Assessing the Lagos Megacity Selected Slum Settlements' Housing and Environmental Conditions

FOSUDO, Peter Olulade Department of Urban and Regional Planning, Lagos State Polytechnic, Nigeria. <u>ladefosudo@yahoo.com</u>

Abstract-Ever increasing rate of urbanization, rapid urban population growth and the inability of government to provide corresponding housing facilities have resulted in a large number of people residing in Slum settlements. This study however, analyzed housing and environmental conditions of slum dwellers in Iwaya, Ijeshatedo and Amukoko in Lagos. The methodology adopted includes the use of both primary and secondary data. The survey covered the 3 identified slums where 201 questionnaires were administered to the residents (39 in Ijeshatedo; 47 in Iwaya and 115 in Amukoko). Houses were selected randomly and the first household contacted in the building was interviewed. Also, information gathered through questionnaire were analyzed descriptively. The findings on socio-economic attribute of the slum dwellers reveals that most of the respondent sampled were male, married, educated (NCE/OND holder), middle-aged, trader and artisan. Also over half of the respondents are low income earner and 54.2% of total respondents having household size of 5 - 10 people. Findings on housing disclosed that majority of the buildings in the study area are residential bungalow buildings built over 40 years ago and has become structurally poor. Findings also reveals that there is high level of congestion, poor state of roads and buildings, the inefficiency of infrastructure and public services and loss of available ones due to poor maintenance culture of residents in the study area. The study recommends the need to prepare detailed infrastructure network plan for the community with population density being the major index, land tenure regularization, security of tenure and the need to recognize and improve the inhabitant means of livelihood which is centered on informal activities. Implementing recommendations could bring tremendous improvement in the standard of living, housing and environmental condition in slums of Lagos State.

Keywords— Environmental Conditions, Housing, Megacity, Slum Dwellers

INTRODUCTION

Housing is adjudged to be one of the basic needs of man; it is central to man's existence, welfare and health (Adedeji, 2004). It is widely acknowledged as the most essential elements for good life; and form the basic requirement for efficient and satisfied labour force, thereby promoting the foundation of satisfying community life. Housing has been noted to be more than a mere shelter, as a unit of the environment. It influences profoundly the health, efficiency, social behaviour, satisfaction and general welfare of the community (A. D. Jiboye, 2010).

The deteriorating state of the housing environment has been of great concern in most urban areas of the developing nations. Therefore, the need for a decent and adequate shelter has long been an issue requiring exigent global attention. Since shelter constitutes one of man's basic needs, it does have a profound impact on the health, wellbeing, social attitudes and economic productivity of the individual (Gilbertson, Green, Ormandy, & Thomson, 2008). Nigeria's mega city Lagos is urbanizing at a fast rate of 6.1% per year as at 2003 like Dhaka in Bangladesh (6.2% p.a); Delhi (4.1% p.a.) (UN, 2004), It is estimate, that more than one billion of the world's residents live in an inadequate housing and unpleasant environment, mostly in the sprawling slums and squatter settlements in developing countries UN-HABITAT (2006). In Africa slum population account for about 54 out of every 100 city residents (Mabogunje, 2005). Poor housing is characterized by dilapidated housing structures with poor ventilation, acute overcrowding, faulty alignment of streets, inadequate lighting, paucity of safe water, water logging during rains, absence of sanitary facilities and non-availability of basic physical and social services (Jiboye, 2010).

Healthy housing and good environmental condition thus remain critical to human health, comfort and general well-being of every man (Habib, Mahfoud, Fawaz, Basma, & Yeretzian, 2008). Adedeji (2004) argued that housing issues affect the life of individuals as well as that of a nation; hence both nature and society ascribed great importance to the role it plays to bring about human comfort. The importance of providing adequate and quality housing in any country cannot be overstated nor disputed in spatio-temporal terms, being a stimulant to the national economy (Omole, 2010). However, the re-current nature of housing needs and the inevitable desire for good housing tend to confirm the widely impression that there is hardly any nation that has been able to cope satisfactorily with its housing requirement (Modupe. 1986). The proliferation of shanty dwellings, squatter settlements and slums in most of our cities in the Nigeria and other less developed nations of the world is attributed to a chain of factors. Basically, such factors are closely related with the housing and environmental socioeconomic lifestyle of condition and the inhabitants. This paper, therefore, intends to investigate the characteristics of housing and environmental condition vis-à-vis the socio-economic lifestyle of slum dwellers in selected slum areas of Lagos megacity, Nigeria.

