

Abstract

One major challenge of urbanization is that of providing tolerable urban environment for the urban dwellers. In Nigeria, rapid urbanization has been characterized with the proliferation of slums which constitute nuisance to the urban environment. This paper therefore, analyses the housing characteristics and environmental conditions of slum areas of Port Harcourt city. Analysis of the data generated reveals very poor housing and environmental conditions in these slum areas. It also discovered housing shortage and poverty as major causes of proliferation, of slums. The paper therefore, recommends the integration of slums into the urban planning frame work and the upgrading of the present housing structure to well structured low-cost housing unit affordable to these occupants.

Introduction

Nigeria's population is presently estimated to be about 120 million and the urban population has been rapidly increasing also. In fact, there has been a steady growth in urbanization in Nigeria since the 1920s. As at 1921 when Nigeria's population was estimated at 1.631 million, at least 1.345 million Nigerians lived in 29 cities; at about 1955, 11% Nigerians lived in cities and by 1990s, the percentage rose to 19.1%; in 1991 the total urban population was put at 30.5% as at 2000AD, the percentage rose to 42.3% and it is estimated that with the 11% annual urban population growth rate, the urban population would reach 60% by the year 2020, (Mabogunje, 1968, Ayeni, 1978 and Sule 2003).

Sada and Oguntoyinbo (1981), affirmed that the country has large urban centres most of which are either poorly planned or not planned at all. There is increasing urban population without corresponding increase in urban social facilities such as roads electricity, water and adequate housing stock. This pattern of urbanization in the country has put under stress and overload, the social and economic structures of the urban areas. These overload, are manifested in the large scale unemployment, population displacement, inadequate water and power supply and most nagging, inadequate housing stock and the proliferation of slums. The menace of solid waste, industrial and atmospheric pollution are also associated problems of an unplanned urbanization in the country. There is no evidence that this present trend of urbanization in Nigeria could change in the foreseeable future due to the erroneous belief by Nigeria's that the only hope of raising their living standard is to live in an urban environment.

Against this backdrop, a major challenge of urbanization in Nigeria in the past decades has been to provide a healthy urban environment to the rapidly growing urban population. Also, there would be the need to make up for the past, the present inadequacies of the urban environment. All these challenges arise because of the close nexus between environment and development. The quality of the environment indicates to a large extent the level of development; and the level of development affects the quality of the environment. The trade off between environment and development need not be undermined.

This paper therefore, is necessitated by the increasing urbanization coupled with the implication for the environment in which urban dwellers live, as well as the growth concern for the need to ensure a healthy and tolerable environment. It considers the perspectives on urban slums and presents a general discussion of the data obtained from the six selected slum areas of Port Harcourt. It finally concludes with policy implication and recommendations on the existing conditions of these slum areas of Port Harcourt.

Conceptual Clarifications

Urbanization

Cities of the world have grown tremendously due to large-scale migration of rural people from the countryside into the cities. This large-scale migration is accounted for by the industrial revolution, which led to increase in demand for labour in the cities. In other words, industrialization

and migration are major factors of urban population growth. Mabogunje (1968), described the cause of the phenomenal growth as push factors in the rural areas and pull factors in the urban centers. For instance, in 1800, 2% of the world's population lived in cities and by 1950, 32% of the world became urbanized. This figure rose to 48% in 1990 and presently about 50% of the world's population of over 7 billion live in urban areas and it is projected that the percentage would rise to 60% in the year 2030 (Berry 1977 and Nigeria, 2003).

Urbanization, is the process of city growth and expansion. Mabogunje (1968), defined urbanization as a process whereby human beings congregate in relatively large numbers at a particular spot in space. Sule (2003), also agrees that urbanization is the agglomeration of people at a definite point in space; and this space is referred to as an urban settlement especially when the size of the population is large. However, the agglomeration of people at some points in space may not necessarily result in the formation of urban settlement. Against this backdrop, demographic or numerical parameter and functions play vital role in the definition of an urban settlement. Demographic definition of urban settlement varies from country to country. In Denmark, Sweden and Finland, settlement with 200 inhabitants and above are designated urban. Whereas, in the United States of America, 2,500 population makes an area urban; in Greece, 10,000 inhabitants is used as parameter; while in Nigeria 20,000 population is the base line (Mmom, 2001 and Sule 2003). However, demographic parameter may be deceptive as a settlement may have large population without corresponding social infrastructure and may not functionally qualify to be termed urban. To this end, Dickinson (1972) has defined an urban area as any settlement where more than 50% of its population engage in non-agricultural occupation. It thus, implies that what makes an urban area is not only its numerical strength, but also the functions it perform. These functions are measurable in terms of the volume of activities and diversity of occupation. Majority of the population must be engaged in non-primary activities or occupation for such a settlement to be termed urban.

