

ENVIRONMENTAL HEALTH EMERGENCIES IN NIGERIA

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ABSTRACT

Flooding, operational /looting, spills, structural collapse, drainage malfunction, accidents, to mention but a few, have been observed to be common in Nigeria; leading to environmental health emergencies. Environmental emergencies can occur anywhere, at anytime, but some parts of the world like Nigeria may be more prone to it; due to poor environmental management. The resultant outcome of environmental emergencies in Nigeria have summarily remained high morbidity, mortality, and economic loss. In which the causes are attributed to lack of value for the environment, as poor sanitary habits have predisposed Nigerians to suffer from high level environmental emergencies. So far, it has been difficult to prevent Environmental health Emergencies in Nigeria. However, the current sure ways out are: upholding environmental health through environmental sanitation, high level preparedness for emergency situations, reporting ,quick intervention, health education, review of environmental polices, prosecution of offenders ,having a sense of value for the environment, and others.

Keywords: Environmental Health, Environmental Sanitation, Environmental Emergencies .

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Introduction

The key to good health lies largely in the environment; thus a sanitized environment remains a valuable treasure. In fact, much of man's health problems can be traced to adverse environmental factors such as water pollution, soil pollution, air pollution, poor housing conditions presence of diseases and radiative substances of all kinds which pose constant threat to man's health. In the pursuit of optimum health, man has always strived from time in memorial to tame the environment so as to make it conducive for man through environment health.

In line with the above assumption, Achalu (2007) defined environmental health as all collective interactions of humans with the environment and the short term and long term health consequences of those interactions; it is focused on the prevention of infectious diseases spread by contaminated water, food, waste, insects, pests, and vectors. Achalu added that environmental health and environmental sanitation are interwoven; as environmental

sanitation is the process of eliminating health hazards from the environment so that they do not pose hazards to man. Environmental sanitation include provision of safe and adequate water supply, proper refuse disposal, proper human waste disposal, food hygiene, good housing, pest / vector control, hazard elimination, air control, noise control, pollution control, radiation control, to mention but a few. In order to buttress the need for good health through environmental health, the fifth stage of the War Against Indiscipline of Buhari – Idiagbon regime of 1984 was launched, mandating environmental sanitation exercises on the last Saturday of every month (from 7am – 10am). Unfortunately, this recorded little success, thus leading the environmental pollution, flooding and health hazards. These have however caused environmental emergency situations in Nigeria, as diseases such as cholera, typhoid, malaria, lassa fever, including Ebola, Collapse buildings, oil spills, underground water pollution, storm damage, including kidnapping and constant bombing have taken away peoples happiness (Nwabueze, 2014).

Furthermore, the twin issues of climate change and global warming have attained a grater dimension which is evident by constant weather change in both rainy and dry seasons, sea level rise, flood, erosion and others. Global climate change driven largely by anthropogenic activities is a growing threat to the environment as well as man's well being in both developed and industrialized nations leading to a conclusion that significant harm from climate change is already occurring and further damages are likely to occur if nothing is done. Nigeria is particularly vulnerable to the impacts of climate change in many ways considering its geography, climate, soil, economic structure, energy demand, daily activities, population settlement patterns, to mention but a few (National Environmental Standards and Regulations Enforcement Agency (NESREA), 2007).

An Overview of Environmental Emergency in Nigeria

An Emergency or disaster occurs when people's health and livelihood are at risk due to the release of hazardous and noxious substance into the

environment. Environmental emergency are defined as sudden on set disaster or accidents resulting from natural, technological or human induced factors, or a combination of these, that cause or threatens to cause severe environmental damage as well as loss of human lives and property (NESREA, 2007).

