

# An Assessment of the Environmental Consciousness of Residents of Nsukka Urban

---

Michael O. Ukonu, Uchenna Anorue & Brenda M. Uji

## **Abstract**

This paper is a survey of the environmental consciousness of residents of Nsukka Urban. Using rational environmentalism as theoretical anchor, the study sought to find out the extent of awareness of the residents of Nsukka on environmental pollution, their views on environmental degradation as well as the factors that affect environmental awareness in Nsukka. Respondents from three major constituents of Nsukka were randomly selected. Results indicated high awareness of environmental messages as disseminated through the mass media. However, awareness of environmental issues was limited to refuse disposal and associated health risks. Awareness of environmental health did not translate to positive action in helping to maintain a clean environment. Awareness level of residents is affected by the volume of information on environmental issues, which was low. The study stressed the need for the provision of facilities to aid the compliance of people in partnering government and other agencies in the maintenance of clean environment. Media messages should emphasize the importance of individual contributions in assuring healthy environment by portraying them as personal concerns rather than just government concern. The messages should also widen in scope to cover various environmental issues such as shifting rain patterns and its impact on agricultural productivity.

**Keywords:** *.Media .Environment .Consciousness .Pollution .Waste/Refuse  
.Waste Disposal Practices*

## **Introduction**

The physical environment where humans live has continued to gain attention across countries and across disciplines in recent years. A lot of attention is often given to human activities, which adversely affect the biosphere, the interdependent living arrangement that supports life. There is growing concern that the biosphere is under unrelenting assault. As a result, the environment is witnessing extreme events, which draw attention to the effects of human actions on the atmosphere. The environment impacts every aspect of human life, and vice versa. Various international conventions and gatherings on environment have attracted people from all kinds of disciplines, not least the mass media. The concern of various stakeholders has been majorly the impact of human actions on environmental health.

Environmental health in itself is an interdisciplinary area, drawing attention from researchers in many fields. This is because of the imperatives of environmental health to humanity. The human climate is changing, humanity continues fouling the atmosphere, the media continue to misreport environmental issues (Oso, 2006, Nwabueze, 2007), and audience ignorance on environmental matters is worsening. In addition, many satellite towns are growing into full-fledged cosmopolitan areas, thereby exacerbating the environmental problems therein.

Waila and Tini (2011), note that mankind and the environment have been in a state of continuous interaction, a relationship which was first explained by the concept of "Environmental Determination". This means that man and the environment affect human behaviour. In addition, "Human Possibilism" explains the Human-Environment Interaction (H.E.I). Man is seen as all-powerful controller of this environment, which is to be explored through Environmental Education Process. Man utilizes the earth's natural resources and modifies the physical world to suit his needs (Waila and Tini, 2011).

Dobson (2003) in Nistor (2010) refers to a new concept of citizenship, namely, environmental citizenship. This talks about assessing the rights and duties of citizens related to the environment. Every individual has the right to live in a clean environment, to access environmental information and to participate in environmental decision making. Citizens have duties related to the preservation of the environmental quality, both in the private and the public sphere.

Many positive human developmental activities have negative consequences. In an attempt to develop his environment, man inflicts a lot of impact on land. This is witnessed in the process of road, railway, airport and seaport construction, waste production and disposal, quarrying and animal operation, wells and other water development projects, agriculture and city development. At no other time in human history than now has the environmental support base of man been so threatened. The negative consequences of human activities come in form of the by-products of developmental activities, which harm the environment such as carbon emission by industries, which causes global warming and climate change. Other negative consequences are the result of development itself, such as waste disposal problems, poor drainage, flooding, environmental pollution, city/housing congestions, diseases and other poor health situations arising therefrom.

People need to appreciate their physical/social environment and to explain it as a way to be protected from nature's vagaries, as well as uphold acts that promote environmental health. An understanding of the environment is necessary to appreciate the environment to avoid causing environmental pollution, wasting other resources (like water) and without devastating the landscape. As man increases his capability to adapt to his environment in the face of teeming human needs and population, he ought to learn more about the environment and how to manage environmental degradation resulting from human activities (Press and Siever, 1982).

Press and Siever (1982:4) write: "Today we seek safeguards against nature's threat, earthquakes, landslides, volcanic eruptions, floods, droughts, and the destructive sea waves known as Tsunamis". People need understanding and environmental consciousness to prevent the processes that trigger these natural disasters. The authors add: "Perhaps even more dangerous are catastrophes of our own making, for our unique species have gained power to trigger earthquakes, foul the atmosphere and oceans and alter climates to the point of either initiating ice ages or melting the polar ice caps or flooding coastal cities." In 2004, more than 2000 lives were lost in tsunamis that hit parts of Asia and East Africa. Reports at the time showed that people were warned of impending danger, but some of them ignored the danger signed.

