Challenges of Slum Upgrading in Port Harcourt, River State, Nigeria

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Abstract

Environmental decay in a city is essentially caused by rapid urbanization and the mismatch in the provision and maintenance of housing and infrastructure. This study examined challenges of slum upgrading in Port Harcourt, Nigeria. The study aims to examine slum areas and their living conditions, and finding out the most critical and problematic zone of the slums. Two sources (primary and secondary) of data were utilized in the study: The study population for this study was the residents of Diobu and Waterside in Port Harcourt, River State. Both descriptive and inferential statistics were used to analyse the data appropriately. Findings established that 11.3% acquired primary education, 29.0% have secondary education, and 14.0% had NCE, 21.0% had both HND and degree and 3.8% had no formal education. Findings showed that 31.7% of the residents were owners of the building while 68.2% were living in rented apartments. Findings revealed that 40.9% of the respondents have bad drainage system which would lead to dirty environment and 6.5% having very good drainage system. The study concluded that majority of building structures in the study area are old that existed for decades without maintenance and the surrounding environment very poor due to neglect.

Keywords: challenges; environment; slum; urban; upgrading

1. Introduction

Slum upgrading is a process of intervention for economic, organizational and environmental improvement to the currently used human settlement undertaken collectively among populists, community groups, governments (national/local) and any other growth partners (Non-governmental, multi-lateral/bilateral organizations). Although the reasons for slum upgrading may vary from place to place, the main push factors have included the demand for affordable term options, environmental health considerations and poverty reduction (Syagga, 2011). UN Habitat (2003a) is mainly interested in the shelter conditions of the most of the urban needy. It is about how the needy struggle to survive within urban areas, mainly through informal shelter and informal income-generation strategies, and about the insufficient of both public and market responses to the situations of the urban poor (UN Habitat, 1996, 2007; World Bank, 1995). But the report is also about hope, about building on the lay down of the urban poor’s survival means and about what needs to be done by both the public and non-governmental bodies, as well as by the international community, if the goal of enough shelter for all is to have any relevance for today’s urban needy. In 2001, 924 million people, or 31.6 per cent of the world’s urban population, lived in slums. The majority of them were in the up-coming regions, accounting for 43 per cent of the urban population, in contrast to 6 per cent in more developed regions. Within the growing regions, sub-Saharan Africa had the largest share of the urban population resident in slums in 2001 (71.9 per cent) and Oceania had the least (24.1 per cent). In between these were South-central Asia (58 per cent), Eastern Asia (36.4 per cent), Western Asia (33.1 per cent), Latin America and the Caribbean (31.9 per cent), Northern Africa (28.2 per cent) and Southeast Asia (28 per cent). Africa

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had a total of 187 million slum inhabitants (about 20 per cent of the world’s total), while Latin America and the Caribbean had 128 million slum inhabitants (about 14 per cent of the world’s total) and Europe and other developed countries had 54 million slum inhabitants (about 6 per cent of the world’s total) (Morka, 2007; Nawagamuwa & Viking, 2003). Efforts to make better the living conditions of slum dwellers (especially within developing countries) have been weak and unintelligible over the last decade or so, having peaked during the 1980s (Agbola & Agunbiade, 2007).

However, resumed concern about poverty has newly led governments to adopt a specific target on slums in the United Nations Millennium Declaration, which aims to significantly make better the lives of not less than 100 million slum dwellers by the year 2020. As this report emphasizes, slums are a outcome of the two main challenges facing human settlements development at the start of the new millennium: rapid urbanization and the urbanization of poverty. Slums areas have the highest concentrations of poor people and the worst building and physical environmental conditions. Another challenge is insufficient land space to provide for all residents within the slum settlements and scarcity of land for re-location where necessary. Land ownership is private in most settlements and lack of planning of informal settlements by the local authorities is a challenge towards improving the settlements. Partnership concepts also have the disadvantage of sourcing several parallel activities that often move off track the implementation schedules. There are also issues with regard to governance and participation of communities in decision making which have various difficulties (Muraguri, 2011). According to SIDA (2006), the slums status quo is described as a product of power politics. This illustrates the difficulty of trying to change the status quo. The slum has been abandoned as illegal habitations and this submerges them to even greater impoverishment due to lack of social services.

