing countries is poor refuse disposal and management (*Nwigwe, 2008*). Solid wastes are generated from home, place of work, hospitals, schools, industries among others. Peter et al, (2016) observed that in most urban centers in Nigeria, solid wastes are disposed by dumping in open areas as this encourages the growth of disease transmitting organisms to people living around the vicinity.

Dumps generation and illegal dumping of wastes keep increasing at an alarming rate in Ibadan (Nest, 2001). Refuse are dump along the major roads, in

culverts and drainage due to lack of any provision for waste disposal and management strategies from the environmental agencies, dump sites are formed where refuse are dump without proper management (Oreyomi, 2005). The odour produced from the heap of waste becomes a breeding ground for different types of infectious organisms. Chakrabati, (2003) noted that waste minimization; reuse; and recycling are different strategies of reducing waste in the society. Omole et al, 2016, condemns burial, open air burning and open dumping commonly practiced waste disposal method in Nigeria. Various ways of managing solid waste includes disposal by either burying or burning, reduce or reusing, recycling and energy generation (Awosusi, 2010). However, the most common ways of disposing solid wastes in the study area is through incineration and creation of dump site.

Waste management are the activities and actions required to manage waste from its inception to its final disposal (wikipedia). Finance is a major problem of waste management especially for municipalities that are faced with resource shortages and competing demands. As many cities fail to meet minimum acceptable standards with grave adverse effects on the urban environment, public health, quality of life for large city (Peter et al, 2016). Akinola and Salami (2001) posited that private sector participation in waste management would be more effective in waste management and that the local government should review its strategy by withdrawal of poor operators from the services, set monitoring team, get rid of cart pushers and make trucks and other equipment available to the operators at subsidized rate.

Njoku, (2005) observed that the impact of improper solid waste disposal ranges from depreciation of aesthetic value, loss of economic value, change of property use, development of slum and reduction of rental value among others. Igbara et al (2016) further explained that there is a link between waste generation and property rental value as the value of individual properties usually depends on the property's unique attributes, each of which creates utilities or disutility to individuals. Rental values according to Oloke et al, (2013) do not only depend on physical characteristics of a building but also the environment that surrounds the building.

This study therefore, examines the perceived impact of indiscriminate dumping and management of solid waste on real estate values focusing on residential houses with a view to proffer solutions.

2. LITERATURE REVIEW

Waste is any solid or semi-solid materials which have been discarded by its primary owner or original user, and may or may not be found useful by any other person but constitute nuisance to people's health and the environment when left untreated (Wokekoro et al, 2014).

UNESCO, (2003) postulates that majority of substances composing municipal solid waste include paper, vegetable matter, plastics, metals, textiles, rubber and glass. Oreyomi (2005) classified solid wastes as combustible items, non combustible items, garbage and agricultural waste. This implies that solid waste generation is a continuous process which needs to be properly managed and turned into wealth.

According to Oreyomi (1998) improper disposal of solid waste poses serious danger to the people living around the wastes as disposal sites carry along rodents, insects and other vermin, which could transmit diseases such as typhoid fever, dysentery, diarrhea, cholera, yaws, salmonellas, and other diseases. Awosusi (2010) explains that waste disposal as open dumping which occurs when large quantities or piles of waste are deposited in areas, undesignated to handle such materials.

According to Wokokere and Uruesheyi (2014) properties in an environment that is clean will have value equal to full market value while properties in an unclean environment will pose health and financial risk and this will affect the value in several ways. To him property in dirty environment loses its marketability and value.

3. METHODOLOGY

This study was conducted in Egbada Local Government. Two different neighbourhoods of Molade Iwo road and Alakia were covered. One hundred and three (103) questionnaires were administered. Twenty three (23) questionnaires were administered to the firms of estate surveyors and valuers while eighty (80) questionnaires were administered to the residents of residential properties in the study area. Random sampling technique was adopted to select the sample size of eighty residents. According to the Nigerian Institution of Estate surveyors and Valuers directory (2009) there were twenty three estate surveying and valuation firms in Ibadan and since the sample frame is small the whole sample frame was adopted as sample size.

4. DISCUSSIONS AND FINDINGS

4.1 Questionnaires administered

Table 1 below shows that out of twenty three (23) questionnaires distributed to the Estate surveying and valuation firms, only fifteen (15) which constituted 65% response rate was retrieved and out of eighty questionnaires (80) administered to the residents , only 70% were retrieved which also constitute 88% response rate.

Table 1: Questionnaires administered on Respondens

Respondents	No. administered	No. Retrieved	Response Rate
Estate surveyors and valuers	23	15	65%
Residents of residential properties	80	70	88%

Source: Field Survey, 2019.

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4.2 Socio-Economic characteristics of the Respondents

Table 2 shows ownership status of the respondents. It reveals that 83% of the respondents are tenant while the remaining 17% are tenant. Also from the table, 40% of the respondents are in the age bracket 20-30years while another 40% are within the age bracket of 31-40years, 20% are within the age bracket of 41-50years. This indicates that the respondents are adults whose opinion will be substantial. Lastly, the larger proportion of the respondents (36%, 31% and 17%) occupy 3 bedroom flat, tenement building and 2 bedroom flat while the remaining 9%, 4% and 3% are living one room apartment, 4 bedroom and duplex. This implies that majority of the respondents are low/middle income earners.

