

QUEST FOR ENVIRONMENTAL SANITATION AND APPROPRIATE WASTE MANAGEMENT: CASE FOR PARTICIPATORY APPROACH

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Abstract

Government's policy initiatives and aspirations are most likely to prove difficult to be fulfilled when citizens are highly critical about them and fail to abide willingly to relevant rules. This study assesses the environmental situation in Enugu and explores the possibility of improving the state of environmental cleanliness through efficient waste management. Against this backdrop, the study proposes the adoption of participatory approach whereupon both the government and citizens cultivate a culture of shared responsibility in sanitation matters. Survey design was adopted and data generated mainly from questionnaire instrument were analyzed using frequency count and simple percentage.

Keywords

Environmental sanitation; Waste management; Participatory culture; Sanitary inspection.

Introduction

Right from the time sedentary lifestyle replaced the era of the wandering band, human beings have devised means of keeping their immediate surroundings in a habitable form. Part of the things that distinguishes the dwelling place of human beings from that of the other lower class animals is cleanliness characteristic of organized setting and orderliness. As a matter of fact, environmental cleanliness cannot be compromised in any society where the citizens are desirous of maintaining healthy lifestyle. Wastes generated by human beings remain one of the main factors that compromise the cleanliness of the environment. And it is a known fact that human beings cannot live without generating wastes. Alive to this fact, proper management of wastes becomes indispensable in pursuit of environmental cleanliness and healthy living.

The challenge of waste management is undoubtedly higher in a modern society. In traditional societies, most of the wastes generated are organic and mainly biodegradable products that can easily be disposed in nearby bushes without adverse consequences both to the soil and humans. Again, the quantity of wastes generated in such societies, comparatively speaking, can be said to be highly minimal. In contrast, wastes generated in modern societies comprise both household and industrial wastes as well as

the organic and inorganic ones. Besides, the population density in modern cities (and even their suburbs) is by far higher than that of traditional societies and to the extent that modern societies are equally more organised, the requirements for waste disposal and maintenance of clean environment are expected to be more complicated.

Owing to its relevance in the lives and well being of citizens, governments have recognised environmental issues in their policy statements and actions. However, the outputs of such policy statements and actions usually differ from one society to the other depending on the level of awareness, political will, commitment of stakeholders, and compliance of citizens to environmental sanitation ethics. A cursory glance at Nigeria's history vis-a-vis issues relating to environmental matters will reveal an undulating and not-so-fantastic trend. Prior to independence, the colonial administration took measures to address the issue of environmental sanitation, at least, in GRAs and Townships. There were such things like the Cantonment Proclamation on the Layout and Sanitation of GRA, Township Ordinance on sanitation and environmental management, Public Health legislations, etc. It was a common practice in townships for sanitary inspectors to visit houses on routine basis and ensure compliance to sanitary rules.

Like some other practices instituted by the colonialists, the practice of taking environmental cleanliness seriously through such means as house to house inspection by sanitary officers gradually fizzled away during the independence era. Thus, one can rightly say that rather than deepen the environmental sanitary habits instituted by the colonial administration, successive governments under the independence era allowed reversals to occur. As it appeared, environmental matters were not taken seriously within the independence era and adequate measures were not taken to cope with the challenges of rapid urbanization, especially, as it relates to proper waste management and maintenance of sound sanitary practice. It is on record that the Nigerian government never had an effective law on environmental management until the discovery of toxic waste dumped in Koko town of the Niger Delta region. It was as a consequence of this that certain laws were introduced such as the Harmful (Toxic) Waste Criminal Provision Decree as well as the Federal Environmental Protection Agency Decrees of 1988 (amended 1992).

Though Nigeria is operating with a federal constitution, the reality on ground shows an exhibition of unitarist tendencies, which scholars like Onimode (2003) and Okediji (2003) blamed on the incident of military rule and the concomitant imposition of a unified command structure upon the polity. In this regard, the central government has overwhelming influence and, perhaps, some degree of control over the federating units to the extent that the latter usually appear constrained to toe whatever line of action taken by the former. With regard to environmental laws, this practice manifested through such means as the monthly mandatory nationwide environmental sanitation exercise (otherwise referred to as monthly clean-up, which usually takes place on the last Saturday of every month) introduced during the military era. Though the practice was eventually abolished at the national level, some state governments retained it in pursuit of environmental cleanliness.