General literature review on slums and slums upgrading may not specifically touch on the challenges of slum upgrading programmes or related solutions but it reveals various foundational factors that may influence such challenges (UN Habitat, 2007). It is also important to note that slums upgrading is not an independent process but involves various interrelated factors on slums livelihoods. This justifies the scrutiny of a large variety of literature to address such interrelated factors. In many cases, slums upgrading involves movements of slum dwellers due to the challenge of getting enough land adjacent to upgraded slums. As a result, the interdependence between the city and the slum is broken leading to serious social economic effects. Sjoberg (1955) opined slums as an inseparable part of the urban economy and a product of urban stratification. Similarly, Meier (2000) notes that slums fulfill transport and communication technologies. Similarly, Beall (2002) attributes social disparity to foreign policies which have inspired global investment and destroyed the local economy.

Many slum upgrading programmes are mainly focused on housing improvements at the expense of other slum livelihoods. This is a challenge that requires urgent address to put in place comprehensive slum upgrading interventions (Gulyani & Bassett, 2007; Mabogunje, 1968). Gong & van Soest (2002) observes that apart from house improvement, slum upgrading should also prioritize the socio-economic improvement of the poor. A similar observation has been made by Erdogan et al. (1996) who recommends sustenance of social-cultural aspects as preconditions to slum improvement. On a different perspective, Torstensson (1994) describes the upgrading programme as guided by Western norms. Seeming to offer a solution, (Leckie: 1995) notes that slums upgrading should integrate behavioural aspects of slum dwellers to enhance sustainability. Moser (1996) observes that secure tenure is vital in slum poverty alleviation. A similar observation is made by the Global Campaign for Secure Tenure (GCST) which asserts that security of tenure is foundational in the promotion of human rights, while UN Habitat (1996) recognize home-ownership as a great opportunity towards promotion of identity and freedom. Still on the same perspective, de Soto (1989), notes that bureaucracy is the greatest impediment to acquiring security of tenure.

Slum upgrading also faces the challenge of extensive environmental degradation in the slums. Industrial effluent, uncollected domestic waste and flooding are among dangerous environmental hazards in the slums. Vliet (2002) describes dumping of waste in the slums as an enormous health risk. Slums are also endangered due to the flammable building materials, illegal electricity connections and use of paraffin and charcoal for cooking in overcrowded houses. Ruel describes ill-health derived from unsanitary conditions as a major determinant of poverty in the slums. The income of construction workers and rickshaw drivers in Dhaka decrease during the rainy season due to flooding (Ruel et al., 1999). It is then prevalent that effective upgrading should integrate environmental rehabilitation and sustainability as a core intervention in house improvement.

Also, slums upgrading initiatives are disadvantaged by slum inhabitants’ ignorance, lack of knowledge and skills to adapt with challenges. Capacity building has been hailed by many writers as essential in urban poverty alleviation. Rahman (2002) observes that capacity building should prioritize women who form the bulk of informal economy. He notes that mortgage repayments should be affordable. On the same note, Appadurai (2001) observes the need to promote local initiatives which address the expressed needs of slum dwellers instead of the western models. In sum, effective slum upgrading should ensure that the beneficiaries’ capacities are built to enhance independence, rights awareness and sustainability of local initiatives (Cohen, 1973).

Various scholars have advanced many approaches of social change that deal with social structure hence many approaches to the study of urban housing. Different scholars and governments in addressing the issue of housing have applied several approaches. Urbanization theories among them migration, industrialization and dependency theories are used to give insights on the housing problems. The
A number of development theories tried in Developing countries are influenced by the Developed World to address the urban problem. Strong regulatory interventions (1945-1970), a Basic requirements approach (1970-1980), and Neo-liberalization with it diverge emphasis on markets, privatization, enablement and good governance (1980-2000) were implemented in turn with limited success. New ideas and policies like Sustainable Development are coming up with key focus on people as the starting point (UN Habitat, 2003b). The study focused on the people (slum dwellers) as the prime stakeholders in upgrading thus used the participatory approach. The basis is that in decree to get nearer to lasting development outcome or sustainable projects, many concur that a participatory approach has to be taken (Mikkelsen, 1995). This study also used the stakeholders approach and the logic is that the two approaches engulfed the perceptions, attitudes and worth of all stakeholders and therefore form the essential component of long-term development (Adesanya, 2000; Agbola & Agunbiade, 2007).