The foregoing points to the need for environmental awareness and consciousness as well as action. This is the reason for the huge involvement of the media, government, rights groups, NGOs and individuals in addressing environmental issues. Since 2008, rain patterns and the dry season winds (Harmattan) have fluctuated heavily in eastern Nigeria, according to Nigeria's Meteorological Agency (Ukonu, 2012). In the North, Niger State suddenly went from a prolonged drought to flooding in August 2010, causing crop failure, death of livestock and submerging of whole villages. An AFP news report of August 24, 2010 showed that the Nigerian Meteorological Agency had forecast low rainfalls, but it came pouring down. The Nigerian Television Authority (NTA) reported the death of 10 people from flooding in Lagos on August 26, 2011. According to Africa Independent Television (AIT) news of September 18, 2012, over 100 people lost their lives, with more

than 30,000 displaced as result of flooding that occurred across Nigeria between July and September 2012. Al Jazeera news on September 1, 2017, reported the displacement of over 100,000 people in Benue State by floods. Over two weeks of rain also submerged more than 3000 homes in Benue State.

Since 1976 over 3,000 reports of oil spillages were recorded with the discharge of two million barrels of oil into the environment. Urban cities and town in Nigeria are increasingly threatened by air, water and land pollution, and improper disposal of solid wastes while the rural areas are plagued by soil erosion, deforestation, and bush burning (Babalola and Babalola, 2010).

In Nsukka, Enugu State, there are various environmental problems that are affecting the ecosystem as a result of human activities. A cursory survey of the major streets, markets and residential areas shows a number of primary issues and their consequences, such as indiscriminate waste disposal and resultant air pollution, blocked drainages and infestation of harmful organisms in public areas. Ene (2014), in a study on waste disposal practices, notes that waste disposal is a major problem in our urban centres, especially in most slum areas and squatter settlements. There is not enough planned disposal sites for refuse with a resultant indiscriminate disposal of refuse on any available space. This assertion holds true for Nsukka. Such environmental degradation and poor waste disposal practices predispose residents of the town to different health and socio-economic challenges. This underscores the need to remedy the situation. One important way of doing this is through the mass media. The mass media play an important role in education, and attitude change. Therefore, it is necessary to measure how much the mass media have gone in promoting environmental awareness, and how residents of Nsukka are receptive to such messages as proof of environmental consciousness.

#### **Statement of the Problem**

Environmental pollution remains a pressing issue among many suburbs and communities in Nigeria, from littered streets, blocked drainages, indiscriminate bush burning to arbitrary disposal of waste/refuse. Over 40% of Nigerians (over 80 million people) live in cities, with over 25% of this number in slums (over 20 million). Of the more than 20 million, more than 17 million lack lacking electricity, potable water, good roads, drainages and waste disposal facilities. Health problems arising from conditions in the slums kill one person every day, and the country loses more than US \$16 million annually from cost of treatments (Olalekan, 2014; Bobadoye & Fakere (2013).

This bears testament to the urgency of environmental pollution, and the need for remedies. Apart from being aesthetically unpleasant, pollution could lead to health issues e.g. malaria, typhoid, and disasters such as flooding. Nsukka has had an unfair share of health problems arising from environmental issues, (Ene, 2014). Refuse can still be seen littering almost all around the town. This is in spite of the presence of government environmental agencies like Enugu State Waste Management Authority (ESWAMA), Special Task Group on Sanitation (STGS), and Enugu State Rural Water Supply and Sanitation Agency (ENRUWASA). Particularly, these researchers noticed that ESWAMA is active in Nsukka, but seemingly overwhelmed by the growing refuse generation capacity and attitudes of residents. But, in addition to refuse problems, the irregular/shift in rain pattern and poor crop yield (especially maize) of 2016 portend dire consequences for the future. The real problem is how much people are aware of what they might be up against in environmental challenges.

There are two radio stations located in Nsukka, *Lion FM* of UNN, and *FRCN's Voice FM*, all running environmental programmes in news and current affairs. There are environment-related bodies in UNN's Departments of Geography and Mass Communication, as well as a climate change research unit. There are open-air community-wide enlightenment campaigns and public awareness messages on refuse disposal (use of polythene bags to package refuse) by the ESWAMA section of the Nsukka local

government authority. In the midst of these situations, this study gauges the environmental consciousness and awareness of Nsukka residents, especially given the growing profile of the University of Nigeria town as a cosmopolitan area, which is fast coming under the ravages of environmental problems.

### **Objectives of the Study**

This paper is guided by the following objectives, from which key questions are implied.

1. To find out the extent of awareness of the residents of Nsukka on environmental pollution
2. To ascertain the attitudes and knowledge levels of the residents of Nsukka on environmental issues
3. To examine the views of the residents of Nsukka on environmental degradation
4. To ascertain the factors that affect environmental awareness in Nsukka

### **Literature Review**

#### **Environmental Pollution in Nigeria**

The role the environment plays in a nation's development process can hardly be overflogged. The environment is the physical surrounding for natural habitats, and provides the basis for human exploits for agricultural, health, industrial, commercial, technological and tourism development of a society. Unfortunately, many towns and communities in developing countries have unhygienic environments. Virtually all the state capitals in Nigeria fall in this category. Many of them are witnessing rapid urbanization, rural-urban migration, infrastructural decay, housing problems, water shortages, shifting rain patterns, poor agricultural practices, rising pollution, rising cases of air and water borne diseases, and dwindling environmental consciousness. Ene (2014) noted that worldwide, out of the major environmental risks, about 1.7 million premature deaths are attributable to unsafe water, poor sanitation and poor hygiene. As many as one-third of these occur in Africa.