According to Environmental Law Research Institute (2011), an environmental emergency occurs when there is threat to the environmental quality of water, land, or air; as possible threats include oil and hazardous material spills, gas leakage, war or other civil crisis. Nigeria has seen a dramatics increase in the frequency and magnitude of both natural and man-made emergencies which have severely affected lives, and the environment at large. Observations have shown that Nigeria is really a disaster prone country which has predisposed the country to environmental emergencies like flooding which is majorly caused by the degradation of the country's environment and natural resources by man. Flood, rain storms, droughts,

industrial accident, oil spills ,building collapse ,bombing, kidnapping, plane crash, road accident , affects people and contributes to epidemic diseases; poverty, and death in most parts of Nigeria.

In Nigeria, flooding; has remained a widespread environmental emergency affecting even states in the upland areas like Bauchi, Sokoto, Niger, Kwara; those states in the low land like Imo, Port-Harcourt, Lagos, Aba, are not left out. It is now common to hear that one was displaced by flood. Observations have also shown that environmental problems associated with uncontrolled expansion of structures and poor management drainages have increased the vulnerability of these cities to disaster, blocked drainage channels in Urban areas worsen the extremities associated with flooding; while the rural condition is not in anyway better as flooding incidences in rural areas are becoming increasingly worrisome. The neglect of environmental policies such as land use Acts, forest control Act, animal disease control Acts, civil aviation Act, factory Act, quarantine

Act, and others are some of the major reasons why environmental health emergencies are on the increase; including Ebola disease (Adedeji, 2013).

Report from International Disaster Database (2013), has also shown that climate change is having an unprecedented effect on the increase in natural disaster and the associated risk of environmental emergencies; with climate change already stretching, the disaster relief system, and future climate related emergency events will generate increased and more costly demand for assistance all over its world. In line with this, Adepime (2011), posited that the importation in high level technological equipments such as second hand value vehicles, television, computer, telephones, x-ray machine and others have caused health problems due to its radiative effects; while unemployment, and religious crisis have increased robbery, kidnapping, bombing, killing and civil unrest; as curfew have been declared in most states of Nigeria like Bornu, Kaduna, Benue, to mention but a few. Observations have shown that in Nigeria emergency have on several

occasions completely disrupts the normal day-to-day activities.

Table showing Some Nigeria Emergency Timeline of the 21 century according to National Emergency Management Agency(NEMA),2014.

Date 2014	Events	State	Outcome/No. of Deaths
14/3	Stampede killed job seekers:	Abuja	17
15/4	Abduction of 276 Chibok School Girls	Bornu	Tension
20/7	First Ebola Case	Lagos	Tension
8/8	Declaration of Ebola as National Emergency	Abuja	Tension
12/9	Nigeria preacher's guest house collapse	Lagos	More than 80
2013			
10/3	Plan crashes after Lagos take off	Lagos	13
28/10	Niger River boat accident	Niger	42
2012			
3/6	Dana Airline crashed into Lagos Building	Lagos	153
31/8	Flood death toll rises	Ibadan	102
2011			
28/8	Another flood death	Ibadan	20
12/2	Rally stampede	Port Harcourt	11
15/10	Lead poisoning	Zamfara	400
2010			
24/9	Flood displaced Northerners ; Jigawa, Plateau	Kano,	2 million displaced
27/8	Cholera out break in the North	Zamfara	352
20/12	Truck crash	Kogi	55
2008			
18/12	Poisoned (my pikin) medicine	Lagos	30
29/9	Suitan among crashed	Abuja	104
30/9	Dam Collapse	Zamfara	1000 displaced
2006			
12/5	Oil pipeline explosion	Lagos	200
2005			
22/10	Bellview plane crash	Ogun	117
10/12	Sosoliso plane crash:	Port Harcourt	107
2002			
28/1	Army dumb blast:	Lagos	many
27/8	Busts crash:	Lagos	60

Types of Environmental Health Emergency

It is wise to note at this juncture that before any situation or incident can be called an environmental health emergency, it must:

- * Cause threat to life, health, property, and environment.
- * Has the potential to escalate if proper, and quick intervention is not taken.
- * Have resulted in loss of life, property, and jeopardized health at large.