In conclusion, the above literature displays various challenges that could obstruct effective slums upgrading. It is then important for all slum improvement laid down to address such challenges towards accessing adequate shelter to the poor. However this is not achievable without a legal framework that guides such a process. Determining whether a slum upgrading initiative has been achieved depends on expectation and what the goals of the initiative are. In some cases, the goal is the provision of urban services. There has been numerous Urbanization theories among them migration, industrialization and dependency theories are used to give insights on the housing problems. The upgrading model (gentrification) in its view restores or smartens houses to make them more attractive for middle class residents (Muthoka, 2005). The study focused on the people (slum inhabitants) as the main stakeholders in upgrading hence used the participatory approach. This study also used the Stakeholders approach and the reason is that the two approaches incorporate the perceptions, attitudes and values of all stakeholders and therefore forge the essential component of durable development. Since the uptake of slum upgrading in waterside and Diobu axis in Port Harcourt has been unsuccessful, the study intends to ascertain which challenges have disrupted the uptake and then recommend adequate policies and interventions towards addressing the identified slum upgrading challenges in the study area. The aim of the study is to examine the challenges of slums upgrading in Port Harcourt, Rivers state with the view to provide guidelines for sustainable implementation of urban renewal programme in the study area.

2. Research Methods

Port Harcourt is the capital and largest city of Rivers State, Nigeria (Figure 1 and Figure 2). It lies through the Bonny River (an eastern branch of the Niger River) 41 miles (66 km) upstream from the Gulf of Guinea. Founded in 1912 in an area traditionally occupied by the Ijo and Ikwere (Ikwerre, Ikwerre) people, it began to perform as a port (named for Lewis Harcourt, then colonial secretary) after the opening of the rail link to the Enugu coalfields in 1916. As of 2016, the Port Harcourt urban area has an approximate population of 1,865,000 inhabitants, up from 1,382,592 as of 2006. Port Harcourt features a tropical wet climate with lengthy and heavy rainy seasons and very short dry seasons. Only the months of December and January truly requirements as dry season months in the city. The harmattan, which climatically influences numerous cities in West Africa, is less pronounced in Port Harcourt. Port Harcourt heaviest precipitation transpires during September with an average of 367 mm of rain. December on midpoint is the driest month of the year, with an average rainfall of 20 mm. Temperatures all-round the year in the city are relatively persistent, showing little variation throughout the course of the year. Average temperatures are typically between 25 °C-28 °C in the city.

Two sources (primary and secondary) of data were utilized in the study: The primary source and the secondary source of data. The two combined were adequately appropriated in the fulfilment of the research objectives. This form of data comes in handy to complement and add new dimensions to secondary data. The study used structured questionnaire containing both open and closed ended questions as a tool for collecting primary data information. The study population for this study was the residents of Diobu and Waterside in Port Harcourt. A total number of 186 household heads were selected for questionnaire administration (98 in Diobu and 88 in Waterside).

To obtain secondary data, a wide scope of literature was reviewed in relation to the study. This included desk top review of the existing data and information mainly from internet searches, published official documents and any other relevant records. The main aim of reviewing the secondary sources of data was to identify existing information gaps, challenges to be addressed by the study and inform areas to lay emphasis on. Secondary data therefore helped to establish what is already in existence in relation to current study and explanations that have been offered concerning relationships among variables, published and unpublished works and access of information from websites acted as further reference materials.

The study employed documentation review, and questionnaire as the data collection techniques as follows; various documents including text books, reports, published and unpublished works and websites were reviewed to get the necessary information on the research study. Administered of questionnaires through hand and soft copy was given out to residents. The individuals were allowed to complete the questionnaires anonymously to give as much information as possible. Both descriptive and inferential statistics were used to analyse the data appropriately.
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Figure 1. Map of Nigeria showing Rivers State and Port-Harcourt

Figure 2. Map of the Study Area
3. Results and Discussions
3.1 Socio-Economic Characteristics of Residents in the Study Area

The gender distribution of the respondents across the selected town is as contained in Table 1. Findings revealed that both genders were well represented across the study area as 57.0% were male while 43.0% were females. This proportional representation of the two genders may influence the residents’ response in the evaluation of slum upgrading in the study area. The summary of data collected and analyzed on marital status of the residents is as presented Table 1. Marital status was grouped into five: single, married, divorced, widowed and separated. It is revealed that most 39.2% of the residents were single, 45.2% were married, 4.8% were divorced while 3.8% and 7.0% were widowed and separated respectively.

Analysis of data collected on the educational qualification of residents as presented in Table 1 revealed that 11.3% acquired primary education, 29.0% have secondary education, and 14.0% had NCE, 21.0% had both HND and degree and 3.8% had no formal education. The implication to this study shows that residents with secondary school education are more and no formal education with the lowest. Data on residents’ age distribution were grouped into five. It is revealed in Table 1 that 5.4% of the respondents were from ages 11 to 20, 46.8% were 21 to 30, 21.5% ages 31 to 40, 23.1% ages 41 to 50 and 3.2% from ages 51 and above. This shows that respondents within the ages of 21 to 30 were the most populated.

