



# Sanitation Exercise in Lagos State, Nigeria: The Imperative of Integrated Communication Strategy

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**Abstract:** Lagos State, one of Nigeria's most prominent political subdivisions, has for some years, been organizing a general sanitation exercise on the last Saturday of every month. Recently, though, a court ruled that the state government does not have the legal backing to restrict vehicular and pedestrian movement during the three-hour activity (7-10a.m), which allegedly amounts to a waste of precious time. The court case had been complicated by residents' incessant complaints which culminated in the cancellation of the exercise. This paper is an assessment of the residents' level of compliance with the program directives. It examines the government's communication strategies for mobilizing residents and how effective they were. An attempt is made to craft a fresh strategy that helps avoid time wastage. Focus group and interview data were generated to facilitate the investigation. Findings show that compliance level was low in spite of the government's use of force to drive it. Results also show that sustained compliance with any beneficial directive on sanitation exercise is possible in Lagos if an integrated communication system is pursued. Unimpressively, however, government's strategy was anything but integrated while the exercise lasted.

**Keywords:** Lagos State, Environmental Sanitation, Communication, Mobilization, Participation, Strategy, Integrated Communication.

## **Introduction and the Problem Statement**

On March 16, 2015, a federal court nullified the restriction order on movement in respect of the monthly environmental sanitation held in Lagos State, southwest Nigeria every last Saturday morning (7-10a.m). This was sequel to a suit brought before it by a lawyer who questioned the legality of the restriction. The court case was the culmination of several issues that the residents had raised, including waste of precious time, disruption of social events and shortening of business deliverables.

Citizens had also alleged that government was incompetent in the way it implemented the sanitation program owing to lack of the appropriate mobilization and communication strategy. Many residents stressed that government never made any adequate arrangement for the disposal of the refuse gathered during the exercise as it ended up littering the streets in a very shameful way. They claimed that if the tools needed were ever made available, most residents were oblivious of the availability.

### **Objectives of the Study**

This paper therefore seeks to examine the level of compliance of Lagos residents during the environmental sanitation program. It attempts to show how

communication can help in mobilizing the people to participate in a sanitation exercise without having to force them. The specific objectives are:

1. To examine the compliance level of residents with regard to the environmental sanitation exercise in Lagos State.
2. To examine the communication strategy and the efficiency profile of that strategy.
3. To attempt a more robust communication programme for the mobilization of residents for a sanitation exercise in Lagos State.

### **Research Questions**

1. What was the level of compliance with regard to the environmental sanitation exercise in Lagos State?
2. How efficient was the communication strategy (if any) in mobilizing people for the sanitation exercise?
3. What kind of communication programme will be efficient in mobilizing Lagos state residents for a sanitation exercise?

### **Significance of Study**

This study is significant in the following ways:

1. It would expose the failures that characterized government's communication strategy.
2. It births a reliable communication strategy to

engage the people for development.

**Conceptual Framework**

Mobilization for participation is a communication function. It deals with the application of the relevant strategies to create awareness on a program with a view to mobilizing the people for action. Community mobilization encompasses a range of interventions and approaches, including community functions, training or sensitization sessions, town hall meetings and other cultural activities. Such sensitization and awareness creation could involve the use of various communication channels with relevant messages created to suit the target audience. Mobilization is deemed effective when there is a commensurate response action from the targeted audience in terms of participating in the program.

Environmental sanitation deals with activities aimed at improving or maintaining the standard for basic environmental conditions affecting the well-being of people. These conditions include clean and safe water supply, clean air, efficient and safe animal, human, and industrial waste disposal systems, protection of food from biological and chemical contaminants, and adequate housing among others. Oregonlaws.org defines the phrase as the art and science of applying sanitary,

biological and physical science principles and knowledge to improve on and control the environment and factors therein for the protection of the health and welfare of the public.

Monthly sanitation exercise was one of the initiatives of Lagos State government to enable residents maintain a clean environment. This exercise was held on the last Saturday of every month, requiring residents to stay at home and clean their surroundings for three hours from 7 to 10a.m. Government agencies were to mobilize residents for the exercise, monitor activities and provide the necessary tools needed (including trucks) to clear the gathered garbage. Anyone flouting the movement restriction order was promptly arrested and prosecuted.

**Theoretical Framework**

Theodore Newcomb (1953) developed a Co-orientation Model as a helpful tool in relational analysis of dyadic pairs. This simple, yet insightful, model consists of two communicators, A and B (or simply AB), and their "orientation toward some object of communication, X. Any subject, behavior, attitude, belief, event, or object, which is the focus of communication for the two participants, has the potential to be the object of communication.

Each of AB has a simultaneous co-orientation toward his or her communication partner (usually the level of attraction and feelings

toward the partner) and toward the object of communication (the degree of positive or negative attitude about X). The Newcomb's ABX Model is based on the psychological view with communication as a way in which people orient to their environment and to each other based on the concept of balance between one's attitudes and beliefs and those that are important to an individual. Akmalrahman (n.d) adds that if the balance is disturbed, communication is used to restore it.

Co-orientation occurs when two or more individuals are simultaneously oriented to one another and to something of mutual interest. The assumption is that individuals behave toward each other based on their perceptions of the other's views and intentions regarding the object of mutual interest. Groups of individuals also act toward other groups based on perceptions of other groups' views, positions, and intentions.

This theory is relevant to this study. In planning a communication campaign for activities like the environment sanitation, the need strongly exists to establish the activity as an issue of common interest between the residents and government. Clean environment should be highlighted as mutually beneficial to both sides. This strategy can be an effective solution to the

problem that emerges in the form of distrust towards the state government and resistance towards the message, which may be politically, culturally or religiously motivated. The common interest view should reflect in the message content, communication language and channels. While some segments of the population do not require any specialized message construction and delivery, others would. For instance, an environment that is predominantly Yoruba speaking would need to be reached in that particular language and through the channels they would respect, or else, it would be difficult to achieve believability and acceptability of the message in that area. Yoruba is the dominant ethnic group in Lagos State.

### **Communicating for Mobilization**

Communication performs various functions. These include: information, education, mobilization, entertainment and so forth. For each of these functions, communication is shared within a context that would ensure the purpose of the sharing. While communication meant for information would normally be designed as a narrative like the news bulletin, those meant for mobilization would be designed to persuade and elicit action.

Mobilization is defined as a process that engages and motivates a wide range of partners and allies to raise awareness of and demand for a

particular development objective through face-to-face dialogues and other forms of interactions. Members of institutions, community networks, civic and religious groups and others work in a coordinated way to reach specific groups of people for dialogue with planned messages. In other words, social mobilization seeks to facilitate change through a range of players engaged in interrelated and complementary efforts.

The process usually takes the form of large public gatherings such as mass meetings, marches, parades, processions and demonstrations. Following changes in communication patterns today, mobilization has gone beyond the face to face gatherings as people have variously been mobilized for action through technology. For example, the Arab Spring mobilization began on the social media. Also, Nigerians were mobilized through the social media for Occupy Nigeria in 2012 to protest the petroleum subsidy removal. Advocacy, capacity development, communication and social mobilization strategies are most effective when their design is in consonance with local processes and experiences. Capacity development, advocacy and community mobilization are said to be most effective when they have broad involvement and participation

including government institutions, non-governmental organizations, communities and households, as well as other sectors of society such as private enterprises and the media.

The underlying factor in mobilization is effective communication. To this end, we consider the necessary forms of communication that are applied during mobilization. Depending on the message and the audience, communication can be intrapersonal, interpersonal, group, intercultural or mass communication. It is important that a development agent understands these in designing a message and choosing the relevant channel for the communication program. Sometimes it would require a combination of different forms for maximum impact.

### **Intrapersonal Communication**

Intrapersonal communication takes place within one person. There are three concepts of intrapersonal communication, namely: self-conception, perception and expectation. Self-conception has to do with how one sees himself, while perception is one's orientation of others. Self-conception lies internally and perception focuses outward. Both are deep rooted in beliefs, values and attitudes. They are intertwined to create a better understanding of both within and the outside world. Expectation is the futuristic-oriented message that deals

with long term occurrences. People form expectations on the basis of learned ideas within the society. This trio must be considered in creating a development message because the attitude of the recipients, their beliefs and values which determine their self-conception and perception can also affect their level of expectation. Communication planners must take cognizance of this to ensure they interact with the recipients in order to achieve congruence, believability and acceptance.