In line into the above assumptions the United Nations Emergency Protection Governing Council (2012), enumerated the three types of environmental emergency that occur around the globe as follows:

- 1) Technological or man-made emergency (usually resulting from an industrial accident), often linked with terrestrial and aquatic oil spills, explosives, toxic substances from mines, and radiation effects.
- 2) Natural emergency (triggered by man), large scale vegetative fire release, gas, noxious

substance, earthquakes, flood, hurricane, change in rain fall patterns.

- 3) Complex emergencies (conflicts and war), like Boko Haram saga, Kidnapping, mass population displacement, and the likes.

Effects of Environmental Health Emergency

All environmental emergencies have some negative environmental impacts; which may be immediate, and life threatening; for example when earth quake damages an industrial facility, it will in turn release hazardous material. This is called the secondary impact of environmental emergency. The secondary impacts may cause as much damage as the primary (casual factor), for example in 2010, about 2 million families in the Northern Area (Kano, Jigawa, Plateau) were displaced by flood; this resulted to in high morbidity and mortality, crop/livestock loss, hunger, unemployment to mention but a few.

Again, environmental health problems arising from emergencies situations

include: threat to human health, well being, survival rate, shelter, and water, problems; thus, oil spill destroys crops, aquatic habitate, wildlife, degrades amenities, and reduce recreation and tourist life, just like other forms of environmental emergencies have influence on morbidity and mortality (WHO, 2014). In the same vein, environmental emergencies also, predisposes large number of people to displacement, injury, and economic loss. It also cause harm to existing infrastructure and threatens the future of sustainable development. The relative effects of environmental emergency can also differ depending on the number of factors such as type, intensity and distribution, condition of environment, degree of the preparedness and opportunity to embrace early warning (Park, 2009).

Management of Environmental Health Emergency

Emergencies are not confined to a particular part of the world they can occur any where, at any time, most times it can be prevented; although not all environmental emergencies can be

prevented, but proactive measures can be taken to replaced its critical effects. Ogbalu (1997) is of the view that the major management measure towards environmental health emergency is by taming the environment so that it no longer constitute a hazard to man. The environment can only be tame through environmental sanitation:

- * proper disposal of waste,
- * elimination of hazards like (noise, pollution, radiation),
- * provision of good housing,
- * adequate water supply,
- * air hygiene,
- * food hygiene,
- * disease /pest and vector control,
- * accident prevention, etc.

In the same vein, Achalu (2007), observed that the neglect of environmental sanitation has done more harm than good; as the magnitude of environmental pollution has increased so much that, air pollution will kill about 2.7 – 3 million people each year, about 2.5 billion people will suffer from high levels of indoor air pollution, which out door pollution will harm more than 1.1 billion people in large cities, about 12 million deaths

will occur due to contaminated water / food ,and poor sanitation will kill 12 million people each year.

Achalu, therefore called on all and sundry to embrace all environmental health programmes such as:

- * water pollution/water supply control,
- * air pollution control,
- * noise control,
- * food protection,
- * parasite / pest/rector control,
- * adequate sewage disposal system
- * solid waste management,
- * housing safety /sanitation,
- * occupational environmental control,
- * radiation safety and control,
- * accident recreational environment control.

Ogbalu (1997) stressed more on the need to eliminate ignorance which is the worst disease; as a number of environmental challenges are due to people's ignorant health behaviours. For example indiscriminate dumping of waste can block drainages thereby leading to flooding, illegal structure creation can block free flow of water in drainages or structural collapse killing people, as indiscriminate

defection can cause epidemic diseases like cholera ,as pollution of all kinds have remained unfavourable to health. The need arrives to preserve the environment through the use of environmental sanitation.