Ityavyar and Tyav (2013) found in a study that that environmental issues did not gain official prominence in Nigeria until the 1988 Koko toxic waste dumping saga in the Niger Delta. This then brought to the fore the urgent need to establish the Nigeria Federal Environmental Protection Agency (FEPA), Federal Ministry of Environment and other relevant agencies, ostensibly to tackle environmentally related issues in the country. These include issues such as environmental pollution, sanitation, depletion of ozone layer, desertification, flooding, erosion, poverty, bush burning, deforestation, soil conservation etc. at the state and local levels.

Despite these laudable initiatives, the important question is how effective are the environmental bodies in carrying out their duties in ensuring a clean, safe and environmentally stable Nigeria? Babalola and Babalola's (2010) study established that urban cities and towns in Nigeria are increasingly threatened by pollution of air and water, and improper disposal of waste while the rural areas are plagued by soil erosion, deforestation, and bush burning. Also, according to Ityavyar and Tyav (2013), in most cities and towns in Nigeria, solid waste generated by residents are not properly disposed, constituting health hazards to inhabitants and an obstruction to traffic by way of garbage heaps. These wastes also emit foul smell to residents.

Waila and Tini (2011) have observed that in Nigeria, particularly in cities like Lagos, Port Harcourt, Bonny and Calabar, the dumping of domestic and industrial waste unto waste has generated threats and leading to Lagos in particular being polluted. Ene's (2014) study further indicated that some houses are not provided with toilet facilities and people defecate indiscriminately, with many of the city dwellers practicing "bush method". According to her, the consequence is that some areas are filthy and dirty and emit offensive odour. This makes the inhabitants vulnerable to diseases attack.

Ezekpube and Obiora (2014) studied the environmental problems of sachet water disposal in Nsukka Urban. Their study indicated that the environmental problems of sachet water waste disposal in the area were considerable, and ranged from blockage of drainage systems, air pollution to water pollution. Among the recommendations by the researchers, they urged that government should make policies that before any company is allowed to start sachet water production, it would have shown its reusing and recycling machines. This is to enable the recycling of used sachets instead of letting them be disposed indiscriminately.

Ene (2014), in a study that focused on the provision of necessary environmental facilities in Enugu State, notes that drainage facilities are absent in some areas. This has resulted in flooding in such areas during heavy rainfall. In most cases, the inhabitants worsen the problem by throwing their waste into moving flood which end up blocking the drainage systems. Some are rendered homeless during heavy rainfall around Ugwuoye, Onuiyi and Catering Rest House Areas of Nsukka. This is not to mention the inaccessibility of these areas to vehicles. The part of the inhabitants in worsening the case makes it imperative to not only provide facilities, but also to actively engage citizens in protecting the environment, Ene recommended.

The health hazards that arise as a consequence of poor environmental practices is another case in point. The WHO (2015) shows that worsening environmental conditions in many areas threaten to reverse gains made in public health over the last several decades. For instance, malaria remains a big problem for Nigeria partly because of the unsanitary environment in some communities. Ene (2014) says that poor sanitation encourages breeding ground for dangerous disease carrying insects. The possibility of epidemic, such as diarrhea and Lassa fever cannot be ruled out in most of these unhygienic environments. According to Mowee (1990), there is no doubt that a dirty environment affects the standard of living, aesthetic sensibilities, health of the people and thus the quality of their lives. The corollary is that improper disposal or storage of waste can constitute hazards to the society through the pollution of air, land and especially water.

Suleiman and Shehu's (2005) study focused on how economic factors can predispose some classes of people to environmental hazards. According to them, millions of adolescents die every year from illnesses caused by environmental pollution, and millions more suffer chronic disabilities such as diminished physical strength and endurance, lower intelligence, and lack of alertness. The poor adolescents suffer most because they have no choice but to face unsanitary living conditions, malnourishment, and exposure to infectious organisms and toxic chemicals, and lack of health services

Ityavyar and Tyav, (2013) have lamented the haphazard nature of buildings in many urban societies in Nigeria, which encourages the growth of filth. In some of these societies, waste bins are provided, but almost always invisible from the heap of garbage besieging them. Ene (2014) recommends that leaders and the government at all levels should ensure the creation of aesthetic values and beatification in our urban cities. According to her, architecture of the environment can satisfy some of the psychological needs of the people in a community, as visual pleasures relax a troublesome heart and aids longevity. Good landscaping is a powerful tool to achieve a pleasant environment. Apart from this, a clean, beautiful and appealing environment contributes largely to promoting the tourism potentials of a society. People are naturally attracted to that which is clean and aesthetically appealing, and repelled by that which is foul. This shows that having an environmentally safe environment can boost the economics of a community, state or country.

### **The Mass media vs. Public Environmental Awareness and Protection**

The environment has always been on the agenda of many organizations in the world. It is a global agenda, and its urgency informs the formation of global, regional, national and

local bodies, with the attendant convening of a myriad of events and meetings. In 1992, there was the United Nations Conference on the Human Environment "Stockholm Conference" and the 1992 United Nations Conference on Environment and Development (UNCED). The Stockholm conference came up with AGENDA 21 which spelt out the strategies for improving the quality of the environment. According to Babalola and Babalola (2010), the document emphasized the need for environmental education as a tool that could be used by all nations to arouse people's consciousness, positively change their attitudes and instill in them values and skills that can promote effective environmental management. With access to environmental information, the people have full knowledge of the implications of their activities on the environment and are able to participate more effectively in decision making processes that affect the environment. Environmental awareness and sensitization are key mass media functions.

The general public receives much of its information from the mass media. As a result of this, the media determine, to a considerable extent, the kind and amount of environmental information that reaches the public, and that may, in turn, serve as a basis for the public's actions. The environment and all the issues revolving round it are an area that cannot be neglected. The central place the environment occupies in our lives necessitates the need for the mass media to adequately inform people about trends in the environment (Boykoff and Boykoff 2007). According to Weingart, Engels, and Pansegrau, 2000, p.263 "how the mass media cover scientific subjects matters in many ways, whether scientists like it or not. Stem cells, genetically modified organisms, cloning, and the environmental or health implications of chemicals or climate change: whatever the subject, media coverage has helped to shape public perception and, through it, affected how science is translated into policy, most notably in regard to the environment, new technologies and risks".

Sampei and Aoyagi-Usui, (2009, p.8) similarly argue that "due to their crucial role in contemporary society and their influence on people's perceptions of climate change issues, the media have emerged as an important setting for the (re)construction of environmental discourses". Media portrayal of the environment can help to shape public perception and, thereby, influence how the fight against environmental degradation is converted into action and policy.

According to Ukonu (2007, p.128), media information on the environment must be fashioned in such a way that audience can understand. He notes that "technical information must be interpreted in order to facilitate understanding. If the audience fails to understand environmental information the reporter cannot meet his need, i.e. attempting to change or influence attitudes of the audience members concerning an environmental issue and possibly get them to literally do something regarding the subject".

Nsitor (2010), notes that environmental awareness is clearly dependent on environmental information, which then depends on mass media and public sphere communication. According to her, the mass media act as an agenda setter in relation with environmental issues and bring into public attention issues and problems about which the public would know less in the absence of the media. Uzzel (2000, cited in Nistor, 2010) notes that global environmental problems are frequently viewed as more serious compared to local problems. This is because more attention seems to be given to world scale environmental issues rather than the ones that affect specific communities, and how residents in such communities can handle them. Mass media thus have the role in increasing social and particularly, local environmental consciousness by helping to create more informed individuals.

This means that mass media efforts sometimes can fall short in the bid to promote environmental consciousness/awareness. This, according to Babalola and Babalola (2010), may be because the media do not provide for live interaction and engagement with the audience. Thus, the audience is left hanging without the opportunity to ask questions or

clear other grey areas with informed personnel. The researchers recommended that the media should intensify their efforts at public enlightenment by presenting environmental information in the local languages to remove the languages barrier. According to Nwabueze (2007, p.107), "the Nigerian mass media play their basic roles of information, education and entertainment in the society. The information role includes message dissemination on environmental or green issues in the nation and in the global scene. When incidents with great significance to the environment and to the health of people take place in the society, the media expose such incidents and make the public aware of them."

However, the basic questions, according to Nwabueze, are - "what is the nature of media coverage of environmental issues in Nigeria? Do the media give adequate coverage to the environment in view of its vital place in human existence? Even when the media cover environmental issues, what approach is adopted in treating environmental news or what is the nature of message content of the coverage? Can the coverage be said to be purposeful and capable of achieving societal change towards ensuring an environmentally sustainable nation?" (p.107).

Oso adds that the mass media give haphazard coverage to environmental issues with mainly spot news reports. According to Moeti, Maraisane and Marou, (2008, p.145), 'information about environment issues hardly ever reaches many people through the mainstream media such as newspapers, radio and television, because of a number of problems. Among these are: the complexity of presentation language, lack of interest by media personnel and other factors influencing production of media publications.' It is against this backdrop that this study looks into the environmental consciousness of the residents of Nsukka, Enugu State. This will provide a springboard for suggestion of strategies for raising the awareness level of people through the media, government policy and collective citizen action.

## **Theoretical Framework**

### **Rational Environmentalism theory**

The theory that guided this research is the Rational Environmentalism Theory. It is one of the theories identified by environmentalists (Adepetu and Eziashi, 1998). The model conceives of man as an integral part of the ecosystem, but man is powerful, rapacious and capable of destroying nature unless his activities are guided and controlled. Hence, the proponents conceive that proper education and orientation can change man from a wanton destroyer into a constructive manager, conservationist and builder of the environment for generations to come. In the light of rational environmentalism theory, this research work holds that man can be educated, oriented and mobilized to live in harmony with his environment and preserve it for his future generation. The citizenry require basic environmental education to uphold to the principles of environmental friendliness. This may provide for adequate and proper management of the environment.

### **Research Design**

The study adopted the survey design. The population for this study includes residents of the three communities in Nsukka area of Enugu State, from age 18 and above. The communities are Nkpunano, Ihe n'Owerre, and Nru, with an estimated population of 150 thousand. These are people currently living in what this study envisages as Nsukka Urban, and can give responses pertaining to environmental issues in their community. The study is therefore not on Nsukka local government area, which is far wider. Four hundred respondents (an approximation) were selected using the online Australian Calculator, to serve as respondents for the study. The stratified and simple random sampling techniques were used to divide Nsukka Urban into different wards/communities and households on streets from Nru, Nkpunano, Ihe Owerre. The

latter covered the University of Nigeria, Nsukka and Government Reserved Area (GRA). Eighty respondents were administered the questionnaire from each of the identified strata (wards).