Interpersonal communication occurs between persons, mostly in a face-to-face situation from a group of two. It gives room for both verbal and non-verbal expressions because participants see one another. Okunna (1999) opines that feedback is immediate (verbally or non-verbally) in interpersonal communication. Persons who are involved interactively do maintain eye contact, hear each other, observe and respond to each other's non-verbal reactions. They change ideas, views and experiences at depths. The settings of interpersonal communication involve people relating in close proximity.

Nwodu and Fab-Ukozor (2003) opine that interpersonal communication is strong in supporting the behavior change process, particularly in explaining in detail, responding to questions and doubts, persuading and convincing target audience about the value of the

proposed behavior. It is also good in legitimizing a program idea, addressing rumors and building consensus.

### **Group Communication**

Group communication is categorized into small group and public speech. Nwodu and Fab-Ukozor (2003) stress that small group communication entails communication between a group of individuals numbering between three and 15 people. In the case of public speech, the number of people who constitute the target group is usually large and diverse in nature. This diverse nature affects the understanding and interpretation of the message sent. This type of communication is also useful in behavior change communication to elicit views from the target population. It is also good for advocacy programs.

### **Mass Communication**

Baran (1999) defines mass communication as the process of creating shared meaning between mass media and their audiences. It involves the use of technologically sophisticated media to gather, package and send messages across to diverse audiences. This means that regardless of the size of audience, and nature of message, a communicative exercise is hardly regarded as mass communication if it does not pass through any of newspaper, magazine, books, radio,

television, film and internet. This type of communication is relevant in behavioral change process because it would enable development agents in reaching wider audience at the same time.

### **Intercultural Communication**

Blake, Cooper, & Calloway-Thomas (1999) define culture as the composite set of patterns of behavior, language, mores, history, philosophy, values, belief structures and religion that guide the day-to-day relations between inhabitants of a given community. They opine that culture involves a diverse set of attributes that forms the foundation of human interactions. Considering the diverse nature of the cultures of the Lagos residents, it is necessary that attention is paid on the task of communicating across cultures in the sanitation communication campaign. The cultural warrants of the people as expressed in their belief systems must be taken into consideration in planning the program.

Intercultural communication involves communication across cultural or racial boundaries. Nwodu and Fab-Ukozor (2003) submit that this form of communication takes into account the cultural diversities existing in the world of humans. Communicating effectively at the intercultural level requires the communicator to have a deep grasp of the cultural values, norms, and codes of the target audience.

### **Environmental Sanitation and Development**

The Environment is the aggregate of the physical and biological entities that supports the existence of human life. It is both natural and human-created. Environmental sanitation is the cleanliness of the surrounding vis-à-vis buildings, sources of food, water supply etc. Blackburn, et al (2004) defines environmental sanitation as the process of creating and improving on an environment that poses no hazard to man. Environmental sanitation therefore is expressed as the control of all the factors in man's physical environment that may exercise deleterious effect on his physical development, health and survival.

Adeniyi (1994, cited in Owoeye & Adedeji, 2013) defines it as the use of different means to protect public health through regular removal of wastes, maintenance of clean surroundings, good food and appropriate personal hygiene. It also involves regular supply of safe water, prevention of pollutions, and provision of decent housing with appropriate facilities essential for human conveniences.

Moemeka (1989) defines development as a positive change for the better from conditions (social, economic, political, cultural and human) that are no longer considered good enough for the goals and aspirations of a society to those that

are most likely to meet those goals and aspirations. This means, going by this definition, that environmental sanitation is necessary for development.

