A Recipe for Disaster: An Assessment of Environmental Sanitation Situation in Nigeria

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Abstract- This paper assessed the state of environmental sanitation in Nigeria. Conceptually, it discussed the roles of legislation, provision of facilities and services and promotion of environmentally friendly behaviour in achieving adequate environmental sanitation. The paper expressed the interface between the three. The paper also traced the interventions of the government in environmental sanitation from the colonial to the post-colonial era. It went further to assess the environmental health effects of the environmental sanitation strategy employed by the government at the federal and the state level. The paper concluded that country's environmental sanitation strategy lacked the necessary ingredients to achieve a healthy environment. It recommended the promulgation of environmental sanitation laws, change in environmental behaviour and provision of facilities and services as key factors in improving the environmental sanitation condition in the country.

Keywords- environmental sanitation, environment, exercise, facilities, Africa, Nigeria

I. INTRODUCTION

Environmental sanitation is one of the widely known tools with significant contributions towards national development across the globe. It refers to efforts or activities aimed at developing and maintaining a clean, safe and pleasant physical environment in all human settlements [1; 2]. It includes the control of aspects of waste that may lead to the transmission of diseases. This encompasses not just excreta disposal and management, but also solid waste management, drainage and hygiene behaviour within living environments. Residents in cities with access to proper environmental sanitation have improved living conditions, enhanced health and well-being and economic productivity [3; 4].

The concept of environmental sanitation entails the control of water supplies, excreta disposal, waste water disposal, refuse disposal, vectors of disease, housing conditions, food supplies and the safety of the working environment [5; 6]. In a simple parlance, environmental sanitation is the sum total of activities embarked upon by people to promote healthy living conditions [7; 8]. Mmom and Mmom [9] opined that effective environmental sanitation in cities is a function of positive environmental behaviour and availability of facilities and services. This view is complimented by Daramola [10], Olowoporoku [1] and Afon and Faniran [7] that availability of adequate environmental sanitation facilities and enabling environmental sanitation policies positively influence the achievement of a healthy living environment.

The quality of environment is essential for health of both adults and children. WHO [11] affirmed that more than 2.4 billion people in the world currently lack access to adequate environmental sanitation and are forced to dispose their excreta in unimproved and unsanitary conditions. Majority of these people are found in Africa and other developing countries of the world. Ekong [12] opined that environmental sanitation problems are responsible for about 30% of the burden of diseases in sub-Saharan Africa. Environmental sanitation problems are behavioural man-made environmental hazards which emanates from living environment. Disaster from environmental sanitation problems affects resident's health, structure, environmental resources and national and household economic assets. These problems are made more acute in these parts of the world as a result of rapid urbanization and uncontrolled population growth, without commensurate expansion in sanitary facilities.

Environmental conditions are appalling in many Nigerian cities [13]. The deplorable and dehumanizing conditions of physical environment calls for sober reflections from all stakeholders [12]. The impacts of poor environmental sanitation situations are severe on Nigeria thus hindering and undermining its development [14]. In Nigeria, adequate environmental sanitation has not been strictly adhered to. Its practices in the country are characterized by lack of basic amenities and poor sanitation behaviour [15; 16; 17] thus having serious consequences for health on citizens. The living environment in the country is well polluted owing to social misdemeanour of citizens. These scenarios have in turn become a recipe for disaster in urban centres [17; 18].

II. THE DEFECTIVE LOOP IN ENVIRONMENTAL SANITATION IN NIGERIA

The causes and pressures of any of today's environmental problems can be traced back, directly or indirectly, to the lifestyles, choices, values and behaviours of people [19]. A meticulous examination of the environmental state of Nigerian cities indicates that environmental sanitation has remained consistently poor for a long time. This has consequently led to a high level of morbidity and mortality from sanitation related diseases like diarrhoea, cholera, typhoid, malaria, schistosomiasis, trachoma, soil transmitted helminthiases, etc. and endemic vector-borne diseases such as Onchocerciasis (River Blindness), Yellow Fever and Trypanosomiasis. Therefore, the incessant increased periodical outbreak of epidemic diseases in various parts of the country can be attributed to poor environmental sanitation.

