

CAUSES AND CONSEQUENCES OF OPEN SPACE HUMAN DEFECATION IN METROPOLITAN KANO

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ABSTRACT

The paper examines the eye sore issues of indiscriminate disposal of Human waste openly along the streets, road sides, corner spaces, and beside the city town walls. Observation, interviews and questionnaires administration were employed to identify the areas, magnitude, responses, and measures that may bring a lasting solution to such ugly trends. The absence of public and private toilets and related facilities are the major causative agents for people to ease themselves openly. The study revealed that the society is facing danger of out breaks of epidemics such as cholera and other communicable diseases as people sell and eat at or near the vicinity of human waste openly existing without any barrier separating the two. Responses unanimously declared the lack of public convenience facilities as the cause. Poverty and ignorance is the main fulcrum that maintained the perpetuity of the menace which is plausibly assuming cultural trends in the society area. The few existing commercial laundries and toilets are located at some places that common man cannot patronise. The study suggests the establishment of mobile as well as standard public conveniences in areas of high density and large concentration of people at affordable charges, especially for the low income earners.

KEYWORDS: *Communicable disease, Environment, Human waste, Low income earners and Public convenience.*

INTRODUCTION

Culture is an integrated pattern of human knowledge, belief, and behaviour that depends upon the capacity for symbolic thought and social learning (Yusuf 2001, Adamu 1999 and Paden 1973). It can also mean the sets of shared **attitudes**, values, goals, and practices that characterize an institution, organization or group. Any of the social forms or beliefs of a group may influence or in turn be influenced by heterogeneity of the society, changes in the socio-economic activities and imported technology (Latiri 2001). Public convenience means any set up site, location or structure made purposely as toilet, lavatory, bath room or restroom by private or and public institution (i.e. the government) with adequate facilities that ensure decency, safety and comfort. It is a point that distinguishes man as intellectual animal from other living creatures as far as answering the 'call of nature'. Be it as it may, with such provision or not, it is a necessity of life that must be discharged as and when due. Public convenience is treated as one of the basic necessities of life that do not attract any charging, fee or toll that is the Hausa name *Bahaya* (no renting). Pollution (from the waste) affects the quality of environment especially the air that supports our life which creates bad odours and spread diseases. In a rapidly urbanising city like Kano, there is greater need to have more concern for the environment especially within the metropolitan city that serves both administrative and commercial function. The effect of such neglect may spell doom to the populace and the daily guests that may transmit the problems to their various destinations. The rate of peoples' movement is accelerated by

serious economic hardship that beggars can be seen on the streets in sun and rain looking for what to eat. Poverty is a growing problem worldwide (the economic recession syndrome) both in the rural and urban areas and impacts negatively on human settlements. At least 600 million urban dwellers in Africa, Asia and Latin America live in "life-and-health threatening homes" and neighbourhoods because of the very poor housing and living conditions and the lack of adequate provision for sanitation, drainage, removal of garbage and health care. During the 19th century, cholera spread repeatedly from its original reservoir or source in the Ganges delta in India to the rest of the world, before receding to South Asia. Six pandemics were recorded that killed millions of people across Europe, Africa and the Americas. The seventh pandemic, which is still ongoing, started in 1961 in South Asia, reached Africa in 1971 and the Americas in 1991. The disease is now considered to be endemic in many countries and the pathogen causing cholera cannot currently be eliminated from the environment due to low level of hygiene and malnutrition (WHO 2003).

Human waste, if not adequately managed, affects the air through the odour, harbour insects such as flies to transmit diseases such as cholera. Individuals with lower immunity, such as malnourished children or people living with HIV, are at greater risk of death if infected by cholera. Recklessly disposed human waste affects the aesthetic beauty of the surrounding space. Defecation openly along the streets is on the increase in Kano and the worse part of the problem is the rate and magnitude of such ugly trend and its extension from nocturnal to day-light affairs without shame.