LITERATURE REVIEW

Housing has a multifaceted character and thus makes its evaluation multi-dimensional (Weidemann & Anderson, 1985). It will however be assessed in the basic manner in context of a particular discussion. Housing and environmental conditions is synonymous with quality of the structure and life in the context of slum dwellers (D. A. Jibove, 2010). Suffice it to reiterate that in this 21st century the world has become more urban, with the majority of the global population living in cities and towns. The fastest rates of urbanization are now taking place in developing countries, where average incomes are the lowest (Weiss, 2001). This suggests that poverty which used to be a rural phenomenon is becoming gradually more urban issue, especially in the developing world. Urban areas are the main generators of economic prosperity, and thus are best positioned to contribute toward the elimination of poverty. Urbanization is an incentive to development and wealth creation, meaning that cities are places of innovation and attractions of industrious and agile individuals(Serageldin, 1996). However, the potentials of urbanization especially in the developing countries have been hampered by its overwhelming including congestion, poverty, negative effects environmental decay, pollution, unemployment and incidence of informal settlements formation as a result of inability of government to adequately meet the housing and infrastructure needs of the urban poor. Urban poverty is characterized by; inadequate income and inadequate or unstable economic assets, inadequate social capital, lack of services and infrastructure and inadequate housing.

It is pertinent to note that millions of people still live in indecent housing in informal urban settlements lacking basic services such as; clean water, sanitation, basic roadways or footpaths, and drainage. This is a common phenomenon in Lagos urban centers. The impacts of service failures and indecent housing on health, livability, prosperity and sustainability of human settlement cannot be over emphasized. Housing in its present day definition is more than just shelter as it include the environment and all necessary infrastructures that make life comfortable. Housing is a key determinant of quality of life that can be measured at individual, household, and community levels 1998). It has economic, social, and (Agbola, psychological and physical significance which support community functioning. The need for adequate and decent housing currently forms the central focus and an integral component in National strategies for growth and poverty reduction However, evaluating the conditions reauire appropriate methodology (Francescato, Weidemann, & Anderson, 1989). Decent and affordable housing is one of the basic needs of individuals, the family and the community at large and being a pre-requisite to the survival of man it has significant impact on man's health, livability, prosperity, efficient, social behaviour, satisfaction and general welfare of the community at large.

However, studies show that housing problem in developing countries' cities as exemplified by Buenos Aires (Argentina) Lagos (Nigeria) and Allahabad (India) is not only limited to quantities but also qualities of the available housing units and the environment (Cairncross, Hardoy, & Satterthwaite, 1990). The problem is more pronounced in urban informal settlements where overcrowding, congestion and inadequate facilities have become order of the day. These problems are more compounded by lack of legal title (secured tenure) of the residents. It has been argued at different fora that security of tenure is one of the most important catalysts in stabilizing communities, improving shelter conditions and provision of decent and adequate housing for the urban poor who are mostly accommodated in informal settlements that are also characterized by poor environmental conditions (UN-HABITAT, 2008).