Income was grouped in five. The summary of this is seen in Table 1 with 0 to 10 having the highest percentage of 58.1%, 11 to 20 having 2.2%, 21 to 30 with 3.2%, 21.5% goes to 31 to 40 and 41 to 50 having 15.1%. As contained in the questionnaire, the residents were made to state their occupations and these were open ended as presented in Table 1. The study shows that 11.8% are students, 50.0% were artisan, 25.3% were public servant and 12.9% were without jobs in the study area. For the purpose of this study, two household groups were determined. These are household with 5 members and below and household with more 6 to 11 members. Household size between 0-5 has 84.4% and 15.6% been 6-11 household members (Table 1). For the ease of analysis, residents were grouped into four and it’s summarized in Table 1. 77.4% for 0-10 period of stay, 18.3% from 11-20, 1.1% from 41-50 and 3.2% 51 and above of stay. The household type was grouped into two namely owner occupier and rented apartments. Findings shows that 31.7% of the residents were owners of the building while 68.2% were living in rented apartments (Table 1).

| Variables                             | Frequency | Percentage (%) |
|---------------------------------------|-----------|----------------|
| Gender                                |           |                |
| Male                                  | 106       | 57.0           |
| Female                                | 80        | 43.0           |
| Marital Status                        |           |                |
| Single                                | 73        | 39.2           |
| Married                               | 84        | 45.2           |
| Divorced                              | 9         | 4.8            |
| Widowed                               | 7         | 3.8            |
| Separated                             | 13        | 7.0            |
| Educational Qualification             |           |                |
| Primary                               | 21        | 11.3           |
| Secondary                             | 54        | 29.0           |
| NCE                                   | 26        | 14.0           |
| OND/HND                               | 39        | 21.0           |
| Degree                                | 39        | 21.0           |
| No formal education                   | 7         | 3.8            |
| Age of Respondents                    |           |                |
| 11-20                                 | 10        | 5.4            |
| 21-30                                 | 87        | 46.8           |
| 31-40                                 | 40        | 21.5           |
| 41-50                                 | 43        | 23.1           |
| 51 and above                          | 6         | 3.2            |
| Income of Respondents                 |           |                |
| 0-10                                  | 106       | 58.1           |
| 11-20                                 | 4         | 2.2            |
| 21-30                                 | 6         | 3.2            |
| 31-40                                 | 40        | 21.5           |
| 41-50                                 | 28        | 15.1           |
| Occupation of Respondents             |           |                |
| Student                               | 22        | 11.8           |
| Artisan                               | 93        | 50.0           |
| Public servant                        | 47        | 25.3           |
| None                                  | 24        | 12.9           |
| Household Size                        |           |                |
| 0-5                                   | 157       | 84.4           |
| 6-11                                  | 29        | 15.6           |
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3.2 Physical and Environmental Characteristics of the Study Area

The type of house occupied by the residents is summarized in Table 2 and it’s revealed that 2.7% live in duplex, 52.2% live in flat, 17.2% in face to face, 21.5% in batcher and 6.5% in bungalow. This showed that most of the residents live in flat building. Findings showed that 81.7% of residents in the study area use the building for residential use, 13.4% uses it for commercial purpose, 1.6% for the purpose of education and 3.2% for mixed purpose. The type of material used for the building of the house is summarized in Table 2. This revealed that 15.1% of houses are made with mud, 25.3% with local brick, 35.5% with concrete block and 24.2% with normal brick.

The types of toilets in the study area were divided into five groups based on Table 2. Findings revealed that 24.7% of the respondents use pit latrine with slab, 10.8% with VIP latrine, 45.7% with water closet, 15.6% with bucket system and 3.2% with no toilet. Data on the drainage system were grouped into three. Table 2 shows that 34.4% of the residents have the open drainage system, 26.9% have the covered drainage and 38.7% have open ground drainage. Various sources of water are utilized in the area. The survey showed that these sources include well, pipe born water, borehole, and vendors. Table 2 shows that 51.1% of residents uses borehole water, 21.5% uses well, 25.3% pipe borne and 2.2% purchase from vendors.