Indeed, all the tiers of government in Nigeria share in the responsibility of environmental management. Section 20 of the Constitution of the Federal Republic of Nigeria mandates States to protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria. Also, one of the functions of the Local Government as provided in the Constitution, Fourth Schedule (g), include the provision and maintenance of public conveniences, sewage and refuse disposal. In a bid to live up to this aspect of her constitutional responsibility, the Enugu State government, like others,

established laws and created environmental management agencies such as the Enugu State Waste Management Authority (ESWAMA). But to what extent have the measures adopted by the government contributed to the maintenance of a clean environment? Is the government doing enough to ensure that citizens live in a very clean environment? Are the citizens, on their own part, taking up measures voluntarily to dispose wastes properly and maintain a clean environment? A close observation will reveal that the issue of environmental cleanliness creates a sort of tension between citizens and government, when in actual fact it is supposed to be the desire of everybody to aspire towards cleanliness. There are signs, which indicate that the culture of environmental cleanliness is lacking and yet to be entrenched within the state. In all, the fact remains that the manner in which public waste management is being handled in the state is yet to be satisfactory.

This study seeks to highlight the salient issues concerning waste management and environmental cleanliness in Enugu State with a view to making the necessary recommendations. To achieve this, the issues discussed here are arranged under the following sections: Introduction, Methodology, Theoretical Framework, Results of the Research, Discussion of Findings and, Concluding Remarks / Recommendations.

Methodology

Enugu State is one of the thirty six states that make up the Nigerian federation. The State retains the same name *Enugu* as its capital. The focus of this study is Enugu Metropolis and this has been designed in such a way that both residential and business areas as well as city centres and their immediate suburbs are equally represented. The things assessed by the study include the state of the cleanliness of the people's immediate surroundings, the means through which they dispose refuse, the structure created by the government for waste disposal, and the extent to which the people engage in self-propelled and voluntary sanitary habits. The activities of officials of the Enugu State Waste Management Agency (ESWAMA) as well as other visible policy actions of the government served as the focal point for assessing government's efforts towards environmental sanitation matters.

Survey was adopted in this study and the main survey instrument for generating data and the basis for analysis is the questionnaire, which involved main questions as well as those raised for the purposes of ensuring internal consistency. 250 questionnaires were purposively distributed to residents across the metropolis in such a manner that covered the area of study. The analysis of the results of the study was however based on the 227 validly returned questionnaires. Added to the questionnaire instrument, interviews were conducted on selected individuals considered to be well informed on the issues at hand. Equally, observation was employed in generating first-hand information and making comparisons with information from other sources for the purposes of ensuring validity. Furthermore, documentary evidence was relied upon in generating basic information relating to the subject matter. Frequency count and simple percentage were used in analysing the questionnaire instrument.

Theoretical Framework

Political participation is a necessary attribute for any democratic and people-oriented political system. Political processes and institutions are strengthened when citizens show positive and active interest in them. Policy statements, policy actions, and policy outputs tend to be more responsive to the immediate needs of the people when citizens contribute actively in policy processes and make the necessary input of

demands. It is through such participation that the government understands not only the needs of the citizens but also their choices and order of preferences over competing needs. Equally, input of support made into the system is very helpful since it creates an air of legitimacy and widens the room for voluntary compliance of citizens to societal rules and regulations. As such, a political system that experiences robust participation is most likely to be in the interest of both the citizens and a responsible government.

Mbah (2007), drawing from the contributions of McClosky, and Dowse and Hughes, captures political participation as those voluntary activities by which members of a society share in the selection of rulers and, directly or indirectly, in the formation of public policy. Operationally, Dibia (2014) explains participation to mean an organised effort to increase stakeholders' access and control over resources and related decision-making that contributes to sustainable livelihoods. While indicating that it requires the cooperation of stakeholders, Henry (2004) observes that participation can range from only token to comprehensive.

