Users' Perception of Environmental Sanitation Exercise in Selected Market in Nigeria Cities

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ABSTRACT

This study examined the factors influencing users' participation in the conduct of environmental sanitation exercise in Selected Cities of Nigeria, with a view of providing information that could enhance users'' participation in the exercise in the study area. 214 questionnaire was randomly administered among the market users' out of which 205 was retrieved. The result of the findings shown that the means of waste disposal used by respondents were nearby gutter/space (1.5%), by burning (2.9%), use of designated dumpsite (19.0%) waste collection service (73.7%) and (34.6%) of the respondents pays N251-N300, (10.2%) pay between N50- N100 naira, 8.3% of respondents' pays N101-N150, (24.4%) pays N151-N200, (13.2%) pays N351 above and (7.3%) pays between N201-N250 naira over the same period. In respect to regularity (7.3%) declared that supply of water is very regular, (49.8%), just regular, (21.0%) irregular, (13.7%) very irregular and (8.3%) no supply of water at all. The types of toilet used by respondents are water closet (57.1%), pit latrine (24.4%), bucket latrine (9.3%), pour-flush (2.9%) and other like ventilated improved toilet constitute (6.3%). The study concluded that environmental sanitation practices go beyond sweeping of market environment and that while environmental sanitation facilities in the market are acceptably insufficient, the existing ones are wrongly managed and not exploited prudently.

Keywords: Akure; Market; Sanitation Exercise; Nigeria Cities; Users' Perception

INTRODUCTION

In Africa, the dramatic effects of rapid urbanization are very clear in all aspect both the cities and peri-urban areas. Although, cities serve as "engines" of growth in most developing countries by providing opportunities for employment, education, knowledge and technology transfer and ready markets for crafts and agricultural products, high urban population place enormous stress on the environment. With this rapid population growth, its implication can be predicted in terms of the demand for food and raw materials or inputs and generation of waste and pollution, or output Invalid source specified.

The market plays a vibrant role in both the social and economic lives of the people and communities. It is crucial not only in the chain of commodity distribution; it also aids information dissemination and social interaction [1]. Markets are not only economic institutions but also serve as social entities Invalid source specified. They serve as links between people of diverse ethnic groups, racial backgrounds, cultural traits as well as meeting places for social-cultural, religious and political activities Invalid source specified. The author also opined that markets provide a physical setting for interaction between urban and rural cultures. It is one of the several diversities of systems, institutions, procedures, information sharing, social relations and infrastructure whereby parties engage in exchange.

According to Morton [2], markets vary in form, location and types of participants, as well as the types of goods and services traded. They are definite or a nominal spatial location where the forces of demand and supply activate, and where buyers and sellers interact (directly or through intermediaries) to trade goods, services, contracts or instruments, for money or barter. In another parlance, markets are means for determining the price of the traded item, communicating the price information, facilitating deals, transactions and effective distribution. Hence, they attract a large gathering of both the sellers and buyers of which the coming together provide opportunities for the spread of communicable diseases occasioned by poor environmental sanitation practices [3].

The condition of environmental sanitation in markets where food is sold is poor in the developing world as they are characterized by inadequate toilet facilities. Since users' perception is the organization, identification, and interpretation of sensory information to represent and understand the presented information or the environment. All perception involves signals that go through the nervous system, which in turn result from physical or chemical stimulation of the sensory system. Users' perception deals with the levels of understanding of traders' on environmental sanitation in the markets, there is a need to examining the perception of markets users' about the environmental sanitation exercises within the markets [4,5].

The population of Akure was estimated at 609,165, 500 in 2017 based on a growth rate of 4.64 % annually Nigerian Population Commission (NPC), (2017). The high rate of population growth coupled with the high migrant numbers has outstripped the rate of infrastructure development and service provision, such that, the city authorities are struggling mightily to cope with the rapid urban growth. Most of the infrastructures such as roads, markets, toilet facilities and housing have exceeded their carrying capacities. The high populations with its accompanying waste generation and indiscriminate waste disposal practices have impacted negatively on the drainage system and have consequently brought all water bodies in Akure to the brink of extinction Invalid source specified.

Urbanization has its accompanying environmental degradation and urban poverty. Reducing poverty and achieving sustained development must be in a healthy environment. The Millennium Development Goals (MDGs) recognize the fact that environmental sustainability is part of global economic and social well-being. However, achieving the fourth goal (reducing child mortality); the fifth goal (improving maternal health) and part of the sixth goal (to halt and begin to reverse by 2015, the incidents of malaria and other major diseases), of the Millennium Development Goals

(MDGs), largely depends on the country's efforts to ensure a clean and healthy environment. Unsafe water, poor sanitation and hygiene result in countless deaths among children and a huge burden of diseases such as diarrhoea, dysentery, malaria, and other parasitic illnesses. Poor hygiene is a channel for these diseases [6].