Data collected and summarized in Table 2 showed that 6.5% of the residents said the road network is very good, 15.1% agreed for good and fairly good, 34.4% bad while 29.0% very bad. Data collected and analysis on the roof of the residents building as summarized in Table 2, showed that 21.5% of residents roof are very good, 34.9% good, 1.1% neither good nor bad, 36.0% bad, and 6.5% very bad. This shows us that residents with bad roofs are more compared to residents with either good or bad. Data gotten and analysis shown in Table 2 shows that 16.7% of residents have very good walls, 42.5% have good walls, 24.7% have neither good nor bad walls, 14.5% have bad walls, and 1.6% have very bad walls. This implies that residents have good walls while 1.6% of them have very bad walls. Findings gotten and analysed showed that 6.5% of the respondents have very good access to their building, 21.5% have good access, 13.4% have neither good nor bad, 36.6 have bad and 22.0% have very bad access to their buildings which implies that respondents with bad access are dominating in the study area while 6.5% of them have very good access to their buildings (Table 2). Data gotten shows that 6.5% of respondents have very good drainage system, 11.3% have good, 12.9% have neither good nor bad, 40.9% have bad drainage and 28.5% have very bad drainage system. This shows that close to average (40.9%) of the respondents have bad drainage system which would lead to dirty environment and can lead to born out of diseases in the study area (Table 2). Corroborating with studies of Werlin (1999), this study emphasized that most urban centres require extensive urban renewal programmes. Therefore, slum upgrading and improvement should be aimed to reduce environmental stress and harmful activities in our towns and cities.

Table 2: Physical and Environmental Characteristics of the Study Area

| Variables                  | Frequency | Percentage (%) |
|----------------------------|-----------|----------------|
| **Length of Stay**         |           |                |
| 0-10                      | 144       | 77.4           |
| 11-20                     | 34        | 18.3           |
| 41-50                     | 2         | 1.1            |
| 51 and above              | 6         | 3.2            |
| **Household Type**        |           |                |
| Owner occupier            |           | 31.7           |
| Rented apartment          | 127       | 68.2           |
| **Total**                 | 186       | 100.0          |

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4.1 Housing Condition

The type of house occupied by the residents is summarized in Table 2 and it’s revealed that 2.7% live in duplex, 52.2% live in flat, 17.2% in face to face, 21.5% in batcher and 6.5% in bungalow. This showed that most of the residents live in flat building. Findings showed that 81.7% of residents in the study area use the building for residential use, 13.4% uses it for commercial purpose, 1.6% for the purpose of education and 3.2% for mixed purpose. The type of material used for the building of the house is summarized in Table 2. This revealed that 15.1% of houses are made with mud, 25.3% with local brick, 35.5% with concrete block and 24.2% with normal brick.

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According to IRIN (2006) houses in the study area can be classified as ‘dehumanizing shacks’ not fit for human habitation. The houses were considered to be substandard, inhabitable and dangerous to live in. There is a stale and unpleasant smell in the settlement; this presumably comes from the mixture of smell from sewage, refuse and dirt found in the settlement.

Studies have shown the deplorable conditions of urban housing in Nigeria (Jagun, 1983). Jagun (1983) affirms that 75% of the dwelling units in Nigeria’s urban centres are substandard and the dwellings are sited in slums. This results from combined effects of natural ageing of the buildings, lack of maintenance and neglect, wrong use of the buildings, poor sanitation in the disposal of sewage and solid waste, wrong development of land, increasing deterioration of the natural landscape, among others. The high level of poverty of most urban households places the available housing stock out of their economic reach. Many of the household’s resort to constructing make shift dwellings with all sorts of refuse materials in illegally occupied land. This has led to the growth of squatter settlements in many urban centers. The buildings therein are badly maintained and lack sanitary facilities. Light, air and privacy are grossly inadequate.

Because of poor layout of the buildings the toilets of one building supposedly located at the rear side is often right in the front of yet another building. The toilets are constructed with corrugated zinc sheets over dug pits with concrete floor slabs. In a few instances toilets and bathrooms are located in the buildings at the extreme end of the row of rooms. Kitchens too are either located at the end of the row of rooms or built as out-houses. The buildings are characterized by overcrowding, with high proportions of people living in single rooms. Overcrowding is thus a visible feature of urban housing in Nigeria. It is symptomatic of housing poverty, consequential of poor economic circumstances, and is considered to lead to irritation, unproductiveness, fatigue and deleterious behaviour, which in most cases are criminal in nature.
Also, house breaking is a common feature, which occurs not only in the night but also right in the daytime. Violent crimes involving armed robberies occur in the neighbourhoods but these are few and far apart. Gangs not necessarily resident in the neighbourhoods often commit them. The presence of a huge population of underemployed youth living in degraded physical and housing environment has enhanced the occurrence of this social malaise.