Do we really have adequate provisions of sanitary facilities? Do we need enforcement? Are people not aware of the danger that may befall the society if not done in right places if at all such facilities exist? We need to find answers to those questions and proffer tenable solution to the eyesore attitudes so that visitors may not rate the people as mere beasts due to such behaviour. The study is aimed at evaluating the availability of Public convenience vis-à-vis the rampant proliferation of human waste within the metropolis. In order to achieve this central aim, the following objectives are to be used to conduct the research.

- a. To examine the rate of unhygienic human waste disposal in the study area.
- b. To identify the availability of the public conveniences to determine its adequacy within the metropolis.
- c. To determine the cause(s) of open street discharge of human waste.
- d. To make recommendations based on the findings with a view to head toward solving the perpetuated problem.

THE STUDY AREA

The study area comprises of Gwale, Dala, Fagge, Nassarawa, Municipal, Tarauni and some part of Kumbotso and Ungoggo LGA's. The area has an approximate location of 12° 04', 13.11''N and 8° 37' 40.99''E (Figure 1). It has a population of mainly Hausa Fulani Muslims of Islamic faith. Other ethnic minorities such as Igbos, yorubas and small tribes of both Muslims and Christian faiths are also living especially in Fagge and Nassarawa LGA's. Kano is the largest city in the Sudan Region of Nigeria. The provisional population figure from the 2006 census for Kano metropolis is approximately 2,828,861 i.e. (2.8) millions people. According to the United Nations about 60% of urban population growth in developing countries is due to natural increase while 40% results from migration into the cities (UN 2003). Growth of metropolitan Kano can be attributed to many factors but prominent ones to be cited includes the availability of potential markets, Institutions and jobs opportunities that keep attracting people from within and outside Kano state. It may not be an exaggeration to state that metropolis has been completely urbanised. The study area comprises of all the three stratum of settlement i.e. low, medium and high density.

CONCENTUAL ISSUES AND LITERATURE REVIEW

For low- and middle-income countries the rate of growth in the decades of globalization from 1980 to 2000 amounted to less than half of what it was during the previous two decades from 1960 to 1980. Although this association of slow economic development and the global implementation of neoliberal economic policies is

not necessarily strict evidence of cause and effect, it contributes to the dissatisfaction of those who had hoped globalization would deliver more growth. A slowdown in the progress and development as indicators of social well-being, such as spread of disease, deteriorating environmental quality, life expectancy, infant and child mortality, and literacy, also has lowered expectations about the benefits of globalization. Moreover, poorly managed cities like Kano have negative impacts on environmental conditions. In most countries in Africa, Asia and Latin America, the absolute level of resources available to local governments is seldom adequate to provide even the most minimal level of services.

Rural urban drift is going at alarming rate as the net poverty forces people out of their villages to cities in search of greener pastures (Lambu 2009). Majority of the present day migrations are irrational since the migrants are not sure of where they are going, how and what kind of life to live (Lambu 2003). The condition of living in the urban environment is calling for serious intervention before pollution, congestion and vices take control (Lambu 2003).

The growth of Kano cannot be considered as development far say until when there are distributive justice between the riches and less privileged citizens. Similarly the safety, comfort and aesthetic beauty of the environment need to be given adequate attention due to recent climatic changes and the consequent phenomena surrounding it. Increase in temperature accelerates growth of microbes and other insect vectors like flies hence unhygienic waste disposal means more dangers to the society. Recent studies indicate that global warming might create a favourable environment for Vibrio cholerae and increases the incidence of the disease in vulnerable areas (WHO 2006). V. cholerae O1 causes the majority of outbreaks worldwide. The sero group O139, first identified in Bangladesh in 1992, possesses the same virulence factors as O1, and creates a similar clinical picture. Currently, the presence of O139 has been detected only in South-East and East Asia, but it is still unclear whether V. cholerae O139 will extend to other regions such as Africa. Careful epidemiological monitoring of the situation is recommended and should be reinforced. Good and healthy environment can be a measure of real development. Provision of basic infrastructures is as basic as water and electricity supply.