Indeed, there are different levels of political participation. Arranging them in a hierarchical order, Milbrath (1965) listed the activities that characterize each of the three different levels of political participation to include the Spectator, Transitional, and Gladiatorial activities- with the Spectator at the base and Gladiatorial at the apex. Placing them side by side with the concept of political culture vis-a-vis the variants of political culture, one can attempt to draw a connection between each of the political culture and a particular type of activity. As can be seen from the works of Almond and Verba (1963) and Almond, Powell, Strom; and Dalton (2004), there are three types of political culture that include the Parochial, Subject, and Participant political culture. Parochials do not participate in the political process and are hardly aware of the impact of political activities upon their lives. Quite unlike the Parochials that are unaware about the relevance of government and politics, Subjects are. However, their level of political participation is low. They can make input of support to the system through such rudimentary actions like obeying laws passively but could not take serious part in political activities. The Participants, at the apex, takes active part in the political process and can involve themselves in making inputs of demand and support into the system. Though this may not fit tightly, it can be seen that those engaging in Spectator activities are within the fringes of the Parochial political culture (Spectators actually take part in political process, though minimally, whereas Parochials don't); Transition activities within the fringes of Subject political culture; and Gladiatorial activities within the fringes of Participant political culture. The point here is that there are different types of political participation and that the type, which is most beneficial to the political system, is active participation.

Considering the nature of this study, the theory of political participation is adopted here as the analytical framework. This theory is relevant to the extent that it will help in x-raying the nature or level of participation of citizens as it concerns the issue of environmental cleanliness and waste management. By assessing the efforts of the government vis-a-vis the extent of support being offered by citizens, it becomes easy to understand the problematic issues, which creates the opportunity for making informed recommendations.

Results of the Research

Posed with the question of how regularly they engage in general sanitation exercise within their compounds and its immediate surroundings, 23 respondents (10%) indicated that they do it on daily basis;

37 respondents (16%) – weekly; 151 respondents (67%) – monthly; and 16 respondents (7%) – Not Regularly (more than one month interval). The interview instrument revealed that most people embark on general cleaning of their surroundings only on the day of the monthly Environmental Sanitation Exercise. On how to describe the level of compliance of neighbours and people living within their area towards the recommended pattern of refuse disposal, 42 respondents (19%) went for *Highly Compliant*, 88 respondents (38%) – *Partially Compliant*, and 97 respondents (43%) – *Do not comply to Rules*. Observation revealed a high incident of indiscriminate dumping of refuse in most areas. It was observed that apart from several cases of refuse that were dumped at unauthorized places, most people fail to adhere to the rules concerning how to dump refuse at the designated areas. Contrary to the rule that refuse must be in a bag, tied up, and dropped inside the bin or (in the event that the bin is filled up) placed close to it, it was observed that most people fail not only to put their refuse in bags but also drop them carelessly around the dump site. Interview instrument equally revealed that many a great number of people fail to comply with the right timing for dumping of refuse at the designated areas.

While 63 respondents (28%) described the compulsory monthly environmental sanitation/Clean-up exercise as necessary, 164 (72%) deemed it unnecessary. In view of the fact that the compulsory monthly environmental sanitation/Clean-up exercise had lasted for some years, this study sought to know whether the people had imbibed the culture of embarking on a general clean-up exercise. Thus, respondents were asked whether they would voluntarily stay back in their houses to engage in general clean-up on the last Saturday of every month if the restriction usually placed on movement of individuals within the period of the exercise were to be lifted. 91 respondents (40%) said yes while 136 (60%) said no. From the interview conducted, many respondents appeared not to be in favour of the exercise. The general opinion was that the compulsory nature of the exercise and the restriction imposed on movement amounted to unnecessary waste of man-hours, especially, in view of the fact that those involved in regular clean-up exercise (and might have no dirt or dirty environment to clean while the exercise lasted) were equally required by law to remain at home during the period. The prominent argument was that anybody can decide to embark on sanitation exercise at anytime and not necessarily on the last Saturday of the month. Thus, it appeared that the main reason most people were opposed to the compulsory exercise borders on the restriction of movement. Yet, interview further revealed that many people do not embark on environmental sanitation activities during the period of the exercise. This is in spite of the restriction of movement. Examples were cited with the incident of youths that occupy themselves playing football along the main roads (usually free of vehicles while the exercise lasted).

135 respondents (59%) indicated that, considering the available facilities/structure for waste management within their residential area, they were disposed to dumping their refuse only at designated dumpsite whereas 92 respondents (41%) indicated that they were constrained to dispose their refuse at any convenient place (such as nearby bushes/drainages) or setting them ablaze. A comparative assessment made through direct observation revealed that the level of compliance towards dumping of refuse at designated areas is higher in places where the facilities (dump sites/bins) are easily accessible to the people, as well as places with paved streets and with little or no vacant/unoccupied spaces. Compliance appears lower in areas with nearby bushes and areas where the refuse dumps are located very far from the intended users. Interview instrument equally revealed the practice where some people that do not have refuse dump close by resort to dumping their refuse along the waterways, especially during the rainy season.