Achieving the MDGs and the eradication of poverty remain the highest priority of the government of Ondo State. The impact of poor environmental sanitation in both the cities, communities and market like Oja-Oba threaten the achievement of the MDGs. MDG 7 (Ensuring Environmental Sustainability) is precisely about linking environmental protection to poverty reduction through sustainable development. Ondo State Environmental Sanitation Policy (2006) through its Ministry of Environmental spells out the guidelines and gives power to each Local government to promulgate bye-laws to address environmental issues in their locality to reduce environmental pollution. It also gives power to the Judiciary to establish and empower Tribunals to prosecute offenders against sanitary bye-laws and regulations. Based on the guidelines, Ondo State government has enacted Environmental Sanitation Bye-Laws, but the enforcement of these environmental bylaws to regulate the activities of the inhabitants has been partially unsuccessful Invalid source specified. Hence, the difference area in Akure still faces the challenges of poor environmental sanitation resulting from poor or unhygienic habits and practices. Thus, there is a need to examine the users' perception of environmental sanitation exercise in a selected market in Nigeria Cities, calls for the solution to reduce its impact on the health of the people and economy of the nation [7,8].

The study area

The study area is Akure, the administrative capital of Ondo state (Figure 1). To have pilot information on the environmental sanitation practices and procedure within the geographical boundary of the market were covered. Historically, of the town, and was built in 1150 AD. It has over 15 courtyards, with each

Figure 1: Map of Nigeria showing Ondo State.

having its unique purpose. At present, a bigger and more modern palace is being built to the south of Akure.

King is known as the Deji of Akure and is supported by six (6) high chiefs (Iwarefa) in his or her domain. The town of Akure is the Leopard and the father of Omoremi Omoluabi was himself called Ekun (this was his regnal name). It is for this reason that every descendant of the Akure clan has been addressed by outsiders as Omo Ekun during the recitation of his or her praise poetry or as 'Omo Akure Oloyemekun' since Omoremi was said to have stayed for a while at Igbo Ooye before coming to the Akure region.

Akure is an ancient city in south-western Nigeria and is the largest city and capital of Ondo State. The city had a population of 484,798 as at the 2006 population census, there is a need to shield this large human population in Akure from unhygienic eco-friendly practices.

Akure lies about 70°15' north of the equator and 50°15' east of the Meridian. It is about 700 km Southwest of Abuja and 311 km north of Lagos StateInvalid source specified. Residential districts are of varying density, some area such as Arakale, Ayedun Quarters, Ijoka, and Oja¬Oba consist of over 200 persons per hectare, while areas such as Ijapo Estate, Alagbaka Estate, Avenue and Idofin have between 60¬100 people per hectare. The town is situated in the tropic rainforest zone in Nigeria

METHOD OF DATA COLLECTION

Data sources for this study includes primary and secondary source. Reconnaissance survey to Oja Oba market, Akure, Ondo State to examine environmental sanitation facilities and sanitation exercise among users in the market. This provides an avenue to get familiar with the traders and commodities being traded as well as nature and mode of environmental sanitation in the market. The sampling frame for this study consisted of traders who were defined by the partitioning and allocation of spaces for the trading of commodities in the market. A preliminary survey to the market show in Table 1, gives further classifications of available trading spaces in the market. It is from these 563 shops that the sample was selected for further processes.

A descriptive technique was used as a method of analysis of the data obtained for the study. Descriptive, the questionnaire

Table 1: List of Shops in Oja-Oba Markets.

S/N	Name Market	Number of Shop	% of Questionnaire
1	Agagu Shopping complex	240	91
2	Olukayode	100	38
3	Adejayi Komolafe Adedipe	28	10
4	Anulowalu	14	5
5	Olorunfemi Gods Favour	10	3
6	Moses Olugbogi	14	5
7	Agabielesi	20	8
8	Arisoyi	20	8
9	Atayese	17	6
10	Line 1	20	8
11	Line 2	20	8
12	Line 3	20	8
13	Line 4	20	8
14	Line 5	20	8
	Total	**563**	**214**

administered was subjected to simple frequencies distributions with frequency tables. Thus, charts such as bar, pie and plates shall be used as a graphical illustration of the findings and to support frequency tables. It is based on descriptive-analytical techniques that conclusions and decisions were made in this research.

