



RESIDENTS PERCEPTION AND RESPONSE TO URBAN ENVIRONMENTAL PROBLEMS IN JIMETA, YOLA NORTH LACAL GOVERNMENT, ADAMAWA STATE NIGERIA

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Abstract

This study investigates environmental problems in Jimeta Yola North Local Government area. The study made use of both primary and secondary data. The primary data came from responses to interview schedule in which 368 respondents were randomly selected for the study. The secondary data were extracted from both published and unpublished materials especially document from population commission and primary health care numbering in Jimeta Yola North Local Government Adamawa State. The study showed that over 50% of the respondents were of the opinion that flooding and erosion are the most prominent environmental problems in the study area, while less than 40% of the respondents were of the opinion that deforestation and pollution are the prominent environmental problem in the study area. The study also shows management strategy that can be adopted in the area. Over 60% of the respondents were of the opinion that proper drainage and incineration are the best management strategy that can be adopted to manage the environmental problems in the area, while less than 40% of the respondents were of the opinion that other forms of management strategy such as construction of good roads and maintenance of the existing infrastructure can be adopted to manage the environmental problems in the study area. Other health problem prevalent in the study area includes asthma, cholera, malaria and meningitis. Based on the findings of the research, the following recommendations are put forward: Government should encourage and support inhabitants in managing and controlling their environment for health and preserved future environment. Government should look at the environmental problems and organize programmers' that would bring about enlightenment to inhabitants and to suggest and implement strategies that will curtail the rate at which environmental hazards are degrading and polluting the environment which leads to havoc at various scales.

Key words: Residents, Perception, Urban, Environmental problems

Introduction

The word urbanization refers to an increase in the proportion of national and regional population living in cities (Abbott, 2003). The world population is

more than 6 billion people and about 3 billion (50 percent) live in urban areas (UNCHS, 2007). Current estimates show that by 2030, about 61 percent of the total population in the world will be living in





cities; and that all the world's increase in population in the next three decades will occur in low and middle income countries (Peters, 2000:2; UNFPA, 2007). Another investigation viewed that the global trend of urbanization is increasing and as of 2008, more than half of the world population reside in urban areas and it was projected that the figure will reach 70% in 2050 (United Nation, 2008). In recent time, current trends suggested that Africa's rate of urbanization is two times faster than Latin America and Asia (Tannerfeldt, 1995; UNCHS, 2007), and that is a major public health challenge in the twenty-first century (Kjellstrom and Mercado, 2008). Several environmental problems were identified by Mba et al (2004) in Nigeria, include; these ecological problems, poaching and habitat loss, increasing desertification and soil erosion. These are subdivided further into pollution, deforestation, global warming and slum development among others. Nigeria's coastal regions are currently experiencing widespread contamination from petroleum exploration (gas flaring, oil spillage) while the general poor living conditions in urban areas in the country constitutes an affront to human dignity. However, Mba et al (eds.) (2004) were of the opinion that pollution from oil activities should probably be given only a moderate priority in the light of Nigeria's other severe environmental problems. They identified deforestation resulting from road projects, subsistence activities, logging, mining, and dam construction as constituting the threat environmental greatest to sustainability in the country. For instance, several studies (Rashid, 1982; NEST,

1991; World Bank, 1992; Anih, 2004; Muoghalu & Okonkwo, 2004; Ijioma & Agaze, 2004; Nduka, 2004; Mba, 2004; Bulama, 2005; Ojeshina, 2005; UN-HABITAT, 2005b) have identified many of the environmental problems as having adverse socio-economic ecological implications. A majority of these problems, it is argued are traceable to a number of factors which include the colonial antecedent of most Nigerian cities (Ogbazi, 1992: 13; Ikya, 1993), the high rate of urbanization (NEEDS, 2004), the bad psychological orientation of urban residents on the environment as well as poor environmental management practices (Meale, 1991; Agukoronye, 2004).

Methodology and Study Area Method

The data for the study were generated from both primary and secondary sources. First reconnaissance survey was conducted to familiarize the researcher with the study area. Data from primary sources include observation and information from interview schedule. Secondary data were extracted from published and unpublished materials especially data from National Population Commission (NPC) and Primary health care numbering in Jimeta.

Sampling frame and size

According to primary health care numbering (2015), there are eleven wards in Jimeta, table 1. Out of the eleven wards, three wards were selected using random sampling technique Table 2. Heads of households constitutes the population for this study. In all the sampled wards, two





percent (2%) of the heads of households were chosen as a sample Table 2. A total of 368 respondents were selected in all the sampled wards. A total of 50 respondents were interviewed in Doubeli, 245 in Karewa and 73 in Luggere respectively.

Random sampling using the balloting method was adopted in selecting the wards and the number of the respondents in the study area. All heads of households in the three participating wards in Jimeta constitute the sample population within the sampling units. 2% of the heads of households were used as a sample in each of the words.

Sampling Techniques

Table 1: Listof wards and number of houses within Jimeta

S/N	Wards	Number of households	
1.	Ajiya	3172	
2.	Alkalawa	2421	
3.	Doubeli	2533	
4.	Gwadabawa	3880	
5.	Jambutu	8505	
6.	Karewa	12,262	
7.	Limawa	3861	
8.	Lugere	3669	
9.	Nassarawa	9820	
10.	Rumde	2742	
11.	Yelwa	1888	

Source: Primary Health Care Department Jimeta Household Enumeration (2014)

Table 2: Number of selected wards and the percentages of sampled houses

S/N	Wards	Number of households	Number of sample at 2%
1.	Doubeli	2533	50
2.	Karewa	12,262	245
3.	Luggere	3669	73
	Total	18464	368

Data Analysis

The data generated from this study was analyzed using descriptive statistical analysis mainly tables, means and percentages.

Study Area

Yola North is the administrative capital of Adamawa state situated in North-East Nigeria. It is among the 21 local government areas in Adamawa state.

It lies between latitude 9° 10" to 9° 19" N





and longitude 12° 22" to 12° 28" E with an estimated landmass of about 39,742.12 sq km fig.1 and has a population of 3.4 million (Nigerian National Population Commission, 2006).

The climate of Yola can be characterized as tropical climate marked by dry and rainy seasons. The dry season usually starts by October and ends in March while the rainy season starts around April and ends around October.

The temperature is generally high throughout the year. Records indicate that temperature drops to about 28°C during the rainy and hamartan season and rises to 38°C during hot seasons. The total amount of rainfall received in the study area annually is about 980mm while mean annual temperature is about 36°C. The

hottest months are March and April while coldest months are December and January. The average daily sunshine is about 8 to 9 hours.

The study area is located within the Benue valley of Niger-Benue trough region of Nigeria. The geology of the area is the oldest cretaceous sedimentary formation consisting of some alluvial deposits which overlie the cretaceous deposits. The second river in Yola after the river Benue is the Chouchi River which separate Yola north from Yola South, located at the bank of river Benue, most of the settlement in the northern and eastern part of Yola are in direct contact with the water. The River Benue bank provides an expanse of floodable land for the dry season farming in the study area.

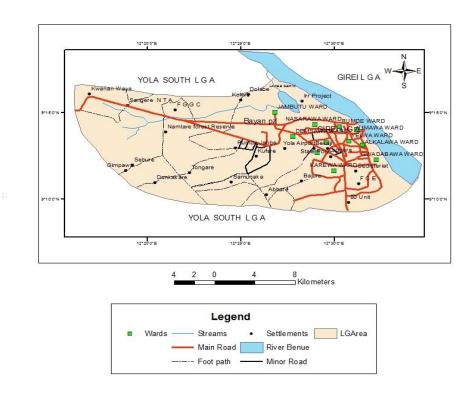


Figure 1: Map of the study area





There are two vegetation zone Adamawa state, the sub-Sudan and the northern guinea savanna zones. The sub-Sudan is marked by short tree commonly found in the northern part of the state; the vegetation is marked with thick tall grasses and tree. This type cover greater part of the state within which Jimeta falls. The of Jimeta vegetation is secondary vegetation characterized by scattered trees, shrubs and tall grasses and most of the trees are deciduous in nature shading their leaves during the cool dry harmattan season. However, Yola has characteristics of a typical urban Centre, with clear vegetation and reclaimed swampy areas. An evidence of environmental impact is man's impact on the environment in the city is so great and very glaring as can be seen from the cities present landscape, due to man's action through construction, grazing, deforestation etc.