On how they dispose of little items (e.g, drinking water sachets, wrappings/empty packets of confectionaries, banana peels, etc) consumed outside the home/office, 59 respondents (26%) selected the option of dropping them on the ground while 168 respondents (74%) selected the option of looking for a nearby trashcan/dustbin. As a follow up, those that indicated the option of looking for a nearby trashcan/dustbin were asked what they would do when there is no trashcan/dustbin within the vicinity. 65 respondents (out of the 168) indicated that they would hold it until they see a trashcan/dustbin whereas 103 (out of the 168) selected the option of dropping it at the most convenient place such as an already-untidy area. Observation revealed that most areas were littered with discarded pieces of paper and nylon materials such as empty sachets of water and black polythene bags. Most people closely monitored around kiosks, roadside restaurants, motor parks, and market places dropped the trash they generated on the ground instead of using wastebaskets/dustbins. Observation equally revealed that it was not uncommon for people to throw away things from the windows of moving vehicles.

It was a unanimous verdict, as 227 (100%) indicated that Sanitary Inspectors do not visit residential homes for routine or unscheduled inspection. The interview instrument confirmed the position of the questionnaire respondents. It was revealed by those interviewed that the ESWAMA field agents do not conduct sanitary inspection but are primarily interested in issuing demand notices, enforcing the purchase of ESWAMA-approved waste bags and dustbins, collecting sanitation levies, and exacting fines from those that failed to pay their rates within the stipulated period. With regard to the level of consistency of Waste Management agents/dump trucks in evacuating refuse dumped at designated areas, 33 respondents (15%) selected the option of *Highly Consistent*; 92 (41%) selected *Slightly Consistent*; and 102 (45%) selected *Inconsistent*. Data generated from the interview instrument pointed in the direction that there is high level of inconsistency in the manner the ESWAMA agents evacuate refuse from the dump and this usually leads to situations where refuse pile up for too long, sometimes, to the extent of blocking part of the nearby roads and generating offensive odour within the vicinity. It was revealed that situations such as this usually lead those residing within the area to resort to setting the refuse dump on fire to mitigate the offensive odour and as well create space for more refuse. Some of the ESWAMA officials interviewed cited breakdown of operational vehicles as one of the major reasons that usually cause delay in evacuation of refuse from the dumps.

In assessing the availability of public conveniences at strategic locations across the city, all the 227 respondents (100%) agreed that it was inadequate to serve the needs of the people. Interview instrument showed that public conveniences are lacking in almost all the strategic locations within the city. There were indications that few public conveniences can be found inside major markets/motor parks. It was indicated, though, that such public conveniences were poorly maintained, which explains why most people preferred to urinate in the open than use such rest rooms. Observation revealed that it was not uncommon for people to urinate by the sides of the roads or at any place that offers the slightest cover.

Regarding the state of environmental cleanliness of public parks and areas that are supposed to be under the care of the government, 198 respondents (87%) indicated that they are being poorly maintained while 29 (13%) held that they are being well-maintained. Observation revealed that the verdict of the majority of respondents of the questionnaire represent the true situation. Some of the public buildings / facilities bore signs of poor sanitary conditions. For instance, the Murtala Muhammad Park, GRA, Enugu and the surroundings of the Federal Court of Appeal in Independence Layout Enugu, were covered with shrubs and overgrown grasses.

The study equally sought to ascertain the view of respondents on whether the measures put in place by the government were adequate to ensure environmental cleanliness and proper waste management. While 48 respondents (21%) shared the opinion that the measures were adequate, 179 respondents (79%) indicated that they were inadequate. On this point, those interviewed noted that the manner environmental laws were being enforced suggested that the primary aim was to generate revenue for the government or make money for the enforcement agents rather than ensure cleanliness. Examples were cited using the preoccupation of ESWAMA officials and security agents in arresting and exacting money from those that violated the restriction placed on movement during the monthly clean-up exercise. It was pointed out that there was no measure put in place to ensure that people actually took part in the sanitation exercise so that those who failed to participate would be sanctioned. It was equally pointed out that the Agency only preoccupies itself with collection of environmental levy/ sale of wastebasket while paying no attention to sanitary inspection with a view to actualizing maximum compliance of the people. Also the erratic manner in which refuse were being evacuated from dump stands were mentioned as one of the inadequacies confronting waste management and environmental sanitation.