Furthermore, Park (2009), proffered three fundamental aspects of emergency or disaster management as response, preparedness and mitigation. It is very necessary to always prepare for emergencies because such ones like natural emergencies are inevitable. The more prepared a country is, the lesser the harm that may follow an environmental emergency. Quick intervention or response during emergencies will help to reduce harm accruing from it .Early preparedness and quick response will generally curtail devastating out comes of environmental emergency; all these are really the way out of environmental health emergencies.

Recommendations

In addition to the management of environmental health emergencies among others, the following recommendations are made:

- * health education to create intensive need for proper waste management.
- * job creation / youth empowerment in order to avoid civil emergencies.
- * development of the a sense of value for the environment.
- * reviewing of the existing environmental policies.
- * constant meetings on environmental emergency forum, this brings environmental experts together, government, NGOs, civil society, industrial agencies, UN agencies etc to improve, prevent, prepare and respond to all resilience to environmental emergencies.
- * creating workable emergency lines.
- * partnership with other environmental emergency agencies in both the state, L.G.A. and Federal: red cross, fire service, police red cross, civil defence, and the likes.
- * research on environmental emergency will help to prevent, prepare for and respond to emergencies.
- * proper funding of emergency management programmes by federal government as National Emergency Management Agency (NEMA) is structurally incapacitated, the situation is worst in states and local levels.
- * building capacity to anticipate and respond to climate change.
- * proper weather forecasting to facilitates early warning.
- * urging multinational oil companies operating in the country to help in environment protection by abiding on led down laws on oil business.
- * educating youths on the dangers of pipeline vandalization on individuals and society at large.
- * dredging of river/canal in order to increase the capacity of river flow and caution in opening of dams.
- * prosecuting offenders of environmental policies.

Conclusion

Environmental health emergencies are not confined to a particular part of the world; they can occur any where, and at any time. Although, some parts of the world are more prone to environmental emergency situations, or a particular environmental emergencies like flooding, accident, structural collapse and the likes of it; as Nigeria has witness since the 21 century. The outcome of these

environmental emergencies have always affected both individuals and society at large because it has caused both human and material loss ,while high morbidity and mortality have remained a big challenge to the country. Past efforts in preventing environmental health emergencies have proved abortive; thus the need for all and sundry to embrace the latest measures in environmental health which among all is the major way out.

REFERENCES

- Achalu, O.E. (2007). *Environmental Health and Pollution Control*. 2nd Ed. Paragraphic Publishers.
- Adedije, J.A. (2013). Environmental disasters and management. *international Journal of Construction Engineering and Management* 2(3),39-45. doi. 10.5923/j.ijcem.20130203.01
- Adepimpe, N. (2011). Environmental Emergency in Nigeria retrieved on October 6, 2014. <http://en.wikipedia.org/wiki/environmentalemergency>.
- Environmental law Research Institute, (2011). Environmental laws and polices. Retrieved on October 6, 2014. <http://www.e/ri-ng.org/newsandrelease2.htm/>
- International Data Disaster Database, (2013). Environmental disaster: Retrieved on October 6, 2014. <http://www.gamji.com/article8000/news8296.htm/>
- National Environmental Standards and Regulations Enforcement Agency, (2007). Environmental Emergencies: Retrieved on October 2, 2014. http://www.sdc.drr.net/and_environmentalemergencies.

National Emergency Management Agency, (2014). Nigeria Emergency Timeline in the 21 century. Retrieved on October 7, 2014. <http://www.mapreport.com/disastertimeline/nigeria.htm/>

Ndubueze, E. (2014). Flood disaster and natural emergency in Nigeria. Retrieved on October 7, 2014. <http://www.thisdaylive.com/home/news>.

Ogbalu, A. I. (1997). *Public Health Education*. Onitsha, University Publishing Company.

Park, K. (2009., *Preventive and Social Medicine*. 12th Ed. India, Banarsida Bjanrt Publisher.

United Nations Emergency Protection Governing Council, (2012). Environmental protection. Retrