IMPACT OF SLUMS DEVELOPMENT ON ENVIRONMENT IN MASAKA AREA, KARU L.G.A. NASARAWA STATE, NIGERIA.

[1]KAMA, HOSEA GOBAK, [1]OLUKAEJIRE SAKANWI JUNIOR AND [2]GUMAU, BINTA GARBA

[1]Department of Geography, Nasarawa State University Keffi-Nigeria [2]Department of Urban and Regional Planning, Abubakar Tafawa Balewa University, Bauchi, Nigeria

ABSTRACT

This work on impact of slums development on environment in Masaka, Karu L.G.A., of Nasarawa State, Nigeria. The objectives were to identify the indices of slums in Masaka; determine the causes of slums development, examine the effects of slums environment on people; examine factor leading to slums development and to identify the problems militating against control of slums in Masaka area. To obtain adequate data, both primary and secondary sources of data were employed. As to the method of data collection, field observations, questionnaire and interview methods were used. The results revealed that slums in the study area have certain feature which include high rate of rural – urban migration, poorly designed houses, poor drainage and sewage disposal system, resulting in unskilled, unemployed and low income earners (men & women). There is need for the government to control the sale and resale of land and enforce compliance with building specification (code) by town planning authority. Slums can be improved by providing good roads, drainages and sewage disposal system and through the provision of basic amenities such as water, electricity and access roads.

Keyword: *Slum, Development, Environment, Masaka Area*

Background of the Study

The world's population has now shifted from predominantly rural to predominantly urban (Davis, 2006). For the first time in history, the majority of people now live in cities and towns. This shift reflects the astonishing trend towards urbanization that has occurred over the last several decades. In 1975, the urban population represented just over a third of the world's population (UN-HABITANT, 2003). In 1950, ''there were 86 cities in the world with a population of more than one million; today there are 400,

by 2015 will be at least 550.'' (Davis, 2006). With this trend it is projected that in a short while, cities will house virtually all additional population growth and this immense urbanization will be felt most strongly in developing countries. Between 1950 and 2000, the percentage of the population in developing countries living in cities and towns rose from 18 per cent to 40 per cent, and this percentage is expected to rise to 56 per cent by 2030 (Rodenbeck,2000)

The growth of cities and towns is attributed to two main causes :(1 migration from rural areas, and 2 natural population growth (Ibid). Among those who migrate to urban areas, the reasons underlying their migration vary. One of the primary reasons identified and discussed in the literature of urbanization and migration is economic: simply make, individuals often come to urban areas in search of jobs and the opportunity to earn more income than they can earn in rural areas (Shandra et al, 2003). The growth of slum has become a natural indicator of the process of the country's urbanization. It is estimated that at least 60 percent of the urban population lives in slums. It is also estimated by (UNDP 1999) that nearly 1 billion people live in slums in the cities of the world. That is one-sixth of humanity! Every single second, somewhere around the world, one person moves into a slum or squatter settlement. Most of these slums are in the cities / towns of the developing countries of the world. The annual urban growth rate in Sub-Saharan Africa is almost 5 percent, twice as high as in Latin America and Asia. It has also the world's largest proportion of urban residents living in slums, which today are a home to 72 percent of urban Africa's citizens representing a total of some 187 million people. With the adoption of the UN Millennium Development Goals (MDGs) in 2000, the poor living conditions in unplanned urban settlement were placed on the global development agenda. UN statistics indicate that by 2020, more than 1.5 billion people will live in slums and informal settlements without significant intervention to improve access to water, sanitation, secure tenure and adequate housing. The term "urbanization and urban poverty" describes the process of cities becoming more and more the places where the poor of the world can be found (Onokerhoraye, 1994). These areas are thickly populated with low income earners and are characterized by haphazardly erected structures of poor quality often lacking amenities with deteriorating conditions of living and lack of utilities layout around it (Jibril, 2000).

Study Area

Masaka area is one of the major towns in Karu Local Government Area that share common boundaries with the Federal Capital Territory to the West, Kaduna State to the North, Keffi Local Government Area to the East and Nasarawa Local Government

Area to the South. Its location is marked approximately by latitudes 9^0 00' and 9^o 15'N and longitudes 7^0 45, and 8^0 00'E (See figure 3.1, 3.2). The study area is well served with inter-city road network. It is also one of the Major towns bordering the nation's Federal Capital, Abuja.