The environmental quality of urban areas has tremendous impact on the health status of all urban residents. While the entire urban population suffers from poor environmental quality, the urban poor tend to be the most vulnerable as they are often living in marginalized parts of the city (UN-HABITAT, 2006). Their situation is further amplified because they lack sufficient resources to invest in infrastructure improvements. The negative consequences of poor environmental quality impact every aspect of their lives as well as the livability and health of the community at large. Healthy cities require safe, easily accessible, and affordable water; sanitation; safe home and work environments; clean air; and reduced exposure to disease pathogens (Ashton, 1992). Poor housing conditions, exposure to excessive heat or cold, diseases, air, soil and water pollution along with industrial and commercial occupational risks, which are inherent features of informal urban settlements and their dwellers, exacerbating the high environmental health risks for the urban poor. Lack of safety nets and social support systems, such as health insurance, as well as lack of property rights and tenure, further overwhelm the urban poor.

STUDY AREA AND METHODOLOGY

Study Area

Various expressions have described slum areas as congested district, characterized by deteriorating, unsanitary housing environments and noticeably poverty area. Hence, the 3 selected areas chosen for this study in Lagos Metropolis include Amukoko, Iwaya and Ijeshatedo (see fig. 1 and fig. 2).

Amukoko slum: Amukoko is located in Ajeromilfelodun local government area of Lagos state and has a geographical coordinates of latitude 7.2166667 and longitude 4.2500000. It is one of the five low income communities that make up the Local Government Area of Lagos State, Nigeria. It has a total population of approximate 120,000 within a land area of about 41 hectares and a population of about 50,000 people. It has a socio-cultural integration of Yoruba, Ibo, Ijaw, Hausa and some minority groups. The major occupation for both men and women is trading while few people are involved in white collar jobs. The study reveals that the community is dominated by male headed households, with female headed households constituting only 22 percent of the population.

Ijeshatedo/ Itire Slum: Ijeshatedo is located in Surulere local government area of Lagos state. Ijeshatedo is bounded by Asimowu canal and Ijesha road by the north, Jubril Martins road at the east and Apapa Oshodi express way to the west.

Iwaya slum: Iwaya is located in Lagos mainland local government area of Lagos state. It is a place with small population and has nearby towns such as Onike, Tatala, Onitiri and Ebute- metta. It has geographical coordinate of latitude 6°30' 15.0006" and Longitude 3°23'30.9984".



Fig. 1: Metropolitan Map of Lagos State Showing the Local Government Areas of Study.



Figure 2: Metropolitan Map of Lagos State Showing Spatial location of the Study area Source: Authors Digitized Map (2015)

Methodology

A variety of data types were used for this study. These were obtained from the primary and secondary sources. The secondary sources include; published materials from journals, textbooks, government publications as well as - spatial and attributes data. Primary data was obtained through personal questionnaire observation and administration. Questionnaire was designed and administered to elucidate information on socio-economic characteristics, building conditions, infrastructural facilities and environmental condition of the study area. Direct observation was also used to validate claims and responses on physical, environmental and housing conditions of the study area.

Adopting a confidence level of 93%, then, Z = 1.96 (see table of confidence coefficients for confidence levels in Spiegel, 1961). The estimated proportion of success (of accepting the various null hypotheses) = 50%. For a 93% confidence level (which means that there is only a 7% chance of one's sample results differing from the true population average), a good estimate of the margin of error (or confidence interval) is given by $1/\sqrt{N}$, where *N* is the number of participants or sample size (Niles, 2006), d is thus 0.07. Therefore the total number of households sampled in all the 3 slum areas is 201. 39 households were interviewed in Ijeshatedo, 47 households in Iwaya and 115 households in Amukoko.

This study adopts at multi-stage sampling. Firstly, the map of Lagos State was used to delineate the geographical boundary of the selected slum area, Second stage involved the use of street map as a guide in selecting streets in Amukoko, Iwaya and Ijeshatedo/Itire respectively and at the

final stage, one household per sampled building was randomly selected and interviewed until the assigned questionnaire in the street were completed

Descriptive statistics was used for data analysis. The descriptive analysis entailed the use of charts, frequency tables in order to get a general

understanding socioeconomic characteristics of the respondents, housing and environmental conditions in the slum areas.

RESULTS AND DISCUSSIONS

The study results are discussed in this section. It consists of the socio-economic, housing infrastructure and environmental situations as discovered during the study. Inferences are drawn accordingly.

Socio - Economic Characteristics of the **Residents**

The study reveals that a larger proportions of the respondents are male with a figure of (57.4%) and (64.3%) in Iwaya and Amukoko respectively, most of whom are of middle age of 21 - 40 years old and were married. Majority of the respondents are educated having at least basic primary education apart from 1 respondent at Iwaya who indicates that she had no formal education. It can therefore, be concluded that it will be an advantage in case of any attempt at improving the environmental conditions of this settlement, since it may not be difficult to communicate with them at the same time get practical input from them.

selected slum area are employed in informal sector; 34.8% are traders, 17% are artisan, 10.9% are civil servants, while 20.4% are students, 11.9% are apprentice, 0.9% is retired and 4.1% fall in unemployed category. This could be attributed to the fact that the area is dominated by poor immigrants, characterized by the informal activities that are uniquely associated with the low income groups. Majorities of the residents 38.4% in lieshatedo. 40.4% in Iwava and 35% at Amukoko earns between N19,000 - N38,000 in a month. This suggests that majority of the resident are poor, earning between 100-200 USD monthly reflecting a low standard of living as many are unable to meet their basic needs which make life more unbearable for them. Average number of household per building in the all the selected slum is between 10 - 15, while the average number of people per household in ljeshatedo and Amukoko is between 5 - 10 and 10 - 20 in Iwaya. Further investigation revealed that the average room per building is 8 and average number of people per room is 5. This suggests that the occupancy ratio is on the high side. The implication of this is reflected on the existing infrastructural facilities and daily life of the residents which is full of unpleasant and difficult situations. Study also reveals that majority of the residents of (53.8%) and (53%) have lived between 20 - 30 years in lieshatedo and Amukoko respectively while in Iwaya most of the respondents have lived for less than 5 years.

Gender		Total		
	ljeshatedo	Iwaya	Amukoko	_
Male	19 (48.7%)	27 (57.4%)	74 (64.3%)	120 (59.7%)
Female	20 (51.3%)	20 (42.6%)	41 (35.7%)	81 (40.3%)
Total	39 (100%)	47 (100)	115 (100%)	201 (100%)

Table 1: Respondents Gender

Table 2: Age group of the Res	spondents

Age Group		Slum Area		Total			
	ljeshatedo	Iwaya	Amukoko				
Less than 21 yrs	3 (7.7%)	10 (21.3%)	8 (7.0%)	21 (10.4%)			
21 – 40 yrs	28 (71.8%)	24 (51.1%)	74 (64.3%)	126 (62.7%)			
41 – 60 yrs	8 (20.5%)	13 (27.7%)	33 (28.7%)	54 (26.9%)			
Total	39 (100%)	47 (100%)	115 (100 %)	201 (100%)			
	Source: Field Survey 2015						

Source: Field Survey, 2015

Typical of any informal or squatter settlement, the study reveals that majority of the respondents in all the

•••

	Slum Area		
ljeshatedo	Iwaya	Amukoko	
4 (10.3%)	4 (8.5%)	9 (7.8%)	17 (8.5%)
12 (30.8%)	15 (31.9%)	34 (29.6%)	61 (30.3%)
9 (23.1%)	22 (46.8%)	32 (27.8%)	63 (31.3%)
11 (28.2%)	4 (8.5)	40 (34.7%)	55 (27.4%)
3 (7.7%)	1 (2.1%)	-	4 (2.0%)
	1 (2.1%)	-	1 (0.5%)
39 (100%)	47 (100%)	115 (100 %)	201 (100%)
-	4 (10.3%) 12 (30.8%) 9 (23.1%) 11 (28.2%) 3 (7.7%)	ljeshatedolwaya4 (10.3%)4 (8.5%)12 (30.8%)15 (31.9%)9 (23.1%)22 (46.8%)11 (28.2%)4 (8.5)3 (7.7%)1 (2.1%)1 (2.1%)	ljeshatedolwayaAmukoko4 (10.3%)4 (8.5%)9 (7.8%)12 (30.8%)15 (31.9%)34 (29.6%)9 (23.1%)22 (46.8%)32 (27.8%)11 (28.2%)4 (8.5)40 (34.7%)3 (7.7%)1 (2.1%)-1 (2.1%)-

