



**ASSESSMENT OF THE ENVIRONMENTAL CONDITIONS OF
SLUMS IN KARU LOCAL GOVERNMENT OF NASARAWA STATE,
NIGERIA.**

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ABSTRACT

Rapid urbanization have led to the creation of slums and informal settlements in urban areas of Nigeria. This study assessed the environmental conditions of slum in Karu Urban Area with the aim of developing sustainable strategies for mitigating the associated effects. In order to accomplish the aim, the study examined the housing and basic infrastructural condition in six slum settlements selected from Mararaba, Karu and Masaka communities. The study was based on survey research design and mixed technique approach (qualitative and quantitative) was used for data collection and analysis. Data for the study were collected through direct field observation, photographs and the use of questionnaire and interviews. The qualitative data was analysed using descriptive statistics while the qualitative data was analysed using content analysis. The findings revealed that only 25.48% of the surveyed buildings had a good walling condition, zinc (94.16%) was the main roofing material out of which 66.31% were either rusted and patched or loosed and flapping. Pit latrines (59.15%) was the main toilet facility, 9.28% had no bathroom facility, 6.37% had no kitchen facilities while the existing ones were shared and inconveniently located. Domestic water supply was still largely from underground wells and 54.65% of the buildings still dispose waste indiscriminately. It was concluded that until the provision of basic urban services is drastically improved, Karu Urban Area will remain a largely unhealthy town to live in. A participatory based upgrading project should be carried out by the State and Local Government authorities to better the living

conditions of slum dwellers in the study area, giving attention to their needs and priorities.

KEYWORDS; Slum, Environment, Condition, Karu

INTRODUCTION

Housing is one of the most crucial human needs, unfortunately it is not enough to have a roof over your head but the associated quality of the structure and its environment is the basic standard of housing. Housing sector plays a key role in the economic growth of a country as well as in wealth creation and employment. According to Maslow's theory of needs, shelter is one of the basic human requirements and as such decent and proper housing leads to the fulfillment of human needs at the bottom of the pyramid. This means that decent housing and settlement programs are a major boost in the realization of human needs. The importance of housing is further emphasized in the Sustainable Development Goals particularly with goal number 11 which explicitly advocates for better housing for inclusive, safe, resilient and sustainable cities and human settlements across the world. The UN-Habitat has been spearheading the implementation of this goal. The gap between the supply and demand of essential services such as housing is growing at an alarming rate and it is an issue that needs to be addressed because unplanned growth of settlements complicates the provision of these services within the urban settings (United Nations, 2006; Centre on Housing Rights and Evictions, 2008). Urban development in developing countries is accompanied by the creation of slums and growth of old slums in cities. In the developing world over 300 million urban poor live in informal settlements, this population is made up of over 200 million in Asia, 50 million in Latin America and over 60 million in other African cities which are experiencing high population growth (Sandhu, 1989). Developing countries are experiencing high urban growth which has resulted to an increase in slums and squatter settlements growing at an alarming rate this has been witnessed since independence.

The UN (2010) gives five characteristics of a slum; (i) inadequate access to safe water, (ii) inadequate access to sanitation and infrastructure, (iii) poor structural quality of housing, (iv) overcrowding and (v) insecure residential status. Thus, people living in slums are subjected to poor living conditions and are

susceptible to diseases as a result of poor sanitation, amongst other things. Also, slum dwellers are socially excluded from the larger economic, social and legal framework of the cities as they are considered informal settlements. The lack of infrastructural facilities present in slums has led to untold hardship amongst slum dwellers, especially amongst women and children. For example chronic diarrhea kills up to 2 million babies in cities every year, caused by consumption of stream water contaminated by animal and human waste (UN-Habitat 2016a). People defecate into plastic bags and dump them into the lagoon or nearby open pieces of land, due to the absence of good sewage facilities. To get fresh water, women have to trek up to 10kilometres in a day. People even rent roof tops to create slums in the air due to inadequate housing in these areas (Davies, 2004; Chang, 2009).The risk to life and other health challenges associated with living in slums has made it a critical problem that needs urgent attention from all stakeholders, especially governments.

Therefore assessing the suitability, adequacy and conditions of slum housing structure and facilities in Karu Urban Areas imperative for devising appropriate intervention strategies for addressing slum prevention, development and achieving sustainable urbanization and a better quality of life .In addition, the study will help towards meeting part of the objectives of infrastructural plan for Karu Urban Area which is to achieve environmental sustainability in the area by improving the lives of all the people living in slums through slum upgrading programmers that are tailored towards specific needs of the slum dwellers and carried out in a sustainable manner.