Concerning sensitization exercise for environmental cleanliness, 63 respondents (28%) shared the view that there was adequate sensitization exercise, whereas 164 respondents (72%) held that government's sensitization exercise was inadequate.

Discussion of the Findings

Going by the results of the study, there are serious indications that efforts being made so far by all the stakeholders are still inadequate for the enthronement of a culture of proper waste management and environmental cleanliness. In specific terms, it can be seen from the findings that many people appeared to be against the imposition of the compulsory monthly environmental sanitation exercise. The loathing for the exercise, however, appeared to be anchored on the grounds of the restriction of movement imposed on such days and not necessarily that it had no impact towards promoting environmental cleanliness. From the results, it can be seen that most respondents actually engage in general clean-up of their environment on the day of Environmental Sanitation exercise. The implication of this is that in as much as people shared a general opinion of disliking the compulsory exercise, it still makes some positive impact in terms of promoting environmental cleanliness and could add more value if better means were devised to expand the space for compliance.

Again, the results of the study point in the direction that there exist low level of voluntary compliance towards sanitation rules by the people. This is not a good trend, especially in view of the revelation that the structure for inspection and monitoring is weak. The situation is even worsened in view of the finding that facilities provided by the government are still inadequate for promoting environmental sanitation. In the event of inadequacies associated with public conveniences, evacuation of refuse from dumpsites, accessing refuse bins, chances are high that those desirous of complying voluntarily with environmental laws would continue to witness hindrances.

Aside the inadequate facilities, findings of the study revealed that some other measures undertaken by the government are inadequate to deliver the goods. For instance, it is quite believable that the priority for maintaining a clean environment would be misplaced if the main concern of the ESWAMA officials is to generate revenue. If this happens to be the case, it stands to reason that general compliance of citizens with the environmental laws might even appear 'counter-productive' since it would lead to decrease in

revenue. The sanitary condition of the city is most unlikely to improve if the ESWAMA officials are preoccupied with collecting levies and selling wastebaskets/bags without embarking on inspection.

Concluding Remarks / Recommendations

So far, it is clear that what is on ground in Enugu, vis-a-vis waste management and environmental cleanliness, still leaves much to be desired. Though one can say that there seem to be ongoing efforts to pursue the goal of environmental cleanliness, these efforts are yet to yield highly satisfactory results. The stakeholders share part of the blames for this state of affairs. Unless all stakeholders are carried along, efforts coming from one quarter might be sabotaged by the other.

Based on the prevailing situation, it is necessary for the government to pursue the task of environmental sanitation more seriously by reviewing its current approach and allowing citizens make their input. Citizens' challenges, expectations, and choices should be streamlined with that of the government and not only integrated into the law but also serve as a guide for ESWAMA agents/officials. In view of the fact that the culture of maintaining environmental cleanliness is yet to be cultivated among the people and that it is most unlikely for them to take up their responsibility in this regard without being prodded, it becomes very necessary for the government to reach out and begin a vigorous sensitization exercise. This should not just be in the form of making announcements over the radio/television but undertaking measures to ensure that the people are alive to their duties. There is need for the government to ensure the availability of operational facilities and logistics for ESWAMA officials to discharge their duties efficiently. Again, the government should take exemplary lead by ensuring that public facilities under its care are always in good sanitary condition. Also, there is need for basic amenities such as dump sites, waste baskets, and public conveniences to be provided at strategic locations to prevent citizens from resorting to unauthorized alternatives. With the necessary facilities and services in place, efforts should be made to educate the people on the extant environmental laws and impress it on them that they will be enforced with every sense of seriousness. As a follow up, sanitary inspectors should be (re)introduced to take up the responsibility of conducting unscheduled sanitary inspection in both business premises and residential homes as well as monitor those dropping things indiscriminately instead of using waste baskets. With this, the compulsory monthly exercise may no longer be necessary since people would be on their toes at all times to avoid being sanctioned. If efforts are sustained in this direction, chances are high that the people will begin to imbibe the culture of environmental sanitation with the passage of time.

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