Cases of epidemic outbreaks have been recorded every year such as 1995 when Nigerians were denied entry into Kingdom of Saudi Arabia for pilgrimage. Kano in particular is having the highest occurrences of Cholera epidemics (due to its high population and improper waste disposal) in the past years and occurs in almost every year.

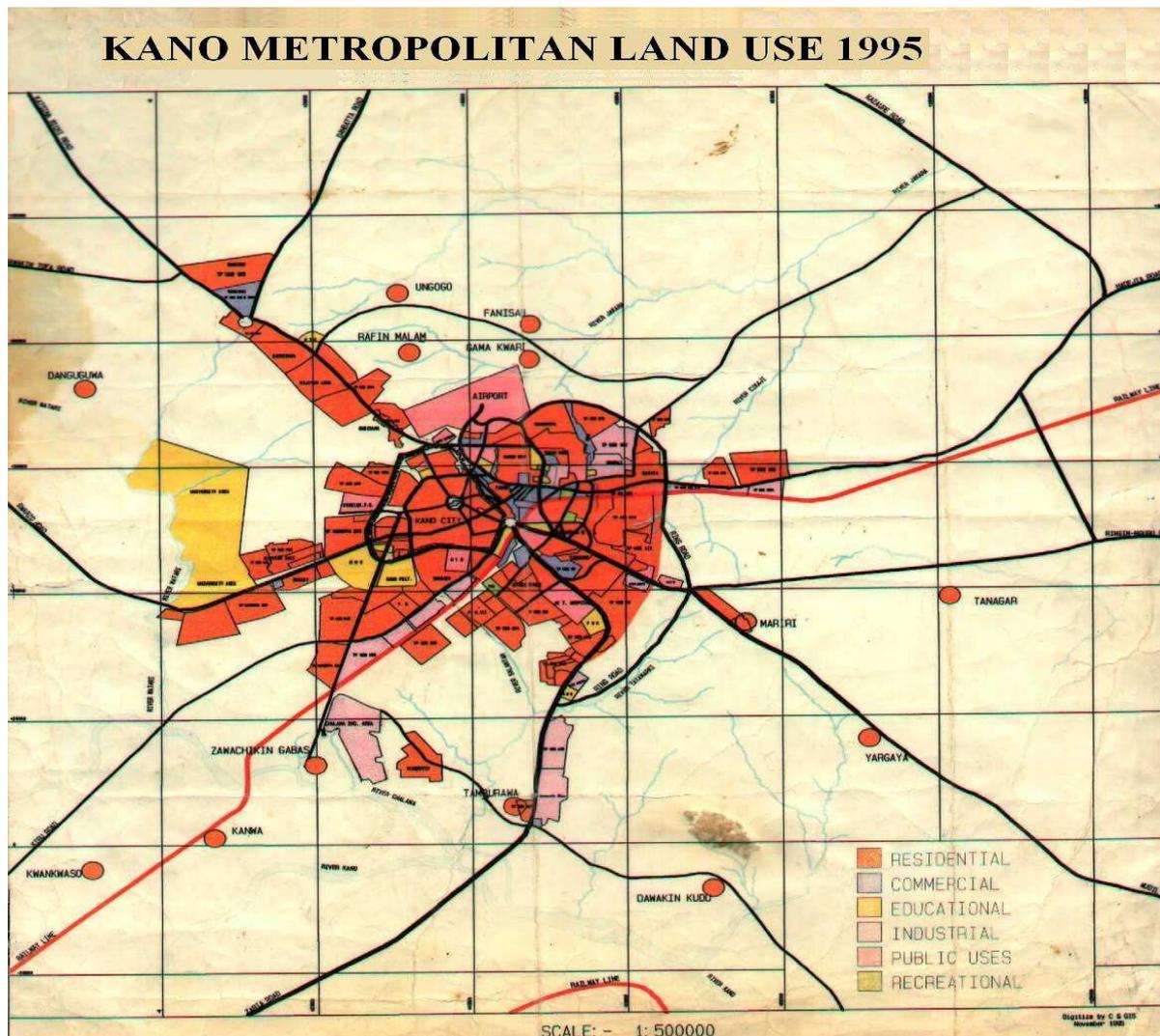


FIGURE 1: THE STUDY AREA
Source: Field work 2010

Cholera is mainly transmitted through contaminated water and food and is closely linked to inadequate environmental management. The absence or shortage of safe water and sufficient sanitation combined with a generally poor environmental status are the main causes of spread of the disease. Typical at-risk areas include peri-urban slums e.g. Kiosks and illegal erections at road sides, where basic infrastructure is not available, as well as camps for internally displaced people, refugees or homeless beggars where minimum requirements of clean water and sanitation are not met. Since 2005, the re-emergence of cholera has been noted in parallel with the ever-increasing size of vulnerable populations living in unsanitary conditions. Cholera remains a global threat to public health and one of the key indicators of social under development. While the disease is no longer an issue in countries where minimum hygiene standards are met, it remains a threat in almost every developing country like Nigeria despite enormous resources to prevent it. The

number of cholera cases reported to World Health Organization during 2006 rose dramatically, reaching the level of the late 1990s. A total of 236 896 cases were notified from 52 countries, including 6311 deaths, an overall increase of 79% compared with the number of cases reported in 2005 (WHO 2009). An attempt at solving the overall problem of municipal solid waste is becoming multi-faceted; many organizations, including the United Nations (UN) and various non-governmental organizations (NGOs) advocate an integrated approach to municipal solid waste management by identifying key stakeholders, identifying specific issues which comprise important "stumbling blocks", and making recommendations based on appropriate technologies, local information, and pressing human and environmental health concerns (UNEP 1996). There is need to understand the various components of the environment where and, what interactions are taking place and how are they responding to one another over time?

MATERIALS AND METHODS

The study utilized survey, observation, interviews and questionnaires and were proved successful toward generation of data. Secondary data from the records kept by Health institutions, libraries etc serve as guide to the research.

Data collection