Results and Discussions

Interviews were conducted with heads of households in the three sample wards to ascertain the environmental problems and management strategies in Jimeta. The three sampled ward are Doubeli, Karewa and Luggere. The data collected were presented and discussed in this section.

Table 3 shows the environmental problems prominent in the sampled wards. The study shows that over 50% of the respondents were of the opinion that flooding and are the prominent erosion most environmental problems in the study area, while less than 40% of the respondents were of the opinion that deforestation and pollution are the prominent environmental problems in the area. The reason for flooding and erosion being the prominent environmental problems in the study area is because Jimeta is located along Benue troughs which make the area liable to flooding and erosion.

Table 3: Environmental problems prominent in the Study areas

Problems	Doubeli ward	Karewa ward	Luggere ward	Total	Percentage %
Flooding	10	2	13	25	31.25
Deforestation	12	5	4	21	26.25
Erosion	14	5	3	22	27.5
Pollution	4	3	5	12	15
Total	40	15	25	80	100

Source: Field Survey, 2015





 Table 4: Management strategies to the environmental problems

Response	Doubeli ward	Karewa ward	Luggere ward	Total	Percentage %
Proper	18	6	7	28	35
drainage					
Land fills	10	7	3	20	25
Incineration	8	5	4	17	27.5
Others	4	7	1	12	15
Total	40	25	15	80	100

Source: Field Survey, 2015

Table 5: Health problems prominent in the Study areas

Diseases	Doubeli ward	Karewa ward	Luggere ward	Total	Percentage %
Asthma	6	2	5	13	16.25
Cholera	10	-	7	19	23.75
Malaria	12	3	9	32	40
Meningitis	4	1	3	6	7.5
Others	8	4	6	10	12.5
Total	40	10	30	80	100

Source: Field Survey, 2015

Table 4 shows the management strategies that can be adopted to mitigate such problems in the study area. The study shows that over 60% of the respondents were of the opinion that proper drainage and incineration are the best management strategy that can be adopted to manage the environmental problems in the area, while less than 40% of the respondents were of the opinion that landfills and other forms of management strategy such as construction good roads of and maintenance of the existing infrastructure adopted to manage the can environmental problems in the study area.

The Table above shows health problems prominent in the study area. The table shows that over 60% of the respondents were of the opinion that malaria and cholera are the most prominent health problems in the study area while less than 40% of the respondents were of the opinion that asthma, meningitis, and other diseases are the prominent health problems in the study area. The reason for malaria and cholera to be the most prominent health problem in the area is because Jimeta as a settlement is located along the bank of river Benue with very low altitude which makes the area to be hot coupled with the water which provide breeding





ground for mosquitoes as a causative agents of malaria as well as breeding of flies which transmit cholera. Transportation problems also exist in the study area in that over 60% of the respondents were of the opinion that they do experience transportation problems in the study area and that this transportation problems affect a lots of activities in the study area.

The respondents were further asked whether or not government have been putting in effort to tackle some of the environmental problems in the area? Over 60% of the respondents were of the view that government did not show any concern regarding the environmental problems in the area, while less than 40% of the respondents were of the view that government is trying its best to ensure that the environmental problems being experienced in the study area are tackled

Recommendation

Based on the findings of the research, the following recommendations are put forward:

- Government should encourage and support inhabitants in managing and controlling their environment for health and preserved future environment.
- Government should look at the environmental problems and organize programmers' that would about enlightenment to bring inhabitants and to suggest and implement strategies that will curtail the rate at which environmental hazards are

- degrading and polluting the environment which leads to havoc at various scales.
- Construction of good standards roads and drainages should be embarked upon to control transportation, erosion, and flooding problems in the study area.
- Proper solid waste disposal strategies should be applied so as to control indiscriminate disposal of waste that leads to blockage of drainages that leads to flooding and incineration of open dumps that lead to air pollution.