Table 3: Educational Attainment of the Respondents

Table 4: Occupation of the Respondents								
Occupation		Total						
	ljeshatedo	Iwaya	Amukoko					
Student	11 (28.2%)	12 (25.5%)	18 (15.7%)	41 (20.4%)				
Apprentice	5 (12.8%)	6 (12.8%)	13 (11.3%)	24 (11.9%)				
Artisans	5 (12.8%)	6 (12.8%)	23 (20%)	34 (17.0%)				
Trader	11 (28.2%)	17 (36.2%)	42 (36.5%)	70 (34.8%)				
Civil Servant	6 (15.4%)	2 (4.3%)	14 (12.2%)	22 (10.9%)				
Retired	•	•	2 (1.7%)	2 (0.9%)				
Unemployed	1 (2.6%)	4 (8.5%)	3 (2.6%)	8 (4.1%)				
Total	39 (100%)	47 (100%)	115 (100 %)	201 (100%)				
	Source: Field Survey, 2015							

Table 5: Income of the Respondents						
Income/month		Total				
	ljeshatedo	Iwaya	Amukoko			
Less than N19,000	•	1 (2.1%)	2 (1.7%)	3 (2.4%)		
N19,000 – N38,000	14 (38.4%)	19(40.4%)	40 (35%)	73 (57.9%)		
N38,001 – N58,000	2 (5.1%)	2 (4.3%)	25 (22%)	29 (23%)		
N58,001 – N78,000	6 (15.4%)	2 (4.3%)	12 (10.4%)	20 (15.9%)		
N78,001 – N118,000	•	•	•	-		
Above N118,000	•	1 (2.1%)	•	1 (0.8%)		
Total	22 (%)	25 (100%)	79 (100 %)	126 (100%)		
Source: Field Survey, 2015						

Table 6: Marital Status of the Respondents

Marital		Slum Area				
Status	Ijeshatedo	Iwaya	Amukoko			
Single	12 ((30.8%)	24 (51.1%)	44 (38.3%)	80 (39.8%)		
Married	23 (59.8%)	18(38.3%)	60 (52.2%)	101 (50.2%)		
Divorced	2 (5.1%)	3 (6.4%)	8 (7.0%)	13 (6.5%)		
Widowed	2 (5.1%)	2 (4.3.0%)	3 (2.6%)	7 (3.5%)		
Total	39 (100%)	47 (100%)	115 (100 %)	201 (100%)		
	Sou	unage Field Summer	2015			

Source: Field Survey, 2015

Household Size		Slu	m Area	Total		
	ljeshatedo	Iwaya	Amukoko	-		
Less than 5	-	-	4 (3.5%)	4 (1.9%)		
5 – 10	25 ((64.1%)	20 (42.6%)	63 (54.8%)	108 (53.7%)		
10 – 20	14 (35.9%)	27 (57.4%)	48 (41.7%)	99 (45.1%)		
Total	39 (100%)	47 (100%)	115 (100 %)	201 (100%)		
	Source: Field Survey, 2015					

Table 7: Household Size of the Respondents

Table 8 Tenancy duration of the Respondents

Tenancy duration		Slum Area		Total	
	ljeshatedo	Iwaya	Amukoko		
Less than 5yrs	-	-	2(1.7%)	2 (0.9%)	
5 – 10	-	27 (57.4%)	-	27 (13.4%)	
11 – 19yrs	16 (41%)	18 (38.3%)	50 (43.5%)	84 (41.8%)	
20 – 30yrs	21 (53.8)	2 (4.3%)	61 (53%)	84 (41.8%)	
Above 30yrs	2 (5.1%)	•	2 (1.7%)	4 (1.9%)	
Total	39 (100%)	47 (100%)	115 (100 %)	201 (100%)	