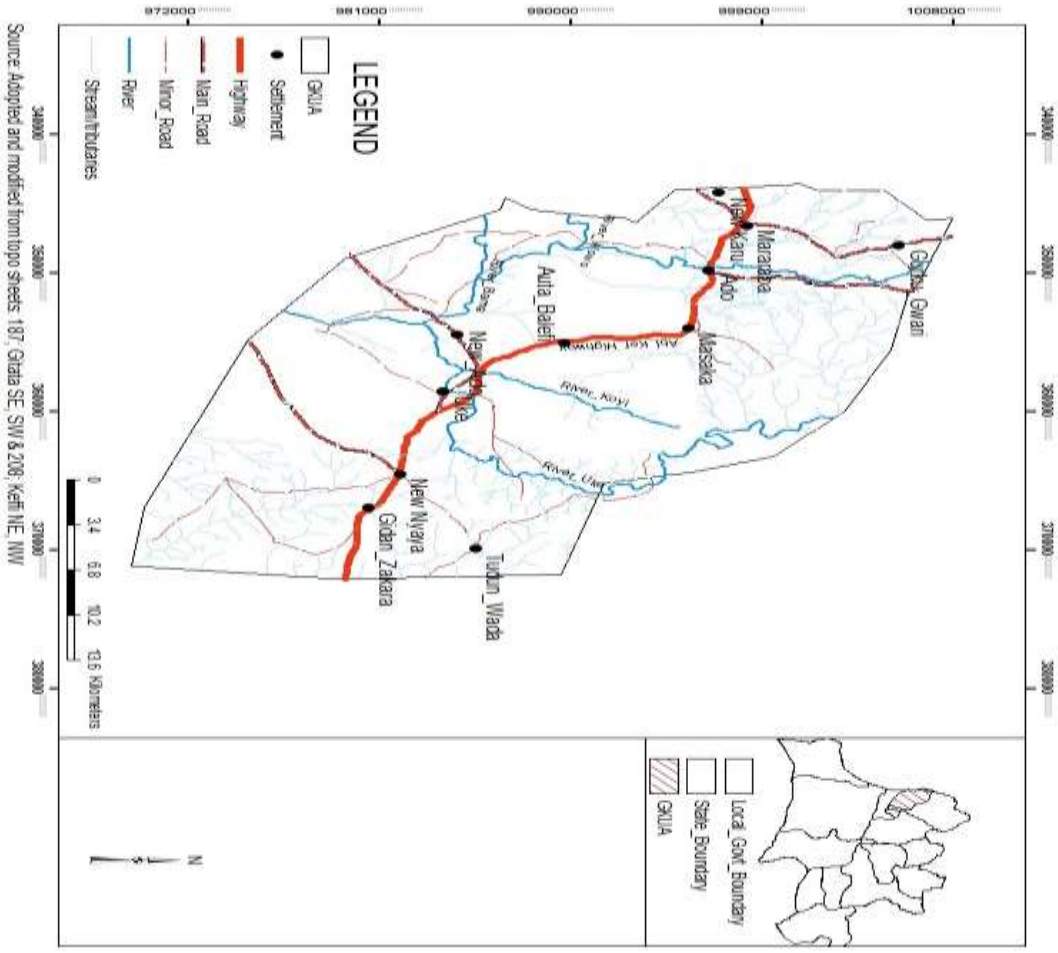

Figure 1: Showing Karu Study Areas.
Source: GIS Lab NSUK, 2018

Climate

Temperature and rainfall are two important climatic factors that determine the availability of water in Nigeria. The climate of the study area is characterized by two well defined seasons. These are the wet season and the dry season. The existence of these two seasons determines the regimes of both ground water and surface water.

The pattern of rainfall in the study area shows that the period, April-October has higher rainfall than November-March. These periods correspond to the wet and dry periods respectively. The main duration of rainy season is from 25th March to about 25th October. At this period, the rivers are filled up with water and the water table becomes

shallow. Most of the rivers flow very well and households obtain water without difficulties. On the other hand, during the dry season the flow of most river is low and some even dry up completely. Therefore, surface stream flows and ground water recharge condition in the area depend on the effectiveness of rainfall in terms of its frequency, duration and the distribution over time. Temperature follows the general two season's pattern of rainfall. The higher temperatures tend to occur at the end of the dry season (February-March) and the lowest temperature in the middle of the dry season (December – January) generally corresponding to the spring and autumn equinoxes. However, the mean monthly temperature on water resources in the extent to which it affects evaporation. The higher the temperature, the higher the rate of evaporation and consequently, this will result in loss of water through evaporation. From the forging, it is apparent that the effect of temperature on water resources is felt more in the area at the end of the dry season which records the highest temperature than in the rainy season.