The history of Nigeria's urbanization could be dated as far back as the medieval times although extensive urban development is a feature of a recent past. In 1952, there were about 329 urban centers with over 40% of them found in the southwestern states due to their administrative and commercial roles. However, after independence in 1960, the trend changed as the number of cities with population of 20,000 or more increased from 56 in 1952 to over 180 in 1963. Similarly, the urban population from 11% in the 1950s and 60s to over 30.5% in 1991. And with the present urban growth rate of 11% per annum, it is projected that by the year 2020, over 50% of the population would be urbanized.

However, a major characteristic of urbanization in Nigeria is its poor planning. Sada and Ogintoyinbo (1981), affirm that factories, markets shops and residential houses exist side by side and there is often no zoning scheme. The pattern of urbanization in Nigeria is described as a unique one in tropical Africa as there is increase in population without a corresponding increase in urban social facilities and infrastructure.

Housing

Housing is another concept which has evoked interpretation by different people depending on their background. To many people, housing means shelter or cluster of shelters for human habitation especially in large numbers (Amadi, 2001). The world health organization (WHO) expert committee on public aspect of housing defines housing as the physical structure that man uses for shelter and the environment of such structures including all the necessary facilities, services, equipment, etc needed for the physical and mental health and social well-being of the residents. In effect, housing is not limited to the provision of shelter, it goes beyond that to other ancillary components or housing facilities as toilet, waste disposal, drainage, ventilation, open space/recreation etc. The experience of the countries of the third world is that shelters are provided without due regards to these components. The resultant effect of the neglect of this important component in shelter planning in many third world countries is the diminishing livability of each house and the rate at which they have become slums or blight to the urban environment (Sule, 2001).

From the foregoing discourse, it becomes imperative to note here that the major proposition of thesis of this section is that the quantity and quality of these ancillary facilities or components are as important as the provision of shelter. Provision of adequate housing is regarded as one of the greatest urban problems and the greatest single cause of environmental degradation.

Slum

Housing is a major problem facing most urban centres of the developing countries including Nigeria. Development of slums or substandard dwelling is a direct consequence of over population and shortage of shelter. These substandard/squatter settlements are characterized by over-crowding and inhabited by low-income immigrants into the city. Imasuen (1991), described slum as unfit dwelling places with filthy and degrading environment or neighbourhood. Slum therefore, is perceived as an aggregate condition of a neighbourhood which is adjudged obscene and segregated from other decent neighbourhoods within the same geographical area. Amadi (2001), noted that development of urban slums results from the inability of the housing authorities to cope with the problem of rapid urbanization. The problem is not peculiar to Nigeria. Researches worldwide have shown that 35% of people in Manila, 25% in Darkar, 43% in Calcutta live in slums and squatter settlements.

The definition of slum has posed as serious problem as various definitions reflect the background and orientation of the various disciplines. However, despite this lack of consensus on the definition of slum, it could be adduced in the Nigerian context that slums are substandard settlements made up of temporary dwellings largely inhabited by poor migrants into the city. The occupation of these areas are illegal, as such building have no approved building plans. The concept of substandard building raises a pertinent question of what constitute a standard housing. The concept "standard housing" is a relative term as the country has not yet determined upon the minimum socially accepted standard for housing. However, in spite of dearth of valid quantitative measurement of bad housing in the country, in the context of this paper substandard housing refers to that which lacks basic sanitary facilities as proper ventilation, running, water, adequate toilet and bathing facilities and strong/durable building materials, etc.

There are two principal views of perspective to slums; the functionalist and dysfunctionalist. The dysfunctionalist views slums as social misfit in the urban system. They are seen as breeding ground for vagabonds, political radicalism and violence and other antisocial values. They therefore see the clearance or redevelopment as the solution to urban slums. On the other hand, the functionalist see slums as assets in the sense that they perform transit-oriented functions. Also, they contribute to capital formation by demanding import from the urban centre; and supply important quantities of semi-skilled and unskilled labour to the urban centre. Since outright eradication of slums is almost impossible due to the mounting and ever increasing problem of housing shortage, slums ought to be preserved and improved rather than eradicated.

Methodology

There are several slum areas of Port Harcourt, but data were collected on only slum five areas. The choice of these five for the study was based on personal judgment of the researcher. Although without a rigorous definition of the slum areas, the researcher carried out a reconnaissance survey of the slum areas in Port Harcourt and identified five slums the worst residential areas with respect to their physical characteristic. The researcher used both questionnaires and personal observation to elicit the relevant data relating to socioeconomic conditions of the households as well as the characteristics of the dwelling in which the people live. However, apart from the data on average household income and occupancy ratio, the analysis mainly, focused on the physical conditions as well as the general environmental conditions of these dwelling. A total of five hundred households were studied and ; faiyas as below:

Table 1; Occupancy Ratio (%) of Dwellings

No of persons per	Abonnem a Wharf	Agip Water Front	Timber Waterside	Ibadan Watersid	Afikpo Watersid	Total %
1 -2	11.0%	9.4	12.9	21.9	e	24%
3- 5	57.4	61.1	58.4	48.7	46.6	45%
5 and above	31.6	29.5	28.7	24.1	40.6	30.9

Source: Field Survey, 2002

Analysis of data on the occupancy ratio of the dwelling as in table 1 above reveal that an average of 45% of the dwellings have occupancy ratio of between 3-5 inhabitants per room; 30.9% of the dwellings have occupancy ratio five (5) or more persons and above; while only 24% of the sample households have occupancy ratio of one or two persons.

Table 2: Percentage of Average Monthly Income of Heads of Households

Income level	Abonnema Wharf	Agip Water Front	Timber Waterside	Okrike Waterside	Afikpo Waterside	Total %
Below 5,000	19.4	24.2	18.9	12.4	23.5	22.5
5,000-15,000	46.4	44.7	13.9	39.2	45.5	43
15,000-35,000	20.6	20.1	42.1	36.4	12.0	22
25,000 & above	13.6	12.0	41.1	12.0	13.6	13.5

Source: Researchers field, 2002

Analysis of average monthly income of heads of households in table 2 above shows that about 22% of the household heads earn below N5,000.00 monthly, about 48% earn between N5,000 -15,000, 22% earn between N15,000 - 35,000 and 13% above N35,000.00 monthly.

Table Land use Structure in the Selected Slum Areas (%)

	Land use type	Abonnema Wharf	Agip Water Front	Timber Waterside	Ibadan Waterside	Afikpo Waterside	Total %
1.	Residential	80.5	73.2	80.4	86.8	87.3	82%
2.	Commercial	12.5	16.8	14.6	12.2	10.7	13%
3.	Recreational/open space	0.0	4.5	0.0	0.0	0.0	8%
4.	Industrial	5.0	2.5	5.0	0.0	0.0	3%
5.	Others	0.0	3.0	0.0	0.0	2.0	1%

Source: Field survey, 2002

Analysis of land use structure in table three (3) above reveals 82% are for residential use, 13% for commercial 1% for recreation 3% for industrial and 100% for other land uses.

Table 4 Construction Materials of Building (%)

	Construction materials	Abonnema Wharf	Agip Water Front	Timber Waterside	Ibadan Waterside	Afikpo Waterside
1.	Sandcrete (block wall)	33.4	21.4	18.2	12.0	20.3
2.	Cement-rendered wall	21.3	33.3	29.7	30.4	31.3
3.	Mud Walls/TB	13.4	19.4	24.0	20.2	21.5
4.	Plywood/Zinc walls	18.1	12.1	16.4	21.0	14.1
5.	Thatch roofs	10.0	9.0	9.3	14.0	10.0
6.	Others	3.8	4.8	5.4	2.4	3.8

Analysis of construction materials reveals that about 20% of the houses in these slum areas are of block walls; while the rest 80% are either made of mud rendered with cement, plywood and other substandard materials.