Source: Field Survey, 2015

Analysis of Housing Condition

Majority of the buildings 172 (85.5%)in the selected slum area (lwaya, ljeshatedo and Amukoko) are bungalow, 25 (12.4%) were flat while only 4 (2.1%) of the buildings in the entire selected slum areas were duplex. . It is not surprising that most of the building are Bungalow building majorly Brazilian type of buildings or rooming apartment because it is believed to be the main design and characteristics of low income group as well as poor communities in Nigeria cities.

Over half that is, 107 (53.2%) of the sampled buildings in the study area are predominantly for residential use. However, a significant proportion representing 57 (28.4%) of the buildings are for commercial use, 25 (12.4%) accounted for mixed use, 9 (4.5%) buildings are been used for institutional/public use while other types of building uses account for 3 (1,5%). It was observation revealed that the activities within the mixed use include residential, shops, schools, place of worship. This means that many of the residents engage in informal activities such as petty trading within their homes

Most of the buildings sampled in the selected slum area (Iwaya, Ijeshatedo and Amukoko) 98 (48.8%) have been built over 40 years ago, 65 (32.3%) of the buildings in all the study area were built between 30 - 39 years, 23 (11.4%) represents buildings built between 20 - 29 years ago while buildings below 20 years accounted for only 15 (7.5%). Further

investigation revealed that the few building that are less than 20 years were rebuilt from the old decaying building. This suggests that the study areas are relatively old settlement and had been built up long ago. Hence, a large number of the housing stocks in the areas of study have relatively low habitability, which has direct effects on the state of health, socioeconomic well-being and emotional stability of the residents.

Building materials, conditions of the roofs, walls, floors. Structural integrity and sanitary facilities were used to assess building condition. The survey revealed that larger percentage of the buildings in the study area (lwaya, ljeshatedo and Amukoko) is extremely poor. 68% of the buildings are poor, 21.5% are fair while10.5% of the buildings are good . Further investigation revealed that poverty (lack of money) and long time neglect by government as claimed by the residents are major factors responsible for the present poor conditions of the buildings as well as overall physical and environmental condition of the communities.

The study revealed that 41..3% of the residents shared toilet facilities, 46.8% have access to private toilet and11.9% of the residents do not even have access to toilet facilities. Field investigation revealed that significant proportion of these toilets are located outside or away from the buildings and their conditions are generally poor. Sharing of toilet facilities by too many people has adverse environmental and health implications.

Majority of the residents (44.3%) shared bathroom similar situation is applicable to kitchen, as high as

over42.3% shared kitchen. Also, some of the kitchen, bathroom and toilet facilities are detached away from the main buildings that subjects occupants to inconvenient at a particular time of the day especially at night. Field observation revealed that the conditions are very poor.

Assessment of Infrastructure and Environmental condition

Assessment of the environmental condition of the selected slum area (lwaya, ljeshatedo and Amukoko) revealed that the daily life pattern of the residents is characterized by unpleasant and difficult situation as majority adjudged that the conditions of the available infrastructural facilities are poor while some basic ones such as play ground, open space, recreational area, fire station, among others are not even available. These claims were also verified by personal observation and were found to be true.

The main source of water supply in the study area is largely through private sector borehole and only few people have access to enjoy tap water, which is not regular. With the level of inadequate provision and supply of water by government, most of the respondents 63 (31.3%) claimed that water supply in their respective areas is fair, 41 (20.4%) indicate that water supply is poor, 38 (18.9%) claimed that water supply is good while the remaining 13 (6.5%) respondents have access to good water supply. From this situation, the existing water supply does not guarantee quality water supply in the area, hence the people are at greater risk of contacting acute water borne diseases. Similarly, the main source of electricity supply to the area is through the Power Holding Company of Nigeria (PHCN), in which majority 70 (34.8%) indicate that the service of PHCN is fair the study area, 38 (18.9%) claimed that the power supply from PHCN is poor,45 (22.5%) assert that electricity supply from PHCN is very poor, 33 (16.4%) assert that electricity supply from PHCN is good while 15 (7.5%) claimed that electricity supply from PHCN is very good. This implication of this is that almost all the respondents has generating set as an alternative means of power supply which usually generate noise and air pollution in all the selected slum area (Amukoko, Iwaya and Ijeshatedo). Regarding the drainage condition, most of the respondents in all the 3 slum areas claimed that drainage condition in their respective area is poor while only few indicate that they have good drainage facility. The implication of this is occasional flooding in the study area anytime it rains.

