# Slum Conditions in Urban Nigeria: A Case of Jimeta-Yola, Adamawa State, Nigeria

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## Abstract

Urban areas the world over has witnessed an unprecedented growth and transformations since the turn of the twentieth Century. The rate of rural-urban migration has triggered high demand for housing, jobs, and pressure on the existing urban infrastructure. Slums began to spring up in the urban areas due to the desire for urban lifestyle. The study looked at the physical conditions of some selected slums in Jimeta-Yola, Adamawa State with a view to demonstrating the hardships being faced in these neighbourhoods so as to recommend a planning solution in the long run. Three slums were selected in the study area, namely: Luggere, Demsawo and NEPA/Alkalawa slums. In Luggere, ten (10) houses were selected for study on the income level of the residents and convenience facilities in their dwellings. It was found to be inadequate. In NEPA/Alkalawa area, ten (10) access/roads were assessed for proper circulation around the neighbourhood. It was found to be inefficient and sometimes impossible for vehicular circulation to occur. In Demsawo area, the drainage and the sanitary conditions of selected ten (10) streets were carried out. The results show that most of the streets do not have drainages and even the existing ones are blocked due to indiscriminate refuse/waste disposal in the area. The results are presented on tables and photographs are shown as plates. In view of all these myriad of challenges, recommendations for slum upgrading is proffered as a solution for the inhabitable conditions in the slums in Jimeta-Yola particularly and Nigeria in general.

Keywords: Slum, Urban, Waste/Refuse, Sanitary condition, Access, Households, Neighbourhood

#### 1. Introduction

Slums are unplanned, unorganised, and clustered residential areas in urban centres mostly as a result of high influx of migrants for rural areas. In its groundbreaking report The Challenge of Slums, the United Nations Human Settlements Programme (UN-HABITAT) defines a slum as a household lacking any of the following: secured tenure; access to safe water or sanitation services; durable housing; and enough living space (Jackson, 2013). These areas form the inner city of most towns and cities in the world especially the developing countries where poverty is high. A slum may also be a heavily populated urban informal settlement characterized by substandard housing and squalor. While slums differ in size and other characteristics from country, most lack reliable sanitation services, supply of clean water, reliable electricity, timely law enforcement and other basic services. Slum residences vary from shanty houses to professionally-built dwellings that because of poor-quality design or construction have deteriorated into slums (Wikipedia, 2015). For example, the notorious Makoko slum in Lagos, Nigeria which is home to over 250, 000 people (IRIN, 2015). The situation of sanitation is very poor, and this is common to all slums as the facilities are either lacking or they are inadequate for the heavy population of residents in such neighbourhoods. The fact that such large proportions of urban residents dwell in slums summarises a critical factor that cannot be ignored when designing sustainable growth in cities: the vast majority of the hundreds of millions of migrants leaving behind their rural livelihoods in hopes of success in the city end up becoming part of the lowest socio-economic group - the urban poor. Different names have been given to slums in different parts of the World such as Shanty town, Favela, Rookery, Skid row, Ghetto among others. The study focuses on the physical characteristics of slums especially housing condition and sanitary facilities; nature and pattern of access/roads within as well as the waste management and disposal. Most of the world's slums are in the developing countries of Africa, Asia and Latin America and a substantial population of the world lives in the slums. Sub-Saharan Africa has a slum population of 199.5 million, South Asia 190.7 million, East Asia 189.6 million, Latin America and the Caribbean 110.7 million, Southeast Asia 88.9 million, West Asia 35 million and North Africa 11.8 million (UN-Habitat, 2012). Pieterse (2014) corroborated the assertion made by UN-Habitat as he stated that almost 62% of urban residents in sub-Saharan Africa live in slum conditions and roughly 280 million urban dwellers are regarded as income poor.

Conditions of these slums in Nigeria are getting worse over time even as some African countries are struggling to reduce this condition or reverse the tide of slums. Egypt, Libya, Morocco have nearly halved their total number of urban slum dwellers, and Tunisia has eradicated them completely. Ghana, Senegal and Uganda have managed to reduce urban slum populations by more than 20%. More than 75% of Nigeria's population lived in slums in 1990, but that is now 61.9%. In South Africa, slum numbers dropped from 46.2% to 28.7% of the population between 1990 and 2010 (Vidal, 2011). Poor sanitary condition in the slums is a serious cause for various types of ill-health experienced. For instance, a significant share of ill health in slums stems from poor

access to sanitation and clean drinking water generally. Even where it is available, access to safe water is often unaffordable for the urban poor. Slum dwellers in cities in east Africa pay 5–7 times more for a litre of water than the average North American (WHO, 2016). This article examines the sanitary condition of some slums in Jimeta-Yola and the poor infrastructure which are mostly in a pitiable condition with a view to making recommendations to reverse the situation.

### 1.1 Aim and Objectives of the Study

The aim of the study is to assess the Slum conditions in Jimeta-Yola, Adamawa State, Nigeria. Specific Objectives are as follows:

- To identify Slums in the study area
- To examine the physical conditions of these Slums identified
- To examine the Sanitary conditions of the Slums

## 2. Materials and Methods

The data for the research was obtained through the use of questionnaire and observation of the physical conditions in sample areas. Ten (10) houses, streets (access roads) and drainages respectively are selected at random in each of the selected Slums in the study area and they are numbered based on the sequence followed during the sampling and questionnaire administration. The results of the study are presented in tables and charts; whereas the photographs are presented as plates.

## 2.1 Study Area

Yola (Jimeta) the Adamawa State capital is located between Longitudes 12° 26' E and Latitude 9° 16' N along the banks of River Benue (Hong, Law and Selaman, 2014), one of the two (2) major rivers in Nigeria. It has total population of 198, 247 based on the 2006 census. It is the administrative capital of Adamawa State where the Government house, Ministries, and Parastatals are located. Yola town is the traditional sit of the monarch, Lamido of Adamawa. Ilesanmi (2013) described Jimeta-Yola as belonging to the first-order (1<sup>st</sup>) Core (Urban centre) with its influence spanning the entire State and the neighbouring states of Taraba, Gombe, Bauchi, Borno and Yobe.

#### 3. Results and Discussions

Slums in every part of the World are found in urban areas owing to the high influx of people from the peripheral rural areas. The slums identified in Jimeta consist of Luggere, Nassarawo, Shinko, Doubeli, Demsawo, Old Malamre and NEPA/Alkalawa areas. These are the early settlements that grew into the present day Jimeta the administrative capital of Adamawa state. These areas are noted for their dilapidated buildings, irregular narrow streets or alleyways, poor sanitary condition, and clustered buildings with no regard for proper planning.

## 3.1 Luggere

Research conducted has revealed that in Luggere, one of the slums in the study area, most of the dwellers are low income earners because housing rents are cheaper due to the poor nature of the buildings and inadequate sanitary facilities especially toilets/bathroom. The rents range between N1000- N2000 (\$5-\$10) per month for a single room depending on the type of building materials used for the construction of the dwelling. A room and parlour usually without its own toilet and kitchen, goes for twice the amount mentioned (\$10-\$20). Ten houses were sampled randomly in the area to determine the number of households (HH) in each sampled house and the number of persons per household; an average number of persons per household (HH) was determined. The number of toilet/bathroom facility available in each compound sampled and time needed per capita for the use of the Toilet/Bathroom facility daily per household were also determined through interviews. The results of this assessment are presented in table 1.

Number of Houses sampled	Number of Households (HH) per compound	Average Number of Persons per household(HH)	Number of Toilets/Bathrooms in each House (compound)	Average queuing time for each HH in the dwellings
1	08	03	01	3x1 <sup>10</sup> =30 min/HH
2	03	03	01	3x1 <sup>10</sup> =30 min/HH
3	10	05	02	5x1 <sup>10</sup> =50mins÷2= 25mins/HH
4	02	04	01	4x1 <sup>10</sup> =40min/HH
5	03	03	01	3x1 <sup>10</sup> =30min/HH
6	03	03	01	3x1 <sup>10</sup> =30min/HH
7	04	03	01	3x1 <sup>10</sup> =30min/HH
8	06	03	02	2x1 <sup>10</sup> =20min÷2= 10min/HH
9	04	02	01	2x1 <sup>10</sup> =20min/HH
10	02	03	01	3x1 <sup>10</sup> =30min/HH

Source: Field Survey, 2015

From table 1, it was determined from the interview conducted that each member of a household requires an average of five (5) minutes to use a toilet and the same time for bathing. An average queuing time for each household (HH) was determined by multiplying an average time needed per capita for toilet usage and bathing (10 minutes). Table 1 indicates sampled homes/houses numbered 1 to 10 are presented in the first left column; second column presents the number of households per compound that share toilet/bathroom facility. The third column from left shows the average number of persons per household and the fourth column presents the number of toilets/bathroom in the sampled houses/homes. The convenience facilities in each compound (rented buildings) serve dual purposes (toilet/bathroom). The fifth column ultimately presents time needed to use a toilet facility which is also the bathroom by each member of a household within a large compound of dwellings. If each member of a household is to use the toilet/bathroom facility (toilet/bathroom). The implication of this situation is that people have to wake up early to queue up for use of these facilities or risk going to Work, School, Business places and so forth very late. Sometimes, quarrels among users do occur due to desperation to use these important but scarce facilities.

#### 3.2 Alkalawa/NEPA Area

The variable considered during the study in this area which is one of the slums in Jimeta is the nature of circulation (street pattern) and its implication on vehicular movement and parking in individual dwellings in the area. Ten accesses were selected at random which are described as Access No. 1-10 and its width measured to assess its size for vehicular circulation within the neighbourhood. All the accesses to the neighbourhood selected were mere alleyways fit for bicycles, motorcycles and pedestrians movement; none can accommodate a car let alone a truck or larger vehicles. The result of the study is presented on table 2.

Number of selected	Average Width of the	Pattern of the	Types of Users
Access/Roads	Access/Roads(in Metre)	Access/Roads	
Access No. 1	1.2	Irregular	Pedestrians, Bicycles &
			Motorcycles
Access No. 2	1.7	Winding	Pedestrians, Bicycles &
			Motorcycles
Access No. 3	2.0	Irregular and	Pedestrians, Bicycles, Tricycles
		winding	& Motorcycles
Access No. 4	1.4	Irregular	Pedestrians, Bicycles &
			Motorcycles
Access No. 5	1.5	Winding	Pedestrians, Bicycles &
			Motorcycles
Access No. 6	1.3	Winding	Pedestrians, Bicycles &
			Motorcycles
Access No. 7	1.9	Irregular	Pedestrians, Bicycles, Tricycles
			& Motorcycles
Access No. 8	2.4	Winding	Pedestrians, Bicycles, Tricycles
			& Motorcycles
Access No. 9	1.6	Cul-de-sac (Dead-	Pedestrians, Bicycles &
		end)	Motorcycles
Access No. 10	1.6	Cul-de-sac (Dead-	Pedestrians, Bicycles &
		end)	Motorcycles
	OA**16.6/10=1.66m		

Table 2: Access roads pattern, size and usage in NEPA/Alkalawa area

Source: Field Survey, 2015

**OA**\*\* is the overall average

Table 2 describes the situation in more clear terms. The access/streets sampled are measured just about 1.2-2.4 metre wide as against the standard 3.1-3.5 metre for neighbourhood access roads/streets (Obateru, 2003); at some point the streets are even narrower. A car or any truck would require at least 3 metre width of a passage to go through for a one-way traffic. The implication of this scenario is that individuals who own cars, trucks, buses *et cetera* cannot drive into their compounds and park as required. They are left with no other choice than to find parking spaces on the roadsides or any available open space within the neighbourhood away from their homes. Survey conducted revealed 70% of those who park their vehicles by the roadside in the area do so because they cannot drive to their homes because the access roads are too narrow.

#### 3.3 Demsawo Area

The situation in Demsawo area is that of inadequate drainage, decay of the existing ones, and filthiness of the environment due to poor waste management. Ten (10) streets were selected for the study namely: Calabar Street, Zaranda Street, Wukari Street, Jos Street, Benin Street, Sokoto Street, Michika Street, Bauchi Street, Demsawo Street and Port-Harcourt Street. Even though the area has the government layout (well-laid-out streets and named after some towns in Nigeria), it is in a pitiable condition due to poor planning and neglect.

Of all the Streets mentioned above only, Zaranda Street has better surface drainages. On one side is storm water drainage measuring 2x3metre and 0.5x1metre drainage on the other side of the street. Demsawo is a low-lying area adjoining the River Benue flood plain which makes it vulnerable to flood. Demsawo area suffers flooding almost every rainy season, the worst of which was the 2012 flooding that ravaged most parts of Nigeria. This is more so because the few other narrow drainages are blocked from silting and indiscriminate dumping of refuse by residents of the area. Dumping of refuse in storm-water drainage is a regular practice in the area because of the belief that it will be conveyed to the River Benue close by. This practice is evident on plate 1.



Plate 1: Blockage of Storm-water Drainage due to indiscriminate dumping of refuse in Demsawo. This is the only storm-water drainage in the area.

Living conditions in the slums is pathetic considering the health implications especially where there is stagnant water which aids the breeding of mosquitoes. In some parts of Demsawo where study was conducted, we came across a drainage right at the door-step of some residents whereby they have to contend with the smell from this drainage and the mosquitoes that are being bred there (see Plate 2). When asked why they live in this kind of condition, a resident responded:

"Do we have a choice? This is the type of a house we can afford. So, we have to manage life as it is until it gets better"

The filthy nature of the environment and living conditions in this area can better be imagined than experienced. Refuse are dumped on the streets and the wind blows it into the gutters thereby blocking it over time (see plate 3). Even though the Local authorities have put up a sign to stop people from dumping refuse indiscriminately at some locations, residents still do not comply with such orders. The residents complain of local authority's insensitivity to their plight in terms of proper waste management and disposal. The Local authorities on the other hand said that people have simply refused to dispose of their refuse at designated locations provided.



Plate 2: Showing a Gutter/Drainage in front of a dwelling (House) in Demsawo area in Jimeta. Note the filthiness of the environment which aids breeding of mosquitoes and stinky smell.

The condition of the streets in Demsawo area is bad due to absence of drainages on most of them and poor habit of indiscriminate waste disposal by residents. The status and conditions of selected streets for the study are presented on table 3.

It is noteworthy that some of the streets are *fair* in terms of sanitary condition (cleanliness) even when they do not have drainage. This is basically of the presence of some shops and businesses that promote daily cleaning and incineration or paid disposal of waste generated. On streets with predominantly residential land uses, there is *poor* sanitary condition due to indiscriminate disposal of liquid and solid waste which also blocks the drainages where it exists. Some of the few existing drainages which are also narrow have been silted over time. Residents confirmed that some parts of the area are usually flooded during the rainy season the worst of which in recent times occurred in 2012.

Selected Streets	Drainage status	Sanitary condition
Zaranda Street	Storm-water and covered	Poor due to disposal of waste in drainage and on
	drainage	street
Wukari Street	Silted and completely blocked	Fair due to presence of shops
Bauchi Street	Silted and completely blocked	Fair due to presence of shops
Benin Street	No drainage	Poor due to indiscriminate waste disposal
Jos Street	No drainage	Fair due to presence of shops and other businesses
Port-Harcourt	No drainage	<i>Poor</i> due to waste disposal
Street		
Michika Street	No drainage	Poor due to liquid waste disposal
Demsawo Street	Narrow and silted drainage	Fair due presence of businesses and shops
Calabar Street	No drainage	Poor due to solid waste disposal
Sokoto Street	No drainage	Poor due to both solid and liquid waste disposal

Source: Field Survey, 2015

Open waste disposal on the street in the area is further demonstrated on plate 3 where it is noted that residents still dump refuse even where a sign is put up to prevent this practice from taking place.