The primary data include survey of public conveniences to find the total number within the area. Major streets such as Maiduguri road, Murtala Muhd way, Katsina road, Aminu Kano way and Ibrahim Taiwo road formed the sampling frame in this study. The reason is quite simple; these roads link the entire metropolitan Kano and serve the nerve center of socio economics activities of the city.

Observation was made on major public places especially by the road sides and some hide outs along major roads like Maiduguri road. It was discovered that from Gyadi-Gyadi round about to Hotoro Eastern bye-pass, there are only 3 public conveniences. People are seen openly defecating at the sides of roads, trees or any cover. Some agree to respond while many shun away due to the fact that they know it is an act of indiscipline. The various responses attached the acts of open space human waste disposal to inadequate public conveniences as in table 3 and 4 below.

Stratified Random Sampling method is was adopted because the population embraces a number of distinct categories, the frame can be organized by these categories into separate "strata" for instance Maiduguri road has unique characteristics that distinguish it from Ibrahim Taiwo road. Each stratum is then sampled as an independent sub-population, out of which individual elements were randomly selected. There are several potential benefits to stratified sampling. First, dividing the population into distinct, independent strata can enable this study to draw inferences about specific subgroups that

may be lost in a more generalized random sample. Also utilizing a stratified sampling method can lead to more efficient statistical estimates (provided that strata are selected based upon relevance to the criterion in question, instead of availability of the samples). It is important to note that even if a stratified sampling approach does not lead to increased statistical efficiency; such a tactic will not result in less efficiency than would simple random sampling, provided that each stratum is proportional to the group's size in the population. Third, it is sometimes the case that data are more readily available for individual, pre-existing strata within a population than for the overall population; in such cases, using a stratified sampling approach may be more convenient than aggregating data across groups (though this may potentially be at odds with the previously noted importance of utilizing criterion-relevant strata). Finally, since each stratum is treated as an independent population, different sampling approaches can be applied to different strata, potentially enabling researchers to use the approach best suited (or most cost-effective) for each identified subgroup within the population. Non response is particularly a problem in such study that nobody wants to be identified as part of the sampling element. One of the main reasons for this could be that people may hold a notion that they constitute the problem, hence may try to either remain neutral or even refuse to react