The questionnaire and personal interview were used as the instrument for data collection. The study used two forms of data collection, primary and secondary data. The primary data were sourced from respondents as answers to the questionnaire as well as responses from the coordinator of ESWAMA, Nsukka, Mr John Onah. The secondary sources were data generated from library materials, books, journals and other related reports. Data collected were analyzed using simple percentages and presented in a tabular form.

**Data Presentation**

Four hundred copies of the questionnaire were administered to respondents who are residents of the different areas in Nsukka Urban in Enugu State. Out of these, 360 were returned and are here analyzed. Data are presented in frequency tables, with text blocks underneath to explain numerical data on the tables. The questions are first presented followed by the tables.

- 1. Have you come across/ seen any news report/ programme/ advertisement/ announcement on protecting the environment?**

**Table 1: Whether respondent have seen any information on protecting the environment**

Response	Frequency	Percentage
Yes	360	100%
No	0	0%
Total	360	100%

All the respondents agreed to having seen an advertisement, report or announcement on protecting the environment that is 100% of the respondents. None answered 'No'. The question merely oriented the respondents, and put them in a positive frame of mind to answer other questions. Thus, the overwhelming positive response to the question was expected.

- 2. If yes, in which of the following media do you mostly get information on the environment?**

**Table 2: Media mostly used to get information on the environment**

Response	Frequency	%
TV	141	39.1
Radio	133	36.9
Newspaper	19	5.3
Discussions	25	6.9
Billboard	37	10.2
Social media	5	1.4
Total	360	100

Out of 360 respondents, 141 included TV as their highest source of information, representing 39.1%. Others are radio-133 (36.9%), Newspaper-19 (5.3%), Discussions-25 (6.9%), billboard- 37 (10.2%), and the social media - 5 (1.4%).

**3. Using the number 1 to 4 identify the ones you consider the most environmentally unsafe practices you see around? (1 is the least seen, and four is the highest).**

**Table 3: Ranking environmentally unsafe practices**

Response	Frequency				Mean
	1	2	3	4	
Indiscriminate refuse disposal	24	26	15	55	30
Blocked Drainages/ Gutters	31	11	07	25	20
Open Defecation	28	09	16	41	23.5
Bush burning	21	11	14	26	18

With a mean of 30, indiscriminate refuse disposal was seen as the most environmentally unsafe practice noticed by respondents. Coming second is open defecation. Most of the people who chose open defecation came from out the UNN, and this answer speaks to the problem of non-provision of toilets in many of those areas. Even households that had toilets still had people choosing the 'bush method'. Blocked drainages was next highest seen with an average of 20, followed closely by bush burning with a mean of 18. The numbers tended to heighten at the level of the least seen practice and the most seen practice; that is 1 and 4.

**4. Do you have a standard waste bin (you went to the market or elsewhere to procure a designated waste bin?)**

**Table 4: Whether respondents have standard waste bins**

Response	frequency	Percentage
Yes	72	20%
No	60	16.7%
Not really	228	63.3%
Percentage	360	100%

Table 4 indicates that 72 respondents, i.e. 20% answered 'yes' to having waste bins in their areas. Sixty (60) or 16.7% said they do not have at all, while 228 i.e. 63.3% said they do not really have waste bins. The last option was inserted during analysis because the respondents' answers tended to be somewhere in between yes and no. Many said they have refuse bins, but not as if it is a permanent one. They answered not really because they said that once they dispose of their refuse, they somehow get any handy instrument and use it to put dirt until it fills, especially waste bags dispossessed of wares from the market or a damaged plastic bucket.

**5. How are the refuse dumps in your area handled?**

**Table 5: Handling the refuse dumps**

Response	frequency	Percentage
Evacuated Regularly	36	10%
Burnt	72	20%
Left till overflow	252	70%
Total	360	100%

Thirty-six (36) of the total respondents i.e. 10% said that their refuse dumps were evacuated regularly, while 72 respondents, representing 20% of them, said that their refuse is burnt. 252 respondents (70%) said their refuse dumps are left till they begin to overflow.

**6: How do you dispose of your waste if there is no waste bin around you at a time?**

Here, only 96 of the respondents said they tried to locate a refuse bin or hold onto their waste till they get home. This is 26.7% of the total respondents. The remaining 264 respondents gave answers referring to actions bordering on throwing their waste on the road, in the bush, or just about anywhere around.

**7. What did you observe in the rain pattern this 2016?**

**Table 7: Observations in rain pattern in 2016**

Response	True (%)	False (%)	Don't know (%)
The rains fell normally	121 (33.6)	31 (8.6)	208 (57.8)
The rains did not come in good time	161 (44.7)	11 (3.1)	188 (52.2)
There has been excessive rain	210 (58.3)	34 (9.4)	116 (32.2)
There has been less than normal quantity of rain this year	12 (3.3)	127 (35.2)	221 (61.3)

The responses to this question again showed the divided in the constitution of the respondents. Those from more urban areas said the rains fell excessively. Majority of those who said they did not know also came from this group of respondents. People outside the UNN areas were on the side of the responses that the rains neither fell normally nor were excessive. The data again betrays the level of weather ignorance among many respondents.