Table 2: Socio-Economic characteristics of the Respondents

	No. of Respondents	Percentage %
Ownership status		
Landlord	12	17
Tenant	58	83
Age		
20-30 years	28	40
31-40 years	28	40
41-50 years	14	20
51 years and above	-	-
Types of Property occupied		
One room apartment	6	9
2 bedroom flat	12	17
3 bedroom flat	25	36
4 bedroom flat	3	4
Tenement building	22	31
Duplex	2	3

Source: Field survey, 2019.

4.3 Household Solid waste disposal and management

Table 3 below shows that solid waste (60%) is most generated wastes, followed by liquid waste (30%) and industrial waste (10%). it is clearly shown from the table that solid waste is most generated type of waste.

Table 3: Major Types of Waste Generated

	Respondents	Percentage %
Solid waste	42	60
Liquid waste	21	30
Industrial waste	7	10
Total	70	100

Source: Field survey, 2019.

Table 4 revealed the attitude of the people to improper dumping of refuse and ineffective services rendered by the waste management agencies. 46% of the respondents disposed their refuse in open dumps, 26% burnt theirs within the neighbourhood while 12% dispose theirs along major roads. This habit destroys the aesthetic views of the city as well as air pollution. 11% dispose their refuse in an incinerator.

Table 4: Methods of Disposing Solid Waste

	Respondents	Percentage %
Open dump	32	46
Burning	18	26
Incineration	8	11
Along major roads	12	17
Total	70	100

Source: Field survey, 2019.

Table 5 shows that 80% of the respondents are aware of waste management agencies while 20% are not aware. This indicates that there are agencies in charge of solid waste management in the neighbourhood.

Table 5: Availability of Waste Management Agencies

	Respondents	Percentage %
Yes	56	80
No	14	20
Total	70	100

Source: Field survey, 2019.

Table 6 reveals that the services rendered by the waste management agencies are not effective.

Table 6: Effectiveness of Service Rendered by the Agencies

	Respondents	Percentage%
Effective	14	20
Not Effective	42	60
Indiffrent	14	20

Source: Field survey, 2019.

4.4 Impact of indiscriminate dumping of solid waste on rental values

Referring to the effect of improper refuse disposal and formation of dumpsite on the neighbourhood.the response revealed the areas of negative impact which include; offensive odour (40%); Low rental/capital values of properties (30%); Presence of disease causing insects (20%);Contaminated water (6%); and Causes void in properties (4%). The most felt negative effect is that of offensive odour and low rental/capital values of properties. This implies that indiscriminate dumping and location of dumpsites in the neighbourhood has negative impact on the health of the residents as well as rental values of properties.

Table 7: Effect of improper refuse disposal and Dumpsite on the Neighbourhood

	Respondents	Percentage %
Offensive odour	28	40
Low rental/capital values of properties	21	30
Presence of disease causing insects	14	20
Contaminated water	4	6
Causes void in properties	3	4
Total	70	100

Source: Field Survey, 2019.

Indiscriminate dumping of refuse affects the aesthetic view of the environment and also leads to reduction in rental values of properties. This is evident in Table 8, the table shows the rental values of one room apartment, 2 bedroom flat, 3 bedroom flat, 4bedroom flat, tenement building and duplex located in an unclean environment are: N80,000, 120,000, N150,000, N200,000, N24,000 and N400,000 while the rent of properties in located in clean environment are: N100,000, N130,000, N180,000, N220,000, N36,000, and N450,000. The difference of rental values are: N20,000, N10,000, N30,000, N20,000, N12,000 and N50,000. The rates of change of rent for the properties are as follows: 20%, 8%, 17%, 9%, 33% and 11%. This findings is similar to the findings of Adewusi and Onifade (2006) that rents paid on properties close to waste dump sites were lower when compared to similar properties farther away.

Table 8: Average Rental values of Residential Properties

Types	Average rent per annum (areas with indiscriminate waste disposal) N	Average rent Passing in other areas N	Difference in Average Rental values N	Percentage of difference in Average rental value N
One room apartment	80,000	100,000	20,000	20
2 bedroom flat	120,000	130,000	10,000	8
3 bedroom flat	150,000	180,000	30,000	17
4 bedroom flat	200,000	220,000	20,000	9
Tenement building	24,000	36,000	12,000	33
Duplex	400,000	450,000	50,000	11

Source: Field Survey, 2019.

Table 9 shows the ranking of responses on the control for indecent solid waste disposal in the study area. The respondents opines that there should be penalty for offenders (3.81) which ranked first, followed by conducting sensitization programmes through the media (3.50) which ranked second.

However, Offenders should be prosecuted (3.44) ranked third and offenders should pay fines (3.01) rank fourth. This implies that there should be penalty attached to indiscriminate dumping of refuse after sensitization programmes had been conducted.

Table 9: Control of Improper Solid Waste Disposal

	Mean	Rank
There should be penalty for offenders	3.81	1st
Sensitization programmes should be conducted	3.50	2nd
Offenders should be prosecuted	3.44	3rd
Offenders should pay fines	3.01	4th

Source: Field Survey, 2019.

5. CONCLUSION AND RECOMMENDATIONS

The study investigated the perceived impact of indiscriminate waste disposal and management on real estate values of residential properties in Egbeda local Government. The study revealed that indiscriminate dumping of refuse and formation of open dumps cause reduction in rental values of residential properties. The study also revealed that inhabitant in the study area also suffers from air pollution as a result of offensive odour from the dumps. Although it was discovered that there are waste management agencies in charge of waste management in the study area but the services rendered are ineffective. The study therefore, recommend that public enlightenment and awareness programmes should be carried out frequently by the Government through various media to sensitize the people on health implications and environmental dangers of improper dumping of solid waste and offenders should be penalized as this will eradicate the habit of indiscriminate dumping of refuse.

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