RESULTS AND DISCUSSION

Findings from the study were presented using graphs and tables as well as pictures in order to give clearer view of the situation. The results obtain from the study are those on the number of existing public convenience along a given street, the approximate distance of the street

Survey of public conviniences along major roads in the study area

S/No	Major street	No of pub.conviniences
1	Maiduguri Road	3
2	Zaria Road	2
3	Hadejia Road	1
4	Katsina Road	2
5	Gwarzo Road	2

Availability of public convenience both public and private within the study area is grossly inadequate. Major areas of public convergence such as stations, major inter state roads and market areas are closely studied. Maiduguri road starting from Gyadi-gyadi to Hotoro round-about has only 3 public convenience houses privately owned. Similarly, Zaria road from Gyadi gyadi to Naibawa round-bout there are two public

conveniences. Hadejia road from Bata to Yankaba only one public convenience is identified. Katsina and Gwarzo roads are having two public conveniences each. It is worthy of noting that each road has distance of more than 5km there fore along all these streets public convenience is absence within 2km distances. In other word, one has to trek or bode a transport for more than 2km to answer the call of nature.

Survey of public conveniences at some major stations and market places

S/No	Place	No. of pub. Conv.
1	Sabon gari market	4
2	Kano line station	1
3	Civic center	Nil

From the finding above, the distribution of public toilets can be described as inadequate looking at the densely market like Sabon Gari where only 4 facilities are available and in Kano line only one

public convenience is provided and non at all in civic centre. People described the situation as unfortunate where strangers are made to adopt strange behaviours that reduces man to a beast

Public responses on the affordability and proximity of public conviniences

Type of response	Percentage
The price is okay	23.1
The price is too much	41.3
The distribution is fair	11.0
The distribution is not fair	10.1
The pub.conviniences are not well maintained	2.2
Maintenance is okay but problem of distance	12.3

Responses from those interviewed reveals the fact that major problem associated with public conveniences is the issue of price. About N20 to N30 are collected at entrances which over 41% voted as hitches toward patronising the service of the facilities. According to one respondent he need to visits bath room and toilet at least 6 or 7 times a day and he further lamented that ' I earn N300 daily so N150 is needed for my bath, urination and defecation having a balance of N150 for feeding and other family matters like clothing and medical bills. Live me alone this is not within my reach' he concluded.

tidy enough for public utility due to bad smell and unhygienic condition of the places.

It can be concluded that absence or inadequacy of such important facilities is affecting the entire landscapes of the area. The younger generations may likely see and adopt the attitude as their cultural way of living since the behaviour is acquired from childhood. The entire areas is at prone of epidemic outbreak of diseases due to the closer consanguinity of human waste, flies and foods. The entire air is polluted and hence affect environmental comport and healthier breathing habit.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The study discovered gross inadequate state of public conveniences in the study area. There is serious neglect on the side of government and private sector toward provision of such facilities. Poverty is affecting the patronage of the few available facilities. Problem of water shortage affect the level of cleanliness of public conveniences hence many describe the places not

The study calls on both Government and the general public to intensify effort toward the provision of public toilets, bath rooms and laundries at the nooks and corners of the metropolis. The charges should be considerate enough to allow the low income earners to patronize. Public enlightenment is dearly needed to make the public understand the danger behind the proliferation of human waste. Similarly people should be made to understand the main cause of cholera and other contagious diseases so as to be guided against the ugly trends.

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