The need for the judicious management of the urban environment has aroused the interest among various stakeholders in Nigeria [20]. Governments both in the past and present have concentrated efforts on the improvement of environmental sanitation in Nigerian cities in terms of provision of facilities and services as well as promulgation of legislations [1; 15]. For instance during the colonial era, adequate sanitation was maintained by enforcement of Public Health Laws through routine house to house inspection. Health inspectors were saddled with the responsibility of ensuring that houses and their surroundings were cleaned. These health inspectors were empowered to apply appropriate sanctions on intransigent residents [7; 21]. The benefits of the legislative and other measures at this time were however not universal because they were restricted to privileged areas such as quarters of colonial masters and civil servants. The effectiveness of the sanitation officer's duties lessened when the country gained independence.

In the post-independence era, the country derived her legislation and authority on environmental sanitation by clinching on to pre-independence policy statements and laws. Nonetheless, routine house to house inspection was still effective in the maintenance of environmental sanitation. However, the interference of politics with the statutory role of sanitary inspectors led to the collapse of the house to house inspection programme and contributed to the poor sanitary conditions in the country. From independence, government at all tiers have developed legislative/regulatory instruments to address the issue of sanitation.

The most noticeable strategy by the government to improve environmental sanitation condition is the introduction of War Against Indiscipline (WAI) program in the early 1980s. Within this program, Federal Government promulgated a law setting aside three hours (7:00am – 10:00am) of every last Saturday of each month for the observance of Monthly Environmental Sanitation Exercise. During this period, movements were restricted, as citizens were expected to stay in their abode and participate in the exercise by cleaning their immediate environment [7]. The exercise was enforced by a combined team of the war against indiscipline brigade, the police, and participation of the public. After the over-throw of the Buhari-Idiagbon regime in 1985, the environmental sanitation exercise was no longer enforced. Also, successive military regimes failed to formulate adequate environmental laws and regulations.

By the advent of democratic rule in 1999, the national monthly environmental sanitation exercise was abrogated. As a result of no legislation from the central government, many states of the federation have re-introduced monthly and bimonthly environmental sanitation exercise through various edicts; and their operations are similar to the abolished military decree of 1985. In spite of the re-introduction of the program in many states of the federation, the sight of cityscapes across the country revealed the paradoxical nature of environmental sanitation in the cities. This is because the practice of the environmental sanitation exercise in the country is with no recourse to citizen participation but a function of various environmental legislations and compliance monitoring.

Various agencies serve as trustee of the environment in Nigeria. They include Federal Environmental Protection Agency (FEPA), Federal Ministry of Agriculture and Rural Development (FMA and RD), Federal Ministry of Environment (FMENV), Federal Ministry of Health (FMH), Environmental Sanitation Committee (ESC), Nigeria Demographic and Health Survey (NDHS) etc. Legislation on environmental protection include National Environmental Sanitation Policy 2005, Federal Environmental Protection Agency (FEPA) Decree No. 58 of 1988 and No. 59 of 1992, National Policy on Environment 1989 and 1999, National Environmental Protection (Effluent Limitations) Regulations S.1.8 of 1991 – mandatory for industries to install anti-pollution equipment and for effluent treatment, National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations S.1.9 of 1991, National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations S.1.15 of 1991, Environmental Impact Assessment (EIA) Decree No. 86 of 1992, etc. There are also agencies responsible for protecting the environment at the state level but these agencies varies in nomenclature within the 36 states including the Federal Capital Territory, yet they perform the same function.

Despite the huge investment, environmental condition in most cities is worrisome. This is because citizens' idea of environmental sanitation starts and ends with the monthly exercise. Most communities are littered with domestic wastes, solid waste, animal and human excreta etc. while sewage flows directly into open streets and nearby water bodies thus fouling the environment and attracting disease vectors [1; 4; 15; 16; 22]. The ineffectiveness of these legislations/agencies to ensure a healthy environment in Nigeria could be traced to the laxity of the government and lack of political will. Others include overlapping of functions, inadequate funding and inadequacies of environmental sanitation facilities, services and personnel. This ineptitude has led to serious cases of pandemic diseases across the country.