Access roads are another important facility in the area that needs serious attention. From the survey, only 8 (4%) of the sampled buildings is accessible by good and tarred road, 66 (32.8%) sampled buildings are accessible through access roads with fair condition. Access roads to 43 (21.4%) of the buildings sampled in all the study areas are poor while to 26 (12.9%) are very poor (See table 9).

Facilities	Very Good	Good	Fair	Poor	Very poor
Water	13 (6.5%)	38 (18.9%)	63 (31.3%)	46 (22.9%)	41 (20.4%)
Electricity Supply	15 (7.5%)	33 (16.4%)	70 (34.8%)	38 (18.9%)	45 (22.5%)
Solid Waste Disposal	12(6%)	48 (23.9%)	73 (36.3%)	46 (22.9%)	22 (10.9%)
Drainage	11 (5.5%)	48 (23.9%)	82 (40.8%)	38 (18.9%)	22 (10.9%)
Road	8 (4%)	58 (28.9%)	66 (32.8%)	43 (21.4%)	26 (12.9%)
Security	6 (3%)	54 (26.9%)	69 (34.3%)	37 (18.4%)	35 (17.4%)

Table 9: Infrastructure Condition and Environmental Quality

Source: Field Survey, 2015

Also the state of waste disposal in the study area is generally absurd in spite of government efforts to curb indiscriminate disposal. 22 (10.9%) indicate that solid waste management is very poor in all the selected slum area, majority 73 (36.3%) also confirmed that waste management is fair, 48 (23.9%) indicate that waste management is fair in stud areas is good while only 12 (5.5%) of the respondents in all the selected slum areas claimed that Solid waste disposal is good.

RECOMMENDATIONS

With reference to the issues discussed under research findings and results as well as the issues arising from reviewed literature, recommendations in this study are structured into broad areas on: how to improve the level of infrastructural facilities, housing conditions and general environmental conditions of the study area so as to achieve a Healthy, livable, prosperous and sustainable human settlement. The first recommendation is the need for upgrading programme through rehabilitation/renovation approach as well as provision of urban basic services. This involves rejuvenation of affected parts of the area by retaining some structures that are retainable; rehabilitate old buildings and structures. There is need to upgrade the roads that are not tarred and introduction of more roads with a view to open up the blighted areas. It also involves improving the existing infrastructures as well as providing new ones. These are improving the structural quality and aesthetic of the areas.

Furthermore, slum dwellers can be encouraged to improve housing and general environmental conditions of their settlement through land regularization that guaranties security of tenure and provision of array of basic facilities. Improvement in the living environment of the poor will help them to be more productive and increase their income over time while security of housing and land tenure is expected to help the poor overcome the problem of social exclusion from urban life.

The study discovered that the amount of infrastructural facilities available in the study area (Iwaya, Amukoko and Ijeshatedo) is grosslyinadequate while some are not even available. Availability and adequacy of infrastructural facilities is a major factor that determines the environmental condition and livability of any settlement. Therefore, effortsshould be directed towards upgrading the existing facilities while those that are not available should be provided.

The social economic characteristic of the residents suggests that the majority of the inhabitants are incapacitated as they are mostly under-employed. They make little money which could not even be enough to meet basic needs of food, cloth and shelter talkless of having some to invest in the improvement of their housing conditions and general environmental conditions of the community. Therefore, deliberate effort should be made to improve the livelihood of this category of people. Their means of livelihood which is centered on informal sector should be recognized and be supported.