**8. Which of the following crops did you hear or notice had a poor yield this year**

**Table 8: Observations in crop yield in 2016**

Response	frequency	Percentage
Maize	123	36.7%
Yam	26	7.2%
Rice	121	33.6%
Don't Know anything about crop yield	81	22.2
Total	360	100%

The numbers were divided almost in half by the choice in the first and third options. The Maize option received a slight highest figure of 163 followed closely by Rice with 161. These researchers did not find out, but it may be linked to the price of rice at the time. Yam is even far more cultivated than rice in Nsukka urban, yet respondents did not go for the yam option as much as they went for rice. Many of them could be traders too for which they may have heard of the performance of rice in the farm this year.

**9. What are the consequences of living in an unclean environment you know?**

Among their lists of consequences, all of them said it could lead to health related problems, some even mentioning the specific diseases. Other consequences listed include:

- Aesthetically unpleasant
- Can cause flooding when drainages are blocked
- Produces foul odour

- The methods of proper/safe environmental practices they are aware of include: using waste bins; keeping drainages and gutters uncluttered; education/ sensitization of the masses on the issue.

**10. What do you think you can do to ensure that all or most environmental problems in the whole of Nsukka is resolved (stop the refuse heaps, avoid blocking the drainages, avert diseases due to pollution)**

This open-ended question appeared to be the high point of the questions. In all most all cases, the respondents forgot they were the ones being addressed. They immediately noted that government should create awareness, evacuate the refuse disposal bins immediately, and open the drainages. In all, the respondents did not see any part they would play, and dropped environmental responsibility squarely at the door step of government.

**Summary of Interview with ESWAMA, Nsukka LGA Coordinator, Mr John Onah**

In an interview with the an ESWAMA Coordinator, John Onah, he noted that environmental consciousness is growing in the Nsukka areas as the body (ESWAMA) uses available means such as the Lion FM to propagate information especially the bagging and proper disposal of refuse. He however regretted that people were yet to fully abide by the act. He said he wished that government would do more in terms of refuse recycling (around Ikenga Hotel, Nsukka areas) which was formerly done by a private-public partnership of a certain professor in UNN in conjunction with the Nsukka LGA, but which has been abandoned.

He noted too that the LGA is currently on environment health campaign using relevant health officials. He advocated a kind of private initiative in which some people provide refuse disposal vehicles, with which they collect people's refuse and collect tokens of N10 and N20 naira or more depending on the type and weight of refuse. He said that this practice obtained currently in Onitsha, Anambra State, but that he was uncertain the kind of response the practice would receive in Nsukka due to the attached levy. He however called for more private interests in environmental issues in Nsukka.

**Discussion of Findings**

The residents have an appreciable level of awareness about the basic consequences/effects of an unclean environment. They showed high awareness that uncleanliness could lead to health related problems, some even mentioning the specific diseases. They also pointed to aesthetically unpleasant housing system, which can cause flooding when drainages are blocked, and the production of foul odour. This is in conformity with Waila and Tini's (2011) findings. The researchers' study was done in Adamawa, where 96% of their respondents were aware of the negative effects of environmental problems.

Television remained atop the list of media through which the respondents got information on the environment. Radio was a close second but it was instructive that TV ranked higher than radio as a source of environmental information. It is a clarion call to the two radio stations in Nsukka to do more to shore up environmental awareness in Nsukka.

The most recurring pollution practice out of the four given items is indiscriminate refuse disposal. One of the most visible consequences of urbanization is mounting refuse dumps. The respondents noted also that the dumps were left to overfill before they (the refuse bins) got the attention of the refuse agents. This is irrespective of the equally visible efforts of environmental agents, who do well to clear the dumps In Nsukka. However, it became evident that the agents did not reach many parts of the town apart from the UNN campus, market areas, Techtonics, New Anglican road, and university road areas. Many

respondents pointed to areas where refuse dumps had become an eyesore around the Junior Staff Quarters of the University and many students' hostels. See appendix 2.

After indiscriminate refuse disposal, the next most ticked option was blocked drainage/gutter, then open defecation and bush burning in that order. From these, it can also be seen that while respondents had awareness about environmental pollution practices, not many see bush burning as an unsafe practice.

In answering a few questions, the divide in the constitution of the respondents showed. Most of those who chose open defecation as the most seen practice also chose indiscriminate refuse disposal as the least seen practice. Most of those who chose bush burning as the most seen practice also chose blocked drainages as the least seen practice. Those who chose blocked drainage as the least seen practice chose bush burning as the most seen practice. This indicated the difference between answers from the less developed areas and those from the University of Nigeria, where refuse bins littered every hostel and other residential areas (see appendix 1). Some students said they chose defecation as the most seen because they also practiced bush method, when the toilet ends become "unapproachable". They said that this leads them to 'blessing' all the farms around Junior Staff Quarters, Odenigwe and hilltop areas with their excreta.