Globally, mortalities resulting from diarrhoea are estimated to be between 1.6 and 2.5 million every year [23]. However in Nigeria, health records revealed that about six hundred thousand cases of diarrhoea occur in children under the age of five yearly (Alabi, 2010). Similarly, there are increasing national spread of the outbreak of cholera in the country. For instance cholera outbreak was reported in eighteen out of the thirty six states in the country in the year 2010 alone. The number of reported cases of cholera was 41,787 cases claiming 1,716 deaths [24]. This was three times more than the number of reported cases of cholera in 2008. This scenario is associated with impoverishment and poor standard of living among the populace [25]. Implications of poor environmental sanitation condition include financial and economic costs, direct medical costs associated with treating sanitation-related illnesses, lost income through reduced productivity and increased government costs of providing health services [25].

The narrations above revealed that, no formidable strategy has been adopted by the government to address the issue of poor environmental condition in most cities of the country apart from the use of legislations by different states to compel urban dweller to participate in periodic environmental sanitation exercise. Other interventions by the government such media (television and radio) campaigns, provision of environmental facilities and services in order to curtail this menace have been a recipe for disaster. The version of environmental sanitation adopted by all tiers of Nigerian government strengthens only legislations covering the periodic cleaning of surroundings only on legislated days. Provision of environmental sanitation facilities, services and legislation as focused by the policy makers is just is a means to an end in environmental sanitation. The attitude and behavioural practices of the citizens will determine the end [14].

III. CONCLUSION

This study has attempted to asses the environmental sanitation situation in Nigeria. It revealed that the main strategy geared towards achieving environmental sanitation in this country has been a recipe for disaster (monthly or bi-monthly environmental sanitation exercise). Also, the basic feature of the environmental sanitation legislations is compliance and monitoring with little emphases on citizen cultivating environmentally-friendly behaviour.

First, improved environmental sanitation standards should become high on the political agenda of all tiers of government. Also, adoption of better-quality environmental sanitation strategy by the government to tackle the menace. Environmental sanitation should not be viewed alone from the promulgation of laws for citizens and periodic conduct of exercise only rather it should be seen as a civic responsibility involving all levels of human activity. Sound environmental sanitation management ensures that appropriate intervention are introduced and implemented to promote behaviour change [5]. The attitude and behaviour of the stakeholders on environmental issues determine its end.

Second, environmental sanitation laws need to be rigorously enforced. Also coordination of the various agencies serving as environmental trustee should be encouraged to prevent overlapping of functions. Their effectiveness will ensure proper execution of the law. Environmental crimes should be enforced and scapegoats should be made of some people to serve as a deterrent to others. In that instance, not only will citizens mindful of their environmental conduct but also pro-active in stopping others from contravening them.

Pro-environmental sanitation behaviour depends on effective environmental education for the citizens on the need to be environment concerned. Public campaign to raise public awareness about environmental sanitation is essential in achieving success in environmental issues. This mind-set reorientation can be achieved through one on one engagement. Thus, active awareness through the recruitment of trained young men and women to go into their communities to disseminate this information should be considered. Also, regular workshops to bring home the desirability of a clean environment to people and the prime actors in that venture should be the youths, NGOs (Non-Governmental Organizations) CBOs (Community Based Organizations) and CSOs (Civil Society Organizations). This will create an avenue through which citizens would be educated on their roles in achieving a healthy environment.

Lastly, there should be adequate provision and maintenance of environmental sanitation facilities and services in cities in Nigeria. The availability of these facilities and services will motivate citizens to conduct themselves in a more environmentally-friendly behaviour. In this era of participatory planning, citizens should be carried along in making decisions that will affect them. Bottom up approach should be integrated to aid in compliance with environmental sanitation laws. In order to achieve a healthy environmental condition there must be a change in behaviour, promulgation and enforcement of environmental laws and availability of facilities and services working in unison.

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