The World Commission on Environment and Development (WCED, 1987, cited in Owoeye and Adedeji, 2013) has observed that for development to be meaningful, it must be sustainable. In its report, sustainable development is expressed as developments that meet the needs of the present time without compromising the ability of future generations to meet their own needs. Environmental sanitation is the major guarantee for the achievement of sustainable development. It does not only ensure the sustenance of human life, it also ensures the sustenance of wild life, ocean life, plant life etc. If a factory produces or a residence carries out its chores without proper disposal of waste, pollution ensues.

Certain diseases are known to be prevented by ensuring a clean environment. Some of them include: malaria, cholera, cough and many more. Munir (2015) outlines the following benefits of environmental sanitation:

- To reduce the occurrence of diseases and number of death toll associated with poor hygiene.
- To improve upon poor sanitation, inadequate toilets, lack of understanding about the

importance of toilet and sanitation, current poverty level, and low level investment by all tiers of governments and local communities.

- To make government and the governed understand the concept of environmental sanitation and sustainability which is more of a journey than a stage to reach?
- To bring a reversal to options of either you buy water or drink polluted one.

### **Methods and Results**

Focused group discussion research method was adopted to generate data for this study from among Lagos residents. Five individuals (R1, R2, R3, R4, R5) participated: three male, two female. Discussion lasted for fifty-five minutes. In-depth interview was also conducted with an official of the Lagos State government to discuss the issues relating to government's handling of the environmental sanitation exercise in the state. Based on the objectives of the study, relevant questions were raised. The discussants cut across the three senatorial zones of the state namely Lagos West, Lagos East and Lagos Central. The following are the discussion outcomes.

### **Compliance level of residents to the environmental sanitation exercise**

To examine this, respondents were asked how often they participated in cleaning activities during the monthly sanitation exercise in Lagos



state. They were also asked how often they complied with restriction of movement during the monthly sanitation days in Lagos state.

Their responses showed that though they complied with restriction orders, largely because they had no choice and to avoid harassment from government agents, they did not really participate substantially in cleaning their surroundings. The only person, who claimed he did, said he hired someone to clean their premises once in a while, while he stayed indoors during the period. Another said he participated only when he was able to or had the chance. "I either went to work clandestinely or stayed indoor," he said. Others said the three hours were an extended sleeping moment since the government had made it impossible for them to attend social programs such as weddings, house warming, etc. Below is a summary of transcripts.

R1 – I clean my interiors only; I comply by staying home during the three hours.

R2 – Sometimes I hire someone to clean the premises; I stay home and rest.

R3 – Sometimes I clean my premises; most times I just stay indoor.

R4 – I rarely participate; the three hours are for extended sleep since I can't honor weddings and other social engagements.

R5 - I don't participate in cleaning; sometimes I go to work earlier before 7am.

**Current communication strategy and its efficiency in mobilizing people for the sanitation exercise.**

To examine this, respondents were asked if they believed that government used the appropriate communication strategy to ensure residents' compliance with the sanitation exercise orders. They were also asked their views on the arrest and detention of defaulters and the restriction of movement.

Only one respondent acknowledged that government communicated with residents, but he was quick to mention that it was inadequate. He also said that arresting people was necessary to instill discipline, but was again quick to add that there should be a balance to ensure that the exercise achieved its aim of instilling the culture of cleanliness in people as against punishing them. Others said the use of force and arrest was not necessary. They said instead of arrest, there should be a proper awareness strategy to mobilize people for participation which unfortunately, according to them, was not a visible part of government's strategy. One respondent said: "I think there should be no restrictions on movements during sanitation exercise. I'm of the opinion that a defaulter should be someone whose environment is not clean, especially on environmental

sanitation days.” Below is the summary of transcripts:

R1- I don’t see enough communication; No need to arrest people.

R2 – I see communication, but not enough; Arrests may help instill discipline.

R3 – Instead of arresting people, they should use more communication for awareness.

R4 – No need for arrests, because there is no proper awareness.

R5 – Emphasis should be on developing the culture of cleanliness not monthly sanitation.