CONCLUSION

Iwaya, Ijeshatedo and Amukoko are prominent informal settlement in Lagos, demand for adequate housing infrastructural facilities continues to be on the increase despite the present situation of dwindling economy and inadequate infrastructural facilities or perhaps unavailability. The study has analyzed the interplay between housing and environmental conditions of slum settlements. Socio-economic characteristics and environmental conditions of Iwaya, Ijeshatedo and Amukoko slums in Lagos were examined. It has been established that the residents are mostly poor, lived in poor housing that lack basic amenities and infrastructural facilities. It has also been observed that majority of them do not have adequate source of income which they could probably use to liberate themselves from bondage of poverty. Without equivocal, poverty, lack of adequate infrastructure facilities and decent housing are some of the major factors contributing to the inadequate housing and poor environmental condition

REFERENCES

[1] Adedeji, Y. M. D. (2004). Sustainable Housing for Low-Income Industrial Workers in Ikeja – Ilupeju Estate: Materials Initiative Options. Paper presented at the School of Environmental Technology, Federal University of Technology, Akure.

[2] Agbola, T. (1998). The Housing of Nigerians: A review of Policy Development and Implementation. Ibadan: Policy Centre.

[3] Ashton, J. (1992). *Healthy cities*: Open University Press Philadelphia.

[4] Cairncross, S., Hardoy, J. E., & Satterthwaite, D. (1990). *Poor die young: housing and health in Third World cities*: Earthscan.

[5] Francescato, G., Weidemann, S., & Anderson, J. R. (1989). Evaluating the built environment from the users' point of view: an attitudinal model of residential satisfaction *Building evaluation* (pp. 181-198): Springer.

[6] Gilbertson, J., Green, G., Ormandy, D., & Thomson, H. (2008). *Good housing and good health: A review and recommendations for housing and health practitioners*. UK: Retrieved from <u>http://www.health_housing_20060816144328.pdf</u>.

[7] Habib, R. R., Mahfoud, Z., Fawaz, M., Basma, S. H., & Yeretzian, J. S. (2008). Housing Quality and ill health in a disadvantaged urban Community. *Public Health*(123), 174-181.

[8] Jiboye, A. D. (2010). The Significance of Households' Characteristics on Housing Quality in Nigeria. *Geography and Planning Sciences.*,2(2),1-10.

[9] Jiboye, D. A. (2010). Evaluating the pattern of residential quality in Nigeria: the case of Osogbo Township. *Facta universitatis-series: Architecture and Civil Engineering, 8*(3), 307-316.

[10] Mabogunje, A. L. (2005). *Global urban poverty research agenda: the African case.* Paper presented at the a seminar on Global Urban Poverty: Setting the Research Agenda, Washington.

[11] Omole, K. F. (2010). An Assessment of Housing Condition and Socio-Economic Life Styles of Slum Dwellers in Akure, Nigeria. *Contemporary Management Research, 6*(4).

[12] Serageldin, I. (1996). *Directions in Development: Livable Cities for the 21st Century.* Paper presented at the The World Bank, Washington, D.C.

[13] UN-HABITAT. (2006). Shelter for All: The Potential of Housing Policy in the Implementation of the Habitat Agenda.

[14] UN-HABITAT. (2008). Secure Land Rights for *All*. Nairobi, Kenya: United Nations Human Settlements Programme (UN-HABITAT).

[15] UN, D. o. E. (2004). *World urbanization prospects: the 2003 revision*: United Nations Publications.

[16] Weidemann, S., & Anderson, J. R. (1985). A conceptual framework for residential satisfaction *Home environments* (pp. 153-182): Springer.

[17] Weiss, M. A. (2001). *Productive Cities and Metropolitan Economic Strategy*. Paper presented at the United Nations International Forum on Urban Poverty (IFUP), Marrakech, Morocco.