Humidity on the other hand causes increase in cloud formation and decrease of the daily average sunshine hours. The variation of the relative humidity with time and over the area is governed by the prevailing dry North East winds and the humid South East winds. The effect of humidity on water resources is similar to those of temperature. Generally, these climate factors affect water resources and this on the other hand influences the use of water for various purpose. (Ayih, 2003)

Drainage and Cultural Composition

The study area is well drained by many small streams. The catchments areas of these streams are characterized by small sized watersheds, rugged topography and high runoff during the rainy season (Ayih, 2003). It is inhabited by people of diverse ethnic groups, the major ones being Hausa/Fulani, Yeskwa, Gwandara, Mada, Gwari, Eggon, Igbo, Idoma, Yoruba and a host of others, (Ayih, 2003).

Socio - Economic Activities

With its proximity to the federal Capital Territory most of the social amenities

Are provided for the betterment and enhancement of the standard of living. The industrial activities in the area increased when the federal capital was moved to Abuja. Agricultural production, however, is largely subsistent oriented. There are ginneries as well as numerous bock industries and small scale industries as Bakery, furniture making. Shopping and plazas and financial institution are scattered around the study area. Few food crops such as yams, maize, millet, are cultivated by peasant farmers to meet their personal needs and the left over taken to the market, (Ade, 2001).

Materials and Method

The population of this study is 256,800 and its focus only on the residence of Masaka area of Nasarawa State. The opinion survey of this population is sought because the study was centered on the impact of slums development on environment. To achieve the aim of this study, two different sources of data were employed. The sources of data employed are: Primary source of data and Secondary source of data.

Sample Techniques.

Based on the nature of population to be sample, a stratified random sample techniques was adopted. This is because the researcher have target on the resident of Masaka area of Nasarawa State, Nigeria. As such to ascertain the impact of slums development on environment in Masaka area of Nasarawa State. This stratified random involves dividing the Masaka into different zones known as street/ward. The high degree of selection involve, is meant to guarantee an even representation of all the strata in the sample as observed, stratified random sampling is very useful in ascertaining research situations, where the goals of generalizing on the population is not needed. Thus, the total of two hundred (200) questionnaires were randomly sampled among the population of about 256,800.

Method of data Analysis.

In analyzing the data used for this research, different statistical tools were used. These include percentages, Tables were also used as well as maps of various aspects of the study area. Percentages were the basic techniques of analyzing the figure obtained from the field. Other techniques as tables were also employed.

The Nature of Physical Environment of the Study Area

Table 1 shows that 18 % are of the view that the house and streets of the study area are poorly designed. 31 % are over-crowded in the house. 12.5 % have poor drainage and sewage disposal systems. 22.5 % are lacking inadequate social amenities while 15.5 % are staying in unhygienic environment. A ranking of the indices of slums revealed that overcrowding is the highest indicator, followed by inadequate social amenities. The least is poor sewage disposal. The study area is generally characterized by unplanned and poorly designed by unplanned and poorly designed house which are construction with poor and inferior building materials. Mostly are mud house and prefabricated structure. They are not well-spaced out. Often these are over-crowded with people. There are no well-planned streets. A time the paths are widen and pass through compounds. Very distinct in these areas are poor drainage and

sewage disposal systems. The paths are always waterlogged with waste drainage out from compounds. Only recently have landlords converted their pit toilets to water cistern.

Often social amenities such as pipe-borne water and electricity are inadequately provided. An over view of the entire area shows poor environmental sanitation. Most of the people living in slum are low income earners and unemployed. They therefore engage in taking alcoholics drinks of low quality and cheap prices. Such as (Kai-kai, palm-wine, Ekot, etc) always. Criminal always use such areas as hide outs since they are very difficult to trace with no address. The houses are irregularly numbered and so criminals cannot be easily traced there.