The respondents' high awareness of environmental information did not show in their practice. Very many households did not have standard refuse bins. Respondents indicated lack of readiness to procure refuse bins any time soon given many other needs they have. They also displayed another lack of interest in environmental cleanliness as many said they would readily discard their refuse on the roads or on the street ways if they did not find any refuse dump nearby. Thus, carrying out instructions on keeping the environment clean may be more difficult because not everyone will comply, and there is inadequate provision of proper waste disposal and management facilities. The interview section of this study noted that Nsukka people were not complying with the messages being spread on Lion FM, UNN on bagging refuse, and properly disposing them at designated venues.

Ene (2014) says that waste disposal is a major problem in our urban centers especially in most slum areas and squatter settlements. There is not enough planned disposal sites for refuse with a resultant indiscriminate disposal of refuse on any available space. As indicated, one of the major difficulties in keeping the environment clean, especially disposing of refuse properly is that people notice that no one really cares; many people are doing the wrong thing. Thus, many give up, caring only for the inside of their homes, and joining the bandwagon when a public area is involved.

The respondents betrayed lack of awareness of the weather patterns in Nsukka. The researchers learnt that in 2016, the rains did not fall normally, they did not come in good time, they were not excessive, and of course, there was less than normal quantity of rain in 2016 in Nsukka. Respondents in less developed areas tended to be more weather conscious, especially women, than those even in the University of Nigeria. Again, the environmental awareness hovered around refuse issues and the resultant risk of disease. Issues about weather and, climate changes, shifting rain patterns, poor crop yield, industrial and vehicular pollution, etc., were not mentioned as part of environmental issues that are bedeviling Nsukka.

While rice and yam are not cultivated in Nsukka in commercial quantity (in fact rice is not at all cultivated in Nsukka urban), it was surprising that the people of the area chose rice as the crop they knew that did not do very well in farms in 2016. As earlier noted, these researchers did not find out, but it may be linked to the price of rice at the time. Yam is even far more cultivated than rice, yet respondents did not go for the yam option as much as they went for rice. Many of them could be traders too for which they may have heard of the performance of rice in the farm this year. But, quite obviously, this researcher heard learnt from authoritative sources in the University of Nigeria that maize

production in Nsukka in 2016 was awful, but respondents did not toe that line. Yet, 62 of those who ticked their ignorance of crop yield this year all came from the UNN.

The respondents were also not aware of their responsibility in helping to maintain an environmentally healthy society. Many of them saw environmental health as the duty of government. One may not insist that the respondents were totally ignorant of what they can do, but their minds were preoccupied with the role to be played by government. People find it difficult to change a place that is already environmentally filthy. They believe that it is the duty of the government or administration in charge of that community that will coordinate efforts and do a large scale clean up, most likely with their own paid workers, before expecting individuals to maintain the place.

The ESWAMA coordinator in Nsukka noted that people were not cooperating with the ESWAMA authorities in using designated bags to package refuse and drop them at designated venues. By implication, the coordinator noted that more needed to be done in the public enlightenment campaign on environmental health in Nsukka. He also indicated that private interests need to partner with the public authorities in environmental issues, especially in refuse disposal.

### **Conclusion**

This study was predicated on the need to have an environment that is safe and conducive for human existence. One of the ways to ensure this is through educating the people using media and media related campaigns and messages. The respondents have good knowledge of what it means to stay in an environmentally safe environment. But many are not eager to do much in helping to realize it. This research further strengthened findings on the attitude of Nigerians towards social issues, not least health related ones. People see everything as a government function. They demand financial rewards to do anything. People easily recognize the need for things to be all right, but also easily place responsibility for rightness and goodness at doorsteps faraway from theirs. In addition, knowledge of environmental issues hardly transcends issues on refuse disposal. The atmosphere, agricultural yields, rain patterns, climate change, farm practices, and industrial practices are rarely mentioned in connection with the environment. Radio particularly has done less than expected from respondents' answers.

### **Recommendations**

Environmental education develops a good and functional relationship between knowledge, awareness and citizen action. These help people to adopt environmentally safe or friendly behaviour. The present research has identified numerous factors hindering adequate environmental awareness and practice in Nsukka Urban. It is important to therefore resolve these problems in order to prevent the implications that may result from the factors.

1. Environmental protection campaigns and programmes should be designed to suit the unique traits of the community or society involved. This involves taking into consideration their lifestyles, business/commercial practices and culture. Lion FM and Voice FM in Nsukka should step up their efforts in environmental awareness creation. They can partner relevant departments in UNN such as Geography, Mass Communication, Fine and Applied Arts, Architecture, Civil Engineering, Climate Change Unit, etc.
2. To ensure that government and institutional efforts at safeguarding the environment are successful, there must be provision of facilities and amenities to aid the compliance of people. For example, the message on proper refuse disposal may not yield needed dividend if no waste bins are provided strategically in public places.
3. There should be more deliberate publicity and messages educating people about environmental protection across all media categories. This includes messages on newspapers, television, radio, billboards, posters and signboards. The messages

should emphasize the importance of individual contributions in social environmental issues as personal problems, not just government concern. Market associations, rights groups, youth organizations, labour/civil society groups and town unions can be incorporated in a joint venture with the local government authorities to drive home the part to be played by individuals and groups in creating and maintaining an environment for healthy living. The messages should also widen in scope to cover various environmental issues such as shifting rain patterns and its impact on crop yields.