Table 5: Ventilation Condition of Dwelling (%)

	Ventilation condition	Abonnema Wharf	Agip Water Front	Timber Waterside	Ibadan Waterside	Afikpo Waterside
1.	Rooms without windows	24.8	21.8	26.1	N. A.	N. A.
2.	Rooms with one window	48	42.8		N. A.	N. A.
3.	Rooms with two or more windows	27.2	25.4	20.4	N. A.	N. A.

In terms of ventilation of buildings, available data shows that about 40% of the buildings are without windows and similar percentage have more than two windows, while about 20% have one window.

Table 6: Housing Facilities distribution in the five Slum areas

	Facilities water	Percentage	N.A
a.	Inside house pipe borne water	7.0%	Means not available
b.	Street borehole	57.6	
c.	Well	24.4	
d.	Itinerant water tanker	10.0	
	Toilet		
a.	Water system	8.2	
b.	Pit latrine	3.4	
c.	No toilet	88.4	
	Kitchen		
a.	Inside house	3.4	
b.	Side house	64.2	
c.	None	32.4	
	Electricity		
a.	In use	57.36	
b.	Not in use	42.64	
	Waste disposal		
a.	Private waste bin	33.04	
b.	Shared waste bin	19.47	
c.	Public dust bin	1.36	
d.	No dust bin	46.13	

Source: Field survey, 2002

Discussion of Findings

Analysis of the occupancy ratio of these slum areas shows that over 55% of the houses have occupancy ratio of between 3-5 persons per room. This occupancy is a high one showing the extent of congestion in the slum areas. Similarity, our analysis of average monthly income of the residents reveals that more than 55% the people earn less than N 15,000 per month. This fact confirms the assertion that the slums are occupied by the low income and less privileged class of the society.

In terms of landuse; the predominant landuse in the slum areas is residential and little commercial activities. We also discovered that the building structures are made up of temporary structures. Most of the walls are mud rendered with cement. The construction materials are prone to fire outbreak. This account for the high incidence of fire inferno in the slum areas. An Aerial view of the slum areas depicts a misfit in the urban environment.

With regard to the ventilation of the houses, it was discovered that due to the clustered nature of the houses they have poor ventilation. Most of the rooms have either one window only or without windows at all. In some of the rooms lanterns are lit all through the day due to the dark nature of the rooms. Fresh air is rare due to congestion.

Moreso, we discovered that the houses had poor hosing facilities. The chief source of water is the private borehole whose water is not properly treated before delivery. Toilet facilities are lacking, most of the houses have no toilets. The people defecate directly in the water from a suspended plat form. Only very few houses have water system toilets. It was also discovered that the residents cook outside as most of them have no in-built kitchen. This exposes the people to risk of fire outbreak. Electricity are illegal in most areas. And the quality and nature of the electrical materials substandard. Waste management is poor as most of the people have no waste bin. Most of the people dispose their wastes directly into the nearby water. On a general note, there is general environmental decay in the slum areas.

Recommendations

On the premise of the researcher (functionalist) perspective to slums, the author sees the slums as assets rather than liabilities. Also, development of slum is concomitant to the process of urban development and outright eradication is almost impossible due to uneven distribution of income.

On the premise of the above, the author proffers a pragmatic strategy to slum redevelopment as follows:

1. The government should first and foremost acknowledge that the existence of slum is part of the process of urbanization as such integrate then in the planning process.
2. Redevelopment of the slum should be a joint venture between the government; residents and private developers rather than out-right demolition. In this strategy, the government should make the residents pay some money to the developers a sign of commitment and to regain ownership after development.
3. The developers to build low cost houses affordable to the low-income residents and the people to complete payment over a reasonably specified period of time.

This strategy if adopted could avert the bitter experience of the Maroko case where the people are deprived of their original right of occupancy. It is my believe that demolition of slums in an areas will definitely lead to its redevelopment in another area. So since outright elimination is not possible; they should be upgraded to enhance the city's aesthetics and enhance environmental quality.

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