**Communication programme for the mobilization of residents for environmental sanitation in Lagos state.**

Respondents were asked to mention the appropriate campaigns that could help mobilize people for an environmental sanitation exercise in Lagos state. All respondents agreed that a mix of communication methods and channels would be more apposite. They further suggested that message should be focused on the health benefits of having a clean environment. They mentioned channels like bulk SMS, social media interactions, billboards and radio. The following statements from the five respondents aptly summarize the transcripts of the item on the appropriate mobilization campaign:

R1 – I will like to see billboards and social media messages on environment sanitation awareness.

R2 – They should engage telecom companies to send bulk SMS on the sanitation program.

R3 – Radio and television messages focusing on health implications of a clean environment are crucial.

R4 – Awareness should be through every available communication channel.

R5 – Awareness should focus on healthy clean environment; last Saturday should be for inspection, to check those who are complying and those who are not.

The following are the specific words of R5:

*“For me, all possible communication campaigns could be deployed to mobilize people to clean up their environment always, while the last Saturday could be set aside as a special environmental inspection day of the month when people with filthy environment would be arrested and fined or jailed as defaulters”.*

Respondents were also asked their views on how clean Lagos of today is. While some said that Lagos is relatively clean compared to some other cities in the country, others were of the opinion that Lagos may be relatively clean in terms of physical structures, but is not in some other aspects as many areas still lack public water supply and depend on bore-holes which must be

regularly treated to be useable. Noise and air pollution, according to the respondents, also constitute a serious issue that urgently needs attention.

**Interaction with Advocacy unit of the Sanitation Department at the Lagos State Ministry of Environment**

Two officials of the advocacy unit of the department in charge of sanitation programs responded to an interview on the subject of investigation. One of them responded on every issue, while the other merely concurred on some answers or simply kept quiet on others.

On mobilization strategy, they said that the unit zeroes in on a local government area monthly to ensure proper mobilization of the residents for the sanitation exercise. They claimed that the public relations department of the ministry of environment would send information through the mass media and on Facebook social media platform to notify people about the exercise. They also said that they received assistance from a few non-governmental organizations (churches in particular) in the aspects of advocacy and monitoring in some selected areas of the state. Top civil servants were always part of the mobilization efforts, according to the respondents. They are expected to submit reports on their areas of participation.

In addition to the foregoing, the respondents said that the unit also organizes seminars for people in the non-formal sector about the need to keep their environment clean. On the effectiveness of the communication, health officers of the selected local council areas must submit a monthly report stating the level of compliance. Based on the reports submitted, the unit later goes on compliance verification. Any resident defying the authorities were promptly arrested and prosecuted using the mobile courts. Fine, sealing off of premises or jail awaited defaulters. The officials agreed that that the change in attitude towards any sanitation program would better be achieved through communication. Unfortunately, they stressed, that level of communication required to produce appreciable results is not something government was capable of achieving alone.

**Qualitative Assessment of Data**

On residents’ compliance with the environmental sanitation law, it is evident from the responses that though residents compulsorily stayed home on environmental sanitation days, many did not participate in cleaning their environment. They either slept for additional hours or watch television indoors. Others merely cleaned their interiors as they normally did every weekend. For instance, R1 stated in response that she stayed indoors and cleaned her interior, R2 and R3 said they

sometimes cleaned their premises, while R4 and R5 rarely did. These responses show the attitude of residents to the exercise, hence the need for a fresh strategy for mobilization. It was observed that most landlord associations used the three-hour window for their meetings. They simply discussed their welfare and collected their dues at such meetings. Though responses from government officials show that there was some level of compliance, they admitted it was low. Moreover, since they based their assessment on one local council area, it may not be wise to extrapolate from such a single case.

Responses to the issue of existing mobilization method and arrest of defaulters show that residents were not satisfied with the level of awareness on the policy. The fact that they preferred awareness creation and mobilization by communication to arrest and detention, show that the government may have been focusing on punishing people instead of mobilizing them to participate. For instance, R1 responded: ‘I don’t see enough communication; no need to arrest people,’ meaning that communication should be the focus while the use of force could only be justified after the proof of communication had been established. This response is in line with what R3 and R4 said. Their responses confirm the need for a better mobilization