MATERIALS AND METHODS

This study is anchored on smart urbanism theory and concept of Slum

Smart Urbanism Theory

Smart Urbanism Theory, advanced by Congress for the New Urbanism, founded in 1993, has its origins in the works of Louis Wirth, 1938. It refers to the pursuit of a viable urban habitat in an increasingly upside down world. The theory is very relevant to dealing with the complex issue posed by existence of slums in third world countries since it comes at a time when both governments and actors tasked with urban planning have to do more with less resources; at a time when so many big plans geared towards controlling slum growth have

failed; and at a time when there is an increasing emphasis on the interplay between urban resilience and social innovation (Barnett, 2010).

Concept of Slum

The word slum first appeared in the 1820s as part of the London cant (UNCHS, 2003). The term was then used to identify poor quality housing with unsanitary conditions which served as places for activities such as crime, drug abuse, social vices and epidemics (UN-Habitat, 2003). In today's everyday usage of the word, it simply means 'bad' shelter (Gilbert, 2007). It is used to denote any housing or group of settlements which are not deemed adequate for human occupation. Khalifa(2011) defines it as an umbrella concept for various categories of settlements, including decaying inner-city tenements, squatter settlements, informal settlements and shantytowns.

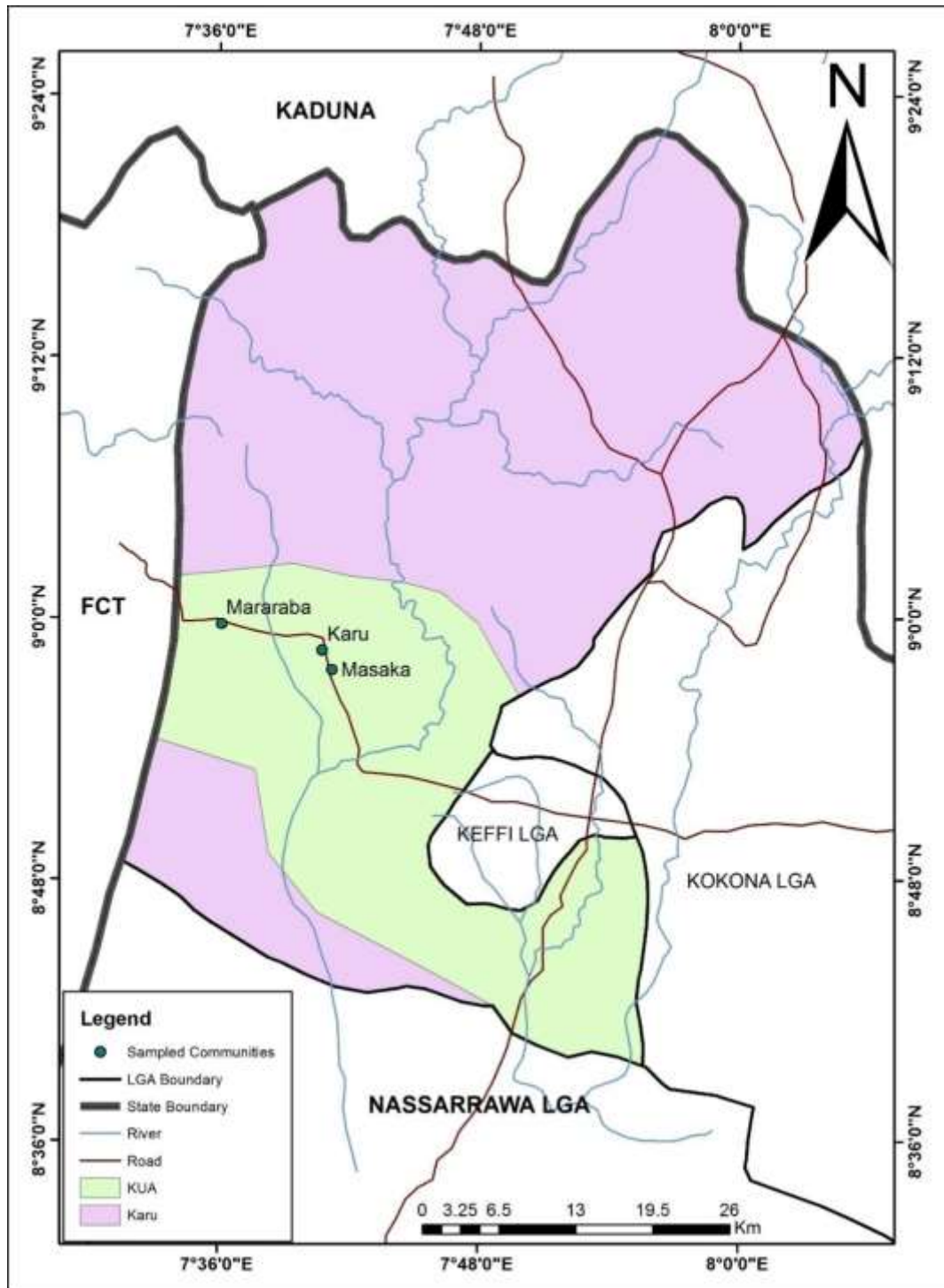
The Cities Alliance (1999) has attempted to define what they mean with the term as:

- A community that does not have Basic municipal services such as water, sanitation, waste collection, storm cess; drainage, street lighting, paved footpaths, roads for emergency access.
- Schools and clinics within easy reach, safe place for kids to play
- Places for the community to meet and socialize

STUDY AREA

Nasarawa state is located in the basement complex of north central Nigeria between longitude 6°.45'03'' and 9° 45' 03'' of the Greenwich meridian and latitude 7° 45' 00'' and 9° 35' 00'' of the equator. It has an approximate land area of about 27,271.50 square kilometers. It shares geographical boundaries with Kaduna state in the north, Abuja Federal Capital Territory (FCT) in the west, Kogi and Benue states in the south, Taraba and Plateau states in the east respectively. The focus of the study is on the Karu Urban Area popularly referred to as Greater Karu Urban Area (GKUA). It is located in the western zone of Nasarawa state and suburb of the Federal Capital Territory (FCT) Abuja, the Nigeria Capital. It is situated between latitude 8 59' 46'' N and 9 25' 00'' N of the Equator and longitude 7 34' 32'' E and 8 00'00'' E of the Meridian. GKUA is bordered by Keffi and Kokona LGAs in the east, FCT to the west, Kaduna state to the north and Nasarawa LGA to the south. It has approximately

area of 2,640 km² (NPC 2006). Figure 1 shows the location of Karu Local Government Area while figure 3.2 shows GKUA and the sampled slum settlements.



METHODOLOGY:

A descriptive Survey research was used for the collection and analysis of responses of sampled respondents. Questionnaires were designed to elicit the opinions, attitudes and perception of the study. Quantitative and qualitative data combined, to help better understand the research problem.

Both primary and secondary data were collected in the study. This enabled the use of secondary data to supplement the primary. Among the types of data collected for the study were: information on indicators of housing and environmental conditions; infrastructural state; effects of housing condition on the residents of slum settlement; According to the NPC (2006) and Chindo (2013), the population of Karu Local Government was 216,230 with 35,069 buildings. A multi-stage sampling technique was employed in choosing the desired samples (number of households). Purposive sampling was first used in the selection of study communities in which Mararaba, Karu and Masaka were selected for being the most urbanized communities in Karu Urban Area. Two slum settlements were further selected randomly from each of the communities. Reconnaissance survey involving visits to the sampled settlements was carried out for the purpose familiarization with the environment, marking buildings that qualified for the survey/study according to explained sampling strategies. Data were collected through structured questionnaire administered to the heads of the selected households or their representatives. The questionnaire was in two parts; the first sought information on the demographic characteristics of the respondents while the second part was used to gather information on the perceived housing and environmental conditions of the slum dwellers based on 14 variables, field measurement and photography was also employed. The condition of houses and basic infrastructures in the study area were assessed based on unstructured interview and physical observation of quality indicator variables which included: construction materials, physical housing condition and the availability/state of basic facilities. Data collected from the household survey was coded, organized, summarized and analyzed using the descriptive statistics tools of SPSS (version 23) to generate frequency and percentage distribution. Simple description and interpretation of the response patterns were used to draw inferences on the study variables. Qualitative data collected from the interview guide was organized into themes, categories and patterns pertinent to the study and integrated with quantitative data to facilitate the discussion of

key findings. Analysis of data enabled the researcher to interpret, summarize and draw conclusions and recommendation of the study.