4. In situations where people are not keen on following instructions for protecting the environment and proper waste disposal practices, other strategies can be introduced such as instituting sanctions to offenders. This can serve as deterrent to other people.

## References

- \_\_\_\_\_ (2017). Nigeria floods displace more than 100,000 people. Retrieved October 23, 2017 from <http://www.aljazeera.com/news/2017/08/nigeria-floods-displace-100000-people>.
- Babalola, Y. and Babalola, A. (2010). *Awareness and accessibility of environmental information in Nigeria: Evidence from Delta State*. Delta State: Library Philosophy and Practice.
- Bobadoye, S and Fakere, A. (2013). Slum prevalence in Nigeria: What role for architects? *World Environment*, 3(2), 45 -51. ; doi:10.5923/j.env.20130302.02
- Boykoff, M., and Boykoff, J. (2007). Climate change and journalistic norms: A case study of US Mass Media Coverage. *Geoforum* 38, 1190-1204.
- Creswell J. (2012). *Educational research*. Boston: Pearson.
- Ene, R. (2014). Environment hygiene in the Nigerian urban cities: A case study of Enugu urban. *International Journal of Environment Science and Development*, 5(4) 67-95.
- Ezeokpube, N. and Obiora, C. (2014). Environmental problems of sachet water waste disposal in Nsukka urban, Enugu State, Nigeria. *Civil and Environmental Research*, 6(1) 105-113.
- Eziashi, A. and Adepetu, A. (1998). Man-environmental relationships: Competing and conflicting philosophies and paradigms. *JEnu*. 2(1), 43-63.
- Gorsuch, R. (1983). *Factor analysis (2<sup>nd</sup> Ed.)*. Philadelphia: W.B. Saunders.
- Hage, S.; Everette, D.; Aronold, I.; and Steven, H. (1976). *New strategies for public affairs reporting*. New Jersey: Prentice-Hall.
- Ityavyar T. (2013). Environmental pollution in Nigeria: The need for awareness creation for sustainable development. *Journal of Research in Forestry, Wildlife and Environment*, 4(1), 87-91.
- Jibo, M (1996). *Politics, mass media and national development*. Ikeja: Malthouse Press.
- Krishna, M. (2013). Environment awareness through mass media. Retrieved from <http://www.groundreport.com/enviromnetnal>.
- Moeti, L., Maraisane, V., and Marou, T. (2008). Mass media and the environment in Lesotho. In V. Agbanu and C. Nwabueze (Eds.) *Readings in mass communication: Global perspectives on communication issues* (pp.144-155). Owerri: Top Shelve Publishers.
- Nistor, L. (2010). The role of the internet in shaping environmental concern: A focus on post- communist Europe. *Journal of comparative Research in Anthropology and Sociology*, 1(2), 32-47.
- Nwabueze, C. (2007). *Environmental communication: Perspectives on green communication and information management*. Enugu: Daisy Press.
- Nwosu, I. and Uffoh, V. (2005). *Environmental public relations management: Principles strategies, issues and cases*. Enugu: Institute for Development Studies (IDS), UNEC.
- Olaekan, G. (2014). Urbanization of urban poverty, slum and sustainable urban development in Nigerian cities: Challenges and opportunities. *Developing Country Studies*, 4(18) 13-19.

- Oso, I. (2006). Framing the Environment: Press Coverage of Environmental Problems. In *The Nigeria Journal of Communications*, 4 (1& 2), 66-77.
- Osunkotun, A. (1999). The environment and its internal dimensions. In A. Osunkotun (Ed.). *Dimensions of Environmental Problems in Nigeria* (pp. 153-164). Ibadan: Davidson Press.
- Press, F. and Siever, R. (1982). *Earth*. San Francisco: W.H. Freeman Publishers Inc.
- Sampei, Y. and Aoyagi-Usui, M. (2009). Mass media coverage, its influence on public awareness of climate-change issues, and implications for Japan's national campaign to reduce greenhouse gas emissions. *Global Environmental Change* 19 (2009) 203-212.
- Suleiman, M. and Adaramaja, S. (2005). The influence of environmental factors on the adolescent's health. *Journal of Educational Research and Development*, 1(1), 56-67.
- Ukonu, (2012). Nigerian Newspaper Reportage of Climate Change and its Influence on Public Knowledge of Climate Change. Being a Ph.D. Thesis, Department of Mass Communication, University of Nigeria, Nsukka.
- Ukonu, M. (2007). *Specialized journalism: A complete course*. Nsukka: MEST.
- Waila, A. and Tini, H. (2011). Appraisal of the extent of environment education among students in Mubi metropolis, Adamawa State. *Journal of Education and Leadership Development*, 3, 12-20.
- Weingart P., Engels A., and Pansegrau P. (2000). Risks of communication: Discourses on climate change in science, politics, and the mass media. *Public Understanding of Science* 9: 261-283.

---

DR. UKONU, MICHAEL O. is a Senior Lecture with the Department of Mass Communication, University of Nigeria, Nsukka.

ANORUE, UCHENNA is Lecturer with the Department of Mass Communication, University of Nigeria, Nsukka

UJI, BRENDA M. is a Research Fellow in the Department of Mass Communication, University of Nigeria, Nsukka