strategy. R5 even extends his response by prescribing that emphasis should be on developing the culture of cleanliness not monthly sanitation. This can only be done through communication not arrests. R2 corroborates some level of communication on the part of government but says it was not enough. He also believes that arrests may help instill discipline but that should be after communication has played its role and this is in line with the assertion of Waila & Tini (2011). The respondents’ mention of a combination of communication channels shows that residents expect the government to communicate with them via all available channels rather than use one or a few. R1 says she will like to see billboards and social media messages on sanitation awareness. This is an affirmation that multiple channels of communication are needed for awareness. R2, R3 and R4 support the idea of integrated communication channels. R2 recommends that they should engage telecom companies to send bulk SMS on the sanitation. R3 suggests that radio and television messages focusing on health implications of clean environment should be introduced while R4 recommends that awareness should be through every available communication channel. R5 goes further to advocate the awareness campaign that focuses on clean environment, adding that the last Saturday of the month should be

for inspection - to know those who are complying and those who are not. These responses are in line with the idea of using integrated communication channels.

Government officials agree that that the change in attitude they desire to see would better be achieved through communication. They also believe that the level of communication required to effectively mobilize people cannot be handled by government alone and suggest further collaboration with relevant agencies in the private sector. These suggestions clearly support the need for a combination of communication methods.

**Conclusion and Recommendation:  
The Imperative of Integrated  
Communication in Sanitation  
Exercises.**

This paper set out to examine the communication strategy for mobilizing residents to participate in Lagos State monthly environmental exercise. It sought to know the level of compliance to the policy on environmental sanitation and how effective the communication strategy had been. Investigation showed preponderant punitive measures rather than communication strategy to mobilize residents for participation, which exacerbated poor results. However, findings have shown visibly that a combination of communication methods would be necessary for effective mobilization,

at least from the point of view of respondents.

It is on this basis we recommend an integrated mobilization communication strategy. The essence of this strategy is to enlighten, inform and mobilize Lagos state residents. It is also integrated because it would take into consideration the cosmopolitan nature of Lagos State. This strategy should be led by the relevant government agency, in collaboration with selected broadcast stations (radio and television), relevant private organizations, including telecommunication, ICT firms and advertising agencies, civil society organizations as well as ethnic nationalities.

This integrated communication strategy promises to be more impactful than the strategy of compulsion adopted by the state government. This is because it focuses on enlightenment which is necessary to provide residents with information they need to imbibe the culture of sanitation. The strategy is also collaborative, involving the private sector. This implies that mobilization will not be seen as sole government efforts, but an endeavor that the private sector also has a stake in.

Message content should focus on the benefits of sanitation and hygiene to public health and the economy. It should inform through editorials and

news bulletins, SMS, chats; enlighten through drama, music, talk shows, current affairs discourse and mobilize through advertisements. Specifically, we recommend as follows that:

- Telecom companies should send bulk SMS to subscribers at least twice every month, one of which should be a day to the sanitation day. The question of who pays for this should be resolved between them and government.
- Government should partner relevant ICT firms to set up and manage dedicated social media accounts to interact with people on this.
- Government should partner with major advert agencies to run adverts on their billboards for enlightenment and mobilization.
- Religious organizations should include information about the program in their weekly publications and services as well teach members about it.
- Street and estate associations should be approached as platforms to mobilize residents for sanitation even as they hold their meetings same day.
- Partnership with relevant non-governmental organizations and entertainment practitioners should be done to produce relevant drama that would run on radio and television. Notable actors and actresses should feature.

- Partnership with broadcast organizations is required to produce and run talk shows, call-in program and discourse.
- Communication content should be focused on health benefits of a clean environment.
- Government should explore further ways of encouraging residents to keep their environment clean apart from the last Saturday of the month exercise.
- Schools should teach about health implications of a dirty environment as a way of sensitizing the pupils of the importance of environmental sanitation.
- Government should re-introduce sanitation agents who would not only recommend dirty premises for sanctions, but also enlighten the residents on the need for sanitation.
- Other environmental cleanliness efforts regulated by the government, like street sweepers and refuse picking trucks should be well focused to function more efficiently.
- Environmental sanitation rules around major markets should be vigorously enforced. Open markets in Lagos are notorious for filth.
- The use of more traditional media channels in the rural areas to mobilize people should be promoted.