RESULTS AND DISCUSSION

Environmental Condition of Karu Urban Area

The quality of housing in the study area is very low due to the low quality materials used for construction and inadequate technology as well as poor planning standards of handling the building components. Thus, a large number of the housing stock in slum area has low relative habitability which has consequent effect on the state of health, socio-economic well-being and emotional stability of the residents (Adedeji and Owoeye, 2008; Oriye and Owoeye, 2010). Table 4.1 shows that although most of the buildings in slum settlements of Mararaba (70.62%), Karu (65.23%) and Masaka (61.18%) were constructed using cements, the walling condition of the buildings showed that only 28.25% were plastered and painted in Mararaba while as much as 45.20% were either fully or partially plastered.

Zinc which accounted for 94.35%, 95.65% and 91.76% of the roofing materials in Mararaba, Karu and Masaka slum settlements respectively was the major material used in roofing of houses in the study area. This was followed by thatched roofs which accounted for 4.52% in Mararaba, 4.32% in Karu and 7.06% in Masaka.

Over 50 % of the buildings in each of the slum settlements need either minor or major repairs, out of which 18.08%, 24.35% and 35.29% are completely old and dilapidated in Mararaba, Karu and Masaka respectively. Only 16.38% exhibit evidence of physical soundness in Mararaba, 16.52% in Karu and 12.94% in Masaka (Table 4.1). Overall, a sum total of 228 building constituting 60.48% of all the sampled buildings were found to be either in need of minor or major repair out of which 23.87% were old and dilapidated and only 15.65% were found to be physically sound.

It is also worthy of note that unlike in developed countries where the private sector plays major role in housing production, in African cities, an important proportion of residents build their houses themselves (Tipple, 1994). Many of these houses are built informally and outside the official building codes and planning regulations (Payne, 1989). Another characteristic is that very often the building process is incremental over many years as households are insecure

about tenure or lack the necessary finances to finish the construction (Ibem et al., 2012; Ogu and Ogbuozobe, 2001; Shiferaw, 1998). When the household head and builder of the house dies, the house is inherited by his children, often without any major renovations happening for decades. This explains why those houses that were inherited by the owner are in the worst condition. Many rented dwellings are also in need of major repairs because neither the owner nor the renter has any incentive to invest money in building maintenance (Konadu-Agyemang, 2001; Nakamura, 2016). The owner is oriented towards quick profits. Often he needs the money to finish his own house. The renter, on the other hand, does not enjoy security of tenure and therefore has no interest in investing money in somebody else's house. Plate 4.4 and 4.5 depicts the state of buildings in the study area.

Table 1: Housing Quality in Slum Settlements of Karu Urban Area

| LOCATION | | | | | | | | |
|-------------------------------|------------|-------------|------------|-------------|-----------|-------------|------------|-------------|
| VARIABLES | MARARABA | | KARU | | MASAKA | | TOTAL | |
| | Frequency | Percent (%) | Frequency | Percent (%) | Frequency | Percent (%) | Frequency | Percent (%) |
| CONSTRUCTION MATERIALS | | | | | | | | |
| WALLING | | | | | | | | |
| Cement | 125 | 70.62 | 75 | 65.23 | 52 | 61.18 | 252 | 66.84 |
| Mud | 20 | 11.3 | 25 | 21.73 | 15 | 17.64 | 60 | 15.92 |
| Mud block | 28 | 15.82 | 15 | 13.04 | 17 | 20 | 60 | 15.92 |
| Bricks | 4 | 2.26 | 0 | 0 | 1 | 1.18 | 5 | 1.32 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |
| ROOFING | | | | | | | | |
| Zinc | 167 | 90.40 | 110 | 95.65 | 78 | 83.53 | 355 | 94.16 |
| Thatch | 8 | 4.52 | 5 | 4.32 | 6 | 7.06 | 19 | 5.04 |
| Asbestos | 2 | 1.13 | 0 | 0.00 | 1 | 1.18 | 3 | 0.80 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |
| CONDITION OF BUILDING | | | | | | | | |
| WALLING | | | | | | | | |
| Half/fully plastered | 80 | 45.2 | 78 | 67.83 | 52 | 61.18 | 210 | 55.7 |
| Plastered and Painted | 50 | 28.25 | 22 | 19.13 | 24 | 28.24 | 96 | 25.46 |
| Not plastered | 32 | 18.08 | 11 | 9.57 | 4 | 4.7 | 47 | 12.47 |