Conclusion

The study concludes that based on urban growth and population expansion in the area due to high fertility, low mortality and increase in immigration, the study area has been devilled with environmental problems such as flooding, deforestation, erosion and pollution. The participation of the inhabitants and the government in managing the urban environment can be said to be little or does not exist at all within the study area.

References

Abbott. C., (2003) "Urbanization"

Dictionary of American History,

the gale group inc.

Encyclopia.com.

Agukoronye, O. C. (2004). "Urban Poverty and Environmental Degradation in Nigerian Cities" in H.C.Mba et al (eds) Management of Environmental Problems and





- Hazards in Nigeria, Hants: Ashgate Publishing Ltd , 161-170.
- Anih, S. C. (2004). "Effective Survival measures against Natural hazards in settled areas" in H.C.Mba et al (eds) Ibid 29-40.
- Bulama, M. (2005). "The Nigerian Built Environment Challenges' in A.S.Alabi and Sam Epelle (eds) Proceedings of the first National Built Environment Summit on Built Environment Disasters: For National Action Plan Nigerian Institute of International Affairs 8th-10th February, Lagos: Nigerian Institute of Architects, 185-196.
- Ijioma, M. A. and Agaze, U. (2004). "Erosion Phenomenon and Development Dynamics in SouthEastern Nigeria" in H.C.Mba et al (eds) Ibid pp 1-12.
- Ikya, S. G. (1993). Urban Passenger
 Transport in Nigeria, Ibadan:
 Heinemann Books Plc.
 International Monetary Fund (IMF)
 (September, 2006). Finance and
 Development (F&D), BPA
 International, Washington, DC.
- Kjellstrom, T. & Mercado, S. (2008). "Towards Action on Social Determinants For Health Equity in Urban Settings" Environment and Urbanization, Vol.20 (2)551-574.
- Mba, H.C; Ude, B.C; Ume, L.C and Uchegbu, B. (eds) (2004)

 Management of
- Environmental Problems and Hazards in Nigeria, Hants: Ashgate Publishing Ltd
- Meale, A. (1991). "Sustainable Development: The view from

- Government" British Geological Services, Earthwise Journal issue 13 pp 4-5.
- Muoghalu, L. N. & Okonkwo, A. U. (2004). "Urban Environmental Factors of Flooding: A Preliminary Enquiry of Awka Capital Territory of Anambra State: The place of Environmental Knowledge for survival in H.C.Mba et al (eds) Ibid pp 13-28.
- Nduka, O. (2004). "Air Pollution: A threat to Human Survival" in H.C.Mba et al (eds) Ibid. 73-79. National Economic Empowerment and Development Strategy (NEEDS) (2004). Abuja: National Planning Commission.
- National Economic Empowerment and Development Strategy (NEEDS) (2004). Abuja: National Planning Commission.
- Nigeria Environmental Study/Action Team (NEST) (1991). Nigeria's Threaten Environment: A National Profile, Ibadan: Interface Printers Ltd.
- Ogbazi, J. (1992). "Historical Development of Urban Planning in Nigeria" in H.Chike Mba et al (eds) Principles and Practice of Urban and Regional Planning in Nigeria, Awka: Mekslink publishers (Nig) pp 12-19.
- Ojeshina, A. (2005). "Paper presented at the Built Environment Summit" in A.S. Alabi and A.O.SamEpelle (eds) Ibid.
- Peters, William (ed.) (2000). Green Cities-Urban Environmental Solutions, Global Issues-An Electronic





- Journal of the U.S Department of State, March 5(1) 1-39.
- Rashid, H. (1982). "Urban Flood problem in Benin City- Nigeria: Natural or Man-made?" Malaysian Journal of Tropical Geography vol.6 pp17-30.
- Tannerfeldt, G. (1995). Towards An Urban World: Urbanization and Development
- Assistance. Stockholm: Swedish International Development Agency.
- UNCHS (2007). Urbanization: A Turning Point in History, Global Report on Urbanization www.unhabitat.org.

- UNFPA (2007). State of the World Population 2007, Unleashing the Potential of Urban Growth, New York: United Nations Population Fund.
- UN-HABITAT (2005). "Air Quality Monitoring in Africa" Urban Environment, Kenya: UN Urban Environment Section.
- World Bank (1992). Environment and Development, Washington DC: World Bank