## References

- Adedayo, A. (2000). Environmental Sanitation and Waste Management Policies at the local level in Nigeria. *Geo-Studies Forum*, 1(1 & 2), 29-37.
- Akmalrahman, A.(n.d.).Models of Communication. Retrieved from [www.scribd.com](http://www.scribd.com),
- Blake, C., Cooper, P., & Calloway-Thomas, C. (1999).*Intercultural Communication: Roots and Routes*, Nedham Heights: Allyn & Bacon.
- Blackburn, B., Craun, G., Yoder, J., Hill,V., Calderon, R., Chen, N., Lee, S., Levy, D. & Beach, M. (2004).Surveillance for waterborne-disease outbreaks associated with drinking water–United States, 2001–2002. *Journal of Research in National Development*,10 (2), 91-97.
- Jick, D. (2003). Advocacy for water, environmental sanitation and hygiene. Thematic overview paper. The Netherlands: IRC International Water and Sanitation Centre.
- Makinde, O. (2016).Evaluating indigenous environmental consciousness with residents of Ogbomoso in Nigeria. *Journal of Geography and Regional Planning*, 9(5), 87-103.
- Momodu, N., Dimuna, K. &Dimuna, J. (2011).Mitigating the Impact of Solid Wastes in Urban Centers in Nigeria. *Journal of Human Ecology*, 34(2), 125-133.
- Munir, S. (2015).An Examination of Environmental Sanitation and Its Health Hazards in the Polytechnic, Ibadan. *Academic Journal of Interdisciplinary Studies*, 4 (1), 377-388.
- Musbau, R. (2015, March 5)Preserving the Lagos Environment.PM News. Retrieved from [www.pmnewsnigeria.com](http://www.pmnewsnigeria.com).
- Nwodu, L. & Fab-Ukozor, N. (2003).*Communication Imperatives for Development*. Enugu: John Jacob’s Classic Publishers Limited.
- Nkwocha, E. & Okeoma, I. (2009).Street littering in Nigerian towns: Towards a Framework for Sustainable Urban Cleanliness. *African Research Review*, 3 (5), 147-164.
- Okunna, C. (1999). *Introduction to Mass Communication*, 2nd Edition. Enugu: New Generation Books.
- Omojola, O. (2016).Using Symbols and Shapes for Analysis in Small Focus Group Research. *The Qualitative Report*, 21(5), 834-847. Retrieved from <http://nsuworks.nova.edu/tqr/vol21/iss5>
- Onyekwere, J. & Nwannekanma, B (2015, March 17). Court nullifies restriction of human movement for Lagos environmental sanitation. *The Guardian*,

- Retrieved from <http://guardian.ng/news>
- Owoeye, J. & Adedeji, Y. (2013). Poverty, Sanitation and Public Health Nexus – Implications on Core Residential Neighborhood of Akure, Nigeria. *International Journal of Developing Societies*, 2(3), 96-104.
- Rasaki, R. (1988). The Problem of managing conurbation like metropolitan Lagos. Speech delivered at the Inaugural Programme of the African Leadership Forum in Ota, Ogun State, Nigeria
- Smith, J. & Shafeega, F. (2009). Community Mobilization and environmental awareness strategy. *Live and Learn Environmental Education*.
- Snyder, L. (2004). *The Importance of Health Communication*. Presentation at the University of Connecticut.
- Uwakwe, F. & Kamaru, N. (2013). Effective environmental management: A panacea for socio-economic development of developing countries. *Academic Journal of Interdisciplinary Studies*, 2 (6), 175-184. Doi:10.5901/ajis.2013.v2n6p175
- Waila, M. &Tini, N. (2011). Appraisal of the extent of environmental education among students in Mubi metropolis, Adamawa State, Nigeria. *Journal of Research in Education and Society*, 2(1), 87-96.
- Wijk-Sijbesma, C. & Murre, T. (1995). *Motivating better hygiene behavior: Importance for public health mechanisms of change*. New York: UNICEF.