| | | | | | | | | |
|------------------------------|------------|------------|------------|------------|-----------|------------|------------|------------|
| Cracked | 15 | 8.47 | 4 | 3.47 | 5 | 5.88 | 24 | 6.37 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |
| ROOFING | | | | | | | | |
| Firm and solid | 65 | 36.72 | 40 | 34.78 | 22 | 25.88 | 127 | 33.69 |
| Loosed & flapping | 39 | 22.04 | 22 | 19.13 | 23 | 27.06 | 84 | 22.28 |
| Rusted & Patched | 73 | 41.24 | 53 | 46.09 | 40 | 47.06 | 166 | 44.03 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |
| STRUCTURE | | | | | | | | |
| Physically sound | 29 | 16.38 | 19 | 16.52 | 11 | 12.94 | 59 | 15.65 |
| Needs minor repair | 62 | 35.03 | 40 | 34.78 | 12 | 14.12 | 114 | 30.24 |
| Needs major repair | 54 | 30.51 | 28 | 24.35 | 32 | 37.65 | 114 | 30.24 |
| Dilapidated and old | 32 | 18.08 | 28 | 24.35 | 30 | 35.29 | 90 | 23.87 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |

Source: Field Data Analysis 2018

Condition of Basic Infrastructures in Slum Settlement of Karu Urban Area

The infrastructure identified in the areas includes both sanitary and general facilities. According to the grouping made by the Federal Ministry of Housing and Environment, Lagos (1982), sanitary facilities include toilets, bathrooms, kitchen, and water supply and refuse disposal while the general facilities include electricity supply, road accessibility, security, health and educational facilities as well as spaces for washing and drying of clothes.

Sanitary Services

Findings made from the study reveal that pit latrine is rampant in the area. Figure 4.1 shows that pit latrine accounted for 56.5% of the total toilet facility types in Mararaba slum settlements, followed by water closet facility which constituted 24.86%. Majority (15.82%) of the buildings in Mararaba slum do not have provision for toilet facility at all. Such buildings make use bush and dunghills, drainages and housing corners as well as mobile (bucket) latrine which constituted 10.17%, 5.65% and 2.82% of the toilet facility in the area

respectively. This finding corroborates that of Kayode (2010) who found that 65.2% of slum dwellers in Akure make use of pit latrine and as much as 23.9% had no toilet facility provision but makes use of mobile latrine, bush and dunghill, stream and drainage channels or squatting in the neighboring houses.