3.3 State of Repairs of Buildings in the Study Area
Most buildings in the study area are in very poor state, as less than 3.2% of them are in sound conditions. Findings established that majority (58.6%) of buildings in the study area requires one form of repairs or the other to make them physically sounds. Socio-economic characteristics of the inhabitants of the buildings such as household size, income classification and type of tenure, significantly contribute to the poor state of repair of the buildings (Figure 3).

![State of Repairs of Buildings](image)

**Figure 3. State of repairs of buildings**

3.4 Infrastructure preferences of the inhabitants in the study area
Respondents were asked to list out their infrastructure preference according to what they needed most and score each chosen item. The listed infrastructure was gotten from in-dept. interviews with respondents. The interviewed persons were asked score the compiled infrastructure and carry out a preference selection by assigning a number to each infrastructure listed, where 10 is the highest number and 1 the lowest number. The chart below shows the result of the respondents in the study area preference in improving their housing conditions (Figure 4).

![Infrastructure](image)

**Figure 4. Infrastructure preferences of the inhabitants**

3.5 Respondent’s Opinion on Possible Solutions to Slum Formation
The least considered of all these possible solutions was provision of waste management facilities. It accounted for 4.9% of what government should do about slum reduction in Rivers state. Provision of low-
cost housing, urban renewal, development control and public education/enlighten were viewed also as part of the policies that must be pursued by government institution in the study area. These are what the residents opined that government should embark upon in order to prevent and eradicate slum formation in Port-Harcourt, Rivers state, Nigeria (Table 3).

Table 3: Government Effort in Improving the Area

| Government Efforts                                      | Frequency | Percentage (%) |
|---------------------------------------------------------|-----------|----------------|
| Provision of low-cost housing                           | 115       | 23.6           |
| Urban renewal                                           | 132       | 27.1           |
| Provision of employment opportunities                    | 86        | 17.6           |
| Development control                                     | 36        | 7.4            |
| Public education/enlightenment                           | 93        | 19.1           |
| Provision of proper waste management facilities          | 24        | 4.9            |
| Total                                                   | 486       | 100.0          |

Notes: Higher than the total survey because of multiple response

4. Conclusion

Urbanization has led to increased productivity and economic diversification, but also deprivation, poverty, and marginalization. This paper examined challenges of slum upgrading in Port Harcourt, Nigeria. Specific emphasis was given to the socioeconomic characteristics of the respondents and their impact on the study area, relating it with variables on the environment and in-depth analysis of the field data brought forward the conditions that exist in the study area, therefore, qualifying it to having full blown characteristics of slum.

The residents in the study areas are mostly self-employed with low income, and are mostly not formally educated. Building structures are old that existed for decades without maintenance and the surrounding environment very poor due to neglect. There are other indications of the nature of environmental degradation and effects in the area, such as high occupancy ratio, overcrowding, pollution, breeding of disease vectors, drinking of unsafe water and pressure on the existing facilities. The acute shortage of housing in the study area has persisted despite several deliberate government measures to increase the available housing stock, as well as effort by the private sectors to provide housing for the population. One important fact is that provision of housing remains very low, relative to the ever-increasing demand by the population this is exacerbated by the rapid growth in urban centers resulting from both natural increase and net migration of people which force the masses to device cheap alternative forms of shelter.

Measures aimed at solving the menace of slums and at improving better housing situation, from the findings of this study, should include the following: (1) provision of services and infrastructure in the study area. This includes adequate drinkable water in the form of piped water or boreholes, drainage facilities, solid waste disposal systems, good roads, sewage disposal system, health facilities, primary schools and a community centre; (2) houses that are a structural risk to its inhabitants and neighbours should be pulled down for safety reasons; (3) there should be a continuous public enlightenment among the people on the health implication of their living condition; (4) poverty has been linked with poor state of health. Government should continue on programmes that enhance the economic status of households. An improvement in the economic condition of the people will impact positively on their housing condition; (5) the promotion of research into the use of local materials in the housing industry should be intensified by both private and public sector; and (6) there should be a deliberate urban renewal programme for the study area. This includes usable building rehabilitation and rebuilding of decaying urban areas. Such programme should include reconstruction and rehabilitation of existing facilities.

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