Political violence is always planned in these areas since the criminals become political thugs during elections. However, this does not mean that the entire inhabitants have socially undesirable characters. Many decent men and women also live there because of shortage of accommodation in the city center.

Table 1: Nature of Physical Environment and indices of slums.

Nature of Physical Environment	Frequency of Respondent	Percentage	Ranking of Indices of Slum
a. Poorly designed houses and streets	**36**	**18**	**3**
b. Over-crowding	**63**	**31.5**	**1**
c. Poor drainage and sewage disposal	**25**	**12.5**	**5**
d. Inadequate social amenities	**45**	**22.5**	**2**
e. Poor Environment sanitation	**31**	**15.5**	**4**
Total	**200**	**100**	**15**

***Source*:** Field Survey, 2018

Assessment of the Causes of Slums Development in Masaka

Table 2 shows that 31% attribute emergence of slum to high rate of rural-urban drift. 29.5 % attribute it to shortage of accommodation in the decent area of the city. 15.5 %

attribute slum to relatively low rent being for house in such areas. 6.5 % attribute it cheap cost of building houses in such areas while 17.5 % attribute slum to all these factors. As house rent continues to rise, the poor individuals who cannot afford it look for alternatives cheap house found in slums. Soon new but cheap settlement develops in such places. Again, owners of land find it cheap to erect poorly designed structure which they offer at relatively cheap rent to those who are in dire need of accommodation.

Table 2: Data on Factor Leading to Slum Development

Causes	Frequency of Respondents	Percentage (%)
(a) High rate of rural-Urban drift (migration)	62	31
(b) Shortage of accommodation In the decent areas of the City	59	29.5
(c) House rent is relatively low	31	15.
(d) Buildings are cheap to erect Here	13	6.5
(e) All of the above	35	17.5
Total	**200**	**100**

Source: Field Survey, 2018

Effects of Slum Development In Masaka Area of Nasarawa State, Nigeria.

The results of field survey revealed the following effects of slum development in Masaka:

- Many of the slums residents are involved in prostitution, drug trafficking hijacking.
- Slum residents are always involved in conflict (Quarrels, clashes, fighting) in the slums and squatter is a regular phenomenon. This creates noise and violence that disturb the city dwellers, especially the nearby residents.
- Increase incidence of communicable disease that may spread to city dwellers from the work place.
- Degradation of air quality with frequent slum fire.
- It provides hideouts for criminal. This is facilitated by the nature of the buildings with inadequate space which makes the environment cluster.

- Environmental pollution which it is the release of harmful substances into the environment, that is air, water or land in quantities or to the level that are harmful to animal and plants. The substances that cause pollution as a result of slum in the environment are called pollutants.

Depicting Various Aspects of Slums in the Study Area

Plate 1 show the different aspects of slums captured during the field survey.

Plate 2: Slums in Masaka Area of Nasaarawa State

Plate 3: Pit Latrine at Angwan Hausawa by Dantata life camp, Masaka Area

Conclusions

From the findings, the major causes of slums development are high rural- urban drift, shortage of accommodation in the town and low rent for slum houses. Thus, and influential factor perpetuating slums development in urban center is low income.
Government can only check slums development through poverty reduction schemes and monitoring the indiscriminating sale and resale of land in satellite areas.

Recommendations.

In the light of the findings from this study, the following measures are suggested as slum prevention strategies:

1. Government should initiate and support rural development programs that will not provide adequate social amenities but also employment opportunities in rural areas. This will reduce the rate of rural-urban drift that fuels the growth of slum in urban centers.
2. Government should enter into arrangement with private sector investors and embark on massive low cost housing schemes. This should be on owner occupier basis and the proceeds should be used in opening up and developing new areas.
3. Since it will difficult to dispossess the natives and the landlords their property for proper development, the government should improve the social amenities in existing slum through road network and construction of

drainages. The government should compensate those whose properties will be affected.

4. The government should enact laws that will give it monopoly of approving sale and re-sale of land. Such empower the government to approve only buildings designed to specification for construction in only approve areas.

Urban drift to peripheral land or neighborhood should be prevented by the government. Only approved areas should be allocated for settlements.

Dispossessing landlords of their slum house and relocating slum dwellers will be a very difficult strategy to prevent slum and so providing adequate social amenities and re- designed the areas for development will be effective strategies.

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