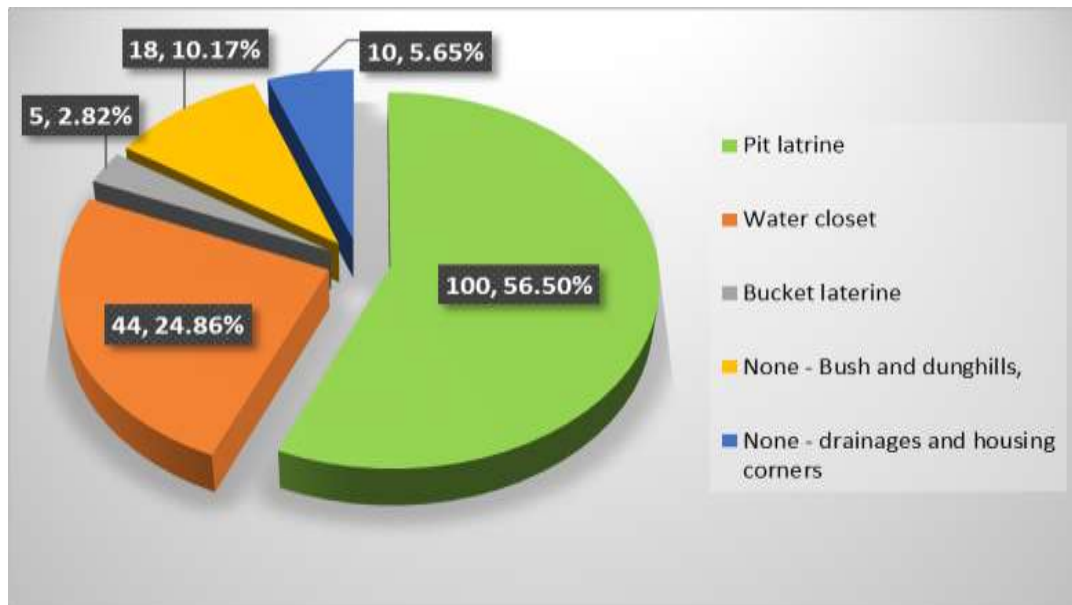


Figure 1: Toilet Facilities used in Mararaba Slum Settlements



Figure 2: Condition of toilet facility at Aso A slum Settlement of Mararaba

Source: Field Data Analysis 2018

Similarly to the situation of toilet facilities found in Mararaba slum, it was found that 62.61% of the sampled buildings in karu slum settlements uses pit latrine which were mostly separated from the main building. Only 19.13% uses modern day water closet, however, interview with some of the residents revealed that even some with modern toilets lack good septic tanks while a large number of them could not get water in their toilet. Those who make use of bushes and dunghills, drainages and housing corner as well as buckets accounted for 10.43%, 6.09% and 1.74% respectively. Figure 4.2 shows the analysis of toilet facilities in the sampled Karu slum settlements.

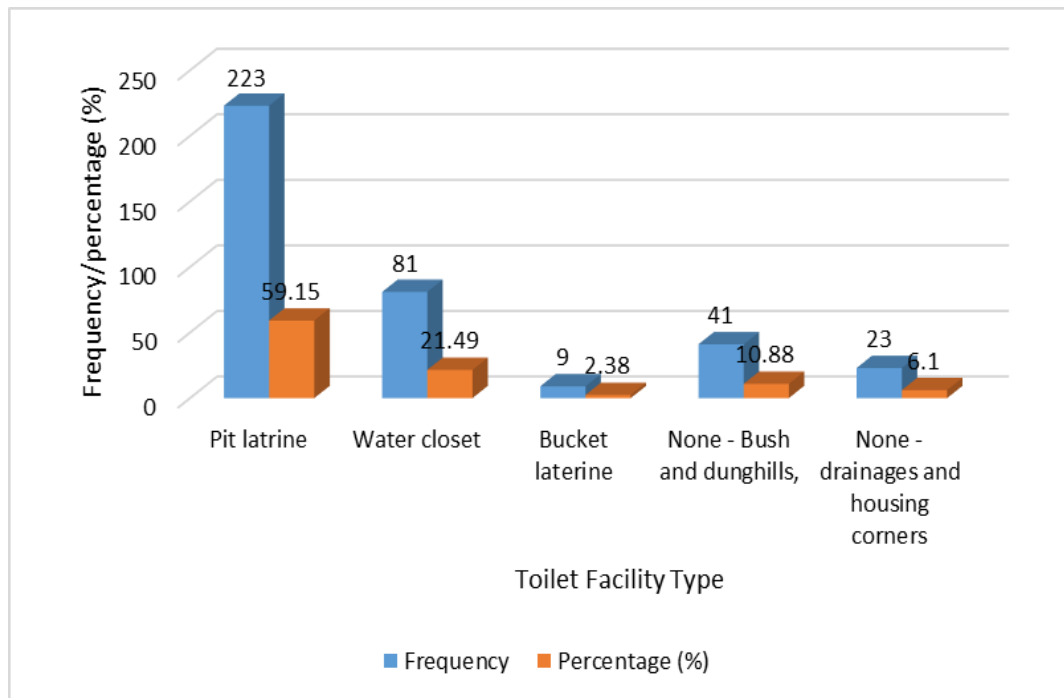


Figure 3: Toilet Facilities used in Slum Settlements of Karu Urban Area

Source: Field Data Analysis, 2018

The condition of bathroom, kitchen and water facilities was found to be very poor in the study area. Table 4.2 shows that 81.36% of the surveyed buildings in mararaba had indoor bathrooms; this number increased in Karu where 85.22% were found to have indoor bathrooms while in 75.30% was recorded in Masaka slum settlements. Out of these proportions, only 24.86%, 19.13% and

17.65% were self-contained indoor bathrooms. Overall, 81.16% of the surveyed buildings in slum settlements of Karu Urban Area had indoor bathroom facility out of which 59.68% were shared. It was observed that many of the bathrooms are just small enclosures, some of which are made of non-durable materials like bamboo, rusted iron sheets, zincs or planks.

Overall, the indoor kitchen facility in slum settlements of Karu Urban Area were found in 79.05% of the surveyed buildings and out of these, only 18.57% were self-contained while as much as 60.48% were shared. This finding corroborates that of Kayode (2010) who found that 63.0% out of the 68.2% of indoor kitchens in Akure slum settlements were shared. The use of firewood and charcoal for cooking is prevalent, hence many of the buildings have their kitchens located at the backyard, except for the few ones that used kerosene stoves as supplement to cook at the passage or right inside their rooms. Outdoor (open courtyard) kitchen facility were found in 14.58% of the total buildings while 6.37% of the buildings had no provision for this facility at all.