Plate 3: Open waste disposal/Refuse dump is a common sight in the slums in Jimeta

#### 4. Recommendations

1. The need to have an orderly society is uncompromising. Therefore, to mitigate or tackle the slum conditions in Jimeta-Yola there is the need for a drastic planning measure. The slums require upgrading

through community participation and collaboration between the Planning authority (Adamawa State Urban Planning and Development Authority). The Government of Adamawa State through ASUPDA should engage the residents of the affected areas in a discussion concerning the living conditions of their neighbourhood especially as regards the cleanliness of the existing drainages. Government should construction new standard surface drainages through direct labour initiative involving the youths of the affected areas and charge them to maintain it afterwards.

- 2. By slum upgrading, it means that the housing conditions need improvement with adequate sanitary facilities such as the convenience (toilets/bathrooms). Laws concerning housing standards should be enacted and enforced to check the excesses of the *shylock landlords* who do not care about the comfort of their tenants so as to ensure that adequate toilets and bathrooms are provided in every dwelling. Soft loans should be made available through Adamawa Homes and Savings to owners of buildings in the affected areas for housing improvement.
- 3. Access/Roads improvement in the affected areas may require demolition of some structures to make circulation easier within the neighbourhoods. This is also part of the slum upgrading programme. The Government in its dialogue with the residents of the area should enlighten them about its intention and what the community stand to gain when upgrading of their area is completed. Affected houses (structures) and buildings should be adequately compensated for before being pulled down. This will help in avoiding possible crisis between the owners of the properties and the planning authority acting on behalf of the Government.
- 4. Government through the Ministry of Environment and Department of Sanitation should provide wheeled-waste-bins among groups of 5-7 houses for collection of refuse and should be evacuated on weekly basis. The youths of the area should be involved in this planning strategy through participatory approach and enlightenment.

These recommendations will help in alleviating the hardships being experienced in the slums in Jimeta-Yola particularly and Adamawa State in general.

## 5. Conclusion

Slums in Jmeta-Yola sprang up as the nucleus of the town and where low income earners find an easy aboard. The study has x-rayed the conditions in these slums with a view to drawing the attentions of the authorities concerned to come to the aid of the affected areas through upgrading and infrastructure provision. This study will serve as a guide for slum improvement to ameliorate the suffering of the residents for a healthy and sustainable environment.

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## Reference

Hong, A.H.; Law, P.L.; & Selaman, O.S.; (2014). Physiochemical Quality assessment of Pollutants in River Benue water in Jimeta/Yola Metropolitan, Adamawa State, North-eastern Nigeria. *American Journal of Environmental Protection*, Vol. 3, No. 2, 91.

Ilesanmi, F.A. (2013). Regional Development Planning Proposal for Adamawa State, Nigeria using the Core-Periphery Model. *International Journal of Arts, Management and Humanities*, Vol. 2, No. 2, 21-34.

IRIN; (2015). Humanitarian news and analysis: Lagos, Nigeria, the mega-city of slums.

Jackson, R.R. (2013). The epidemic of slum growth in African cities and the implications thereof for sustainable urban development, *Discussion Paper, Enviro Africa*.

Obateru, O.; (2003). Space standards for Urban Development, Ibadan: Penthouse Publications (Nig), 32p.

Pieterse, E. (2014). Slum Urbanism in Africa, Future Glimpses, South Africa.

UN-Habitat, (2012). Housing and Slum Upgrading, *Urban Theme*, United Nations Avenue, Gigiri, Nairobi, Kenya.

Vidal, J. (2011).' Africa Warned of "Slum" Cities Danger as its Population Passes One Billion', *Guardian News and Media Limited*.

WHO, (2016). Slums, Climate change and Human Health in sub-Saharan Africa, Geneva, Switzerland. Wikipedia; (2015). Slums (www.wikimedia.org accessed 19<sup>th</sup> January).