MAJOR FINDINGS

The study found that more than half of respondents' (78.5%) generated solid perishable waste, while less than twentieth of a quarter of respondents' (18.5%) generated liquid waste and 2.9% of respondents generated waste that is particles. This analysis attested to the fact that waste generation is not only a function of land use but also a product of trading process mostly especially in such a vast market like Oja-Oba market, Akure. The study further established that the period of waste generation varies in the study area among the sampled respondents. (87.8%) of respondents' generated waste daily, while 2.4% generated weekly and the remaining respondents' who were less than one-tenth (9.8%) occasionally generated waste. From this analysis, waste generation appeared to be a continuous exercise in the trading process of study areas and had no specific period. One-fifth (6.8%) of respondents used a nearby bush, while slightly -half (49.3%) rush to defecate in the gutter and open drainage.

Moreover, far more than one-fourth of respondents (24.9%) used available public toilet facility in the market, while the remaining respondents that are more than a one-seventh quarter (19.0%) make use of other places outside the market. From this analysis, it was observed that the proportion of respondents who make use of the public toilet in the market is very low compared to the total sample population of the study. Thus, anytime commodities are being traded among the respondents' in the study area, waste generation shall accompany such transaction process. The result of the study revealed that the amount payable for waste collections by respondents varies, and perhaps all respondents unintentionally make use of unconventional refuse collectors. Precisely, 10.2% of sampled respondents' paid between N50-N100 for refuse collectors, while 8.3% of paid between N101-N150 for the same purpose and period. Also, 24.4% of respondents' paid N151-N200 for a refuse collector as service charge and less than a tenth (7.3%) paid N201-N250 for the same service. However, a majority of respondents' paid N251-N300 for the same purpose and period. Meanwhile, 2.0% and 13.2% respectively paid N301-N350 and N351 for waste collection among the sampled market users.

Sweeping of market surroundings was the predominant activities engaged in by respondents as it accounted for more two-third (50.2%) of responses received. Also, respondents who participated in the cleaning of drains in the market accounted for less than one-quarter of the seventh (6.3%) of the sampled population. While 4.4% of respondents' wash toilet, 16.6% of respondents' participate in the picking of litters, while the remained, 22.4% of respondents' identified in the cutting of grass/bushes. Hence, sweeping of market environment remained the most participated sanitation activity among sampled respondents' in the study area.

Relationship between level of education, commodities trader in and waste generated

In these results, (Table 2), the Pearson correlation between commodities trader in, education level and waste generated is a, which indicates that there strong relationship between the variables. The Pearson correlation between natures of commodities is -136, and between wastes generated is about 0.052 and level of

Table 2: Relationship between Level of Education, Commodities Trader in and Waste Generated.

Correlations		How often did you generate waste	Highest level of education	nature commodities trader in
How often did you generate waste	Pearson Correlation	1	.051	-.136
	Sig. (2-tailed)		.465	.052
	N	205	205	205
Highest level of education	Pearson Correlation	.051	1	.020
	Sig. (2-tailed)	.465		.772
	N	205	205	205
nature commodities trader in	Pearson Correlation	-.136	.020	1
	Sig. (2-tailed)	.052	.772	
	N	205	205	205

[a]Some or all bootstrap sample results are missing, so no bootstrap estimation has been performed for this table.

education is 0.465 respectively. The relationship between these variables is negative (-136), which indicates that, as natural increase, education increase, waste generated decreases. In these results, the p-values for the correlation between commodities trader in and waste generated are both less than the significance level of 0.05, this indicates that the correlation coefficients are significant (0.05) with an absolute value of 1; this indicates that rank-ordered data are perfectly linear.

CONCLUSION

A market is a central place and with a sphere of trading influence extending beyond the shore of the state, much attention is deserved for environmental sanitation practices of Oja-Oba market, Akure and understudied market users' sanitation practices of traders' who are major stakeholders in the market. However, this study concluded that environmental sanitation practices transcend sweeping of market environment and that while environmental sanitation facilities in the market are grossly inadequate, the available ones are improperly placed and managed and not used prudent

RECOMMENDATIONS

Having understudied the users' perception of environmental sanitation exercise in a selected market in Nigeria Cities, this study hereby makes the following recommendations based on the result of the findings:

- strengthening of awareness on environmental sanitation practices,

- compliance with sanitation regulations' in the study area,

- upgrading and improve the accessibility to environmental sanitation facilities and services in the market,

- improves of service radius to users',

- environmental sanitation should be prioritized in the study area through periodic fumigation of the market environment and cleaning of drainages in the market, while market association should ensure that traders' clean the drainages passing through their shops daily.

As a result of this, environmental sanitation practices in the market should exceed sweeping activities and attentions should be extended to picking litters, general sanitary habits and favourable attitude to environmental sanitation by market users'. Market associations have a great role to play in safeguarding sanitary trading environment and obedience of market users' to sanitation laws to make the market clean of messes and rubbish which are contributory health risk factors.

Conclusively, there is a need for significant improvement in environmental sanitation practices in the study, to uphold health, well-being and cleanliness in the market and neighbouring residents'.

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