The main source of water supply in slum settlements of Karu Urban Area was largely through underground well water, 57.63% of the surveyed buildings in Mararaba slum settlements rely on this source for water supply. In Karu it was 64.34% and 58.83% in Masaka. Overall, 59.95% of the total surveyed buildings in the study area rely mostly on underground wells for water supply. This poses some problems because the water is not treated before use and some are very shallow, as such, can easily be infected. The use of water vendors' services was found to also be a common practice in the study area as 21.47% of the slum settlements in Mararaba relied heavily on water vendors for daily water supply, the figure was 17.39% in Karu and 22.35% in Masaka while on overall, it 20.42%. Only few, about 12.74% enjoy tap water in the study area, which they emphasised is never regular. Another 7.16% were those that enjoy water from boreholes, however most of these people mentioned that they have to walk some distance to fetch the water for a fee as most owners of boreholes in the area have taken advantage of the water scarcity supply in the area to commercialize their boreholes. From this situation, the existing water supply does not guarantee quality water supply in the area, hence the people are at greater risk of contracting acute water borne diseases.

The state of waste disposal in the area was generally absurd in spite of government efforts to curb indiscriminate disposal. Refuse from over 54.65%

of the surveyed buildings in slum settlements of Karu Urban Area were indiscriminately disposed, some by road sides (13.53%) and in open spaces (21.22%) where nobody cares for them, some in natural or man-made drainages (10.88%) while 9.02% disposes theirs through burning around residential environment thereby causing air pollution. Dumping of refuse in drainages hampers the free flow of run-off and constitutes comfortable breeding grounds for flies, mosquitoes other health-infected animals that could contribute to the spreading of diseases in the study area.

Table 2: Distribution of Sanitary Services in Slum Settlements of Karu Urban Area

| LOCATION | | | | | | | | |
|------------------------------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| FACILITIES | MARARABA | | KARU | | MASAKA | | TOTAL | |
| | Freque ncy | Percent (%) | Freque ncy | Percent (%) | Freque ncy | Percent (%) | Freque ncy | Percent (%) |
| BATHROOM | | | | | | | | |
| Indoor -Self contained | 44 | 24.86 | 22 | 19.13 | 15 | 17.65 | 81 | 21.48 |
| Indoor -Shared | 100 | 56.5 | 76 | 66.09 | 49 | 57.65 | 225 | 59.68 |
| Outdoor -Open Courtyard | 19 | 10.73 | 7 | 6.09 | 10 | 11.76 | 36 | 9.56 |
| Not available | 14 | 7.91 | 10 | 8.69 | 11 | 12.94 | 35 | 9.28 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |
| KITCHEN FACILITY | | | | | | | | |
| Indoor -Self contained | 39 | 22.03 | 18 | 15.65 | 13 | 15.29 | 70 | 18.57 |
| Indoor -Shared | 98 | 55.37 | 74 | 64.35 | 56 | 65.88 | 228 | 60.48 |
| Outdoor -Open Courtyard | 30 | 16.95 | 14 | 12.17 | 11 | 12.95 | 55 | 14.58 |
| Not available | 10 | 5.65 | 9 | 7.83 | 5 | 5.88 | 24 | 6.37 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |
| WATER SUPPLY | | | | | | | | |
| Pipe borne water | 26 | 14.69 | 10 | 8.69 | 11 | 12.94 | 47 | 12.47 |
| Underground well water | 102 | 57.63 | 74 | 64.35 | 50 | 58.83 | 226 | 59.95 |
| Water vendors | 38 | 21.47 | 20 | 17.39 | 19 | 22.35 | 77 | 20.42 |
| Borehole | 11 | 6.21 | 11 | 9.57 | 5 | 5.88 | 27 | 7.16 |

| | | | | | | | | |
|---------------------------|-----|-------|-----|-------|----|-------|-----|-------|
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |
| WASTE DISPOSAL FACILITIES | | | | | | | | |
| Free range - Road side | 29 | 16.38 | 10 | 8.70 | 12 | 14.11 | 51 | 13.53 |
| Free range - Open space | 40 | 22.60 | 25 | 21.74 | 15 | 17.65 | 80 | 21.22 |
| Drainages | 20 | 11.30 | 12 | 10.43 | 9 | 10.59 | 41 | 10.88 |
| Controlled tipping | 70 | 39.55 | 60 | 52.17 | 41 | 48.24 | 171 | 45.36 |
| Incarceration/Burning | 18 | 10.17 | 8 | 6.96 | 8 | 9.41 | 34 | 9.02 |
| Total | 177 | 100 | 115 | 100 | 85 | 100 | 377 | 100 |

Source: Field Data Analysis, 2018

Conclusion

This study has found out that African countries have begun shifting towards slum upgrading as a means of providing adequate standards of living. This is necessary because previous strategies adopted by governments have failed. This research study has investigated the needs and preferences of slum dwellers and compared them with previous interventions as well as with the recent United Nations definitions of slum upgrading make-up in view of determining more sustainable strategies for upgrading projects.

Water supply infrastructure and waste management systems are both highly inadequate in the vast majority of Karu's neighborhoods. Electricity supply from the Abuja Electricity Distribution Company is also erratic, which frustrates both domestic and commercial users. Healthcare services are underfunded and in moderate supply in the study area, however, this poses a severe condition in Masaka.

References

- Aboki, P. M. & Saingbe, N. D. (2007). A Profitability Analysis of Small-scale Rice Processing Activity in Nasarawa State, Nigeria. Proceedings of the 9th Annual Conference of the Nigeria Association of Agricultural Economists, Abubakar Tafawa Balewa University, Bauchi (2007).
- Achankeng, E. (2008). "Globalisation, Urbanization and Waste Management in Africa", *Proceedings of the Conference of African Studies Association of Australasia and the Pacific - African on a Global Stage*, University of Adelaide, Adelaide, Australia, pp. 1-22.
- Acioly Jr., C. (2012b), Informal Settlement Upgrading in Brazil, PowerPoint presentation 23 Feb.
- Acioly, Jr. C. (2009), Informal City and the Phenomenon of Slums: The Challenges of Slum Upgrading and Slum Prevention, paper presented to *International New Town Institute*

- (INTI) Conference on New Towns for the 21st Century: the Planned vs. the Unplanned City, 4-5 June.
- Adedeji, Y.M.D and Owoeye, J.O (2008); Environmental Sanitation and the Health of Slum Dwellers in Akure: *Knowledge Review*; 17(2):57-67.
- Akwa VL, Bimbol NL, Samaila K, Marcus ND (2007). Geographical Perspective of Nasarawa state. Onaivi Printing and Publishing Company Limited, Keffi, Nigeria.
- Anol, B., (2012). *Social Science Research: Principles, Methods, and Practices*, 2nd Edition, University of South Florida, Florida, USA, 23.
- Anol, B., 2012, *Social Science Research: Principles, Methods, and Practices*, 2nd Edition, University of South Florida, Florida, USA, 23.
- Arcila, C. A. C., (2008). Learning from Slum Upgrading and Participation -A case study of participatory slum upgrading in the emergence of new governance in the city of Medellín-Colombia. Stockholm: Kungliga Tekniska Högskolan.
- Baker J. L. (2008) "Urban Poverty: A Global View." World Bank, Washington D.C.
- Beatley T. (2000). May (2008), *Women, Slums and Urbanization: Examining the Causes and Consequences*. Green Urbanism. Island: Washington, DC. Centre on Housing Rights and Evictions (COHRE).
- Berner, E. & B. Phillips (2005) Left to their own devices: Community self-help between alternative development and neoliberalism. *Community Development Journal*, 40, 17 - 29.
- Berner, E. (2007) Assessment of slums and gated communities: Failure of formal and informal land markets in developing cities. Paper presented at the *ISS/Development and Change Symposium 'Cities of Extremes'*, The Hague, 15th – 16th October 2007.
- Boonyabanacha, S. (2009). Land for housing the poor -- by the poor: experiences from the Baan Mankong nationwide slum upgrading program in Thailand. Environment and Urbanization.
- Botes, L. & Rensburg, D.v. (2000) Community participation in development: Nine plagues and twelve commandments. *Community Development Journal*, 35, 41 - 58.
- Brakarz, J. (2013) 'Favela-Bairro – Scaled up Urban Development in Brazil', in Reducing Poverty, Sustaining Growth – What Works, What Doesn't, and Why A Global Exchange for Scaling Up Success Scaling Up Poverty Reduction: *A Global Learning Process and Conference*, Shanghai, May 25–27, 2013 (http://web.worldbank.org/archive/website00819C/WEB/PDF/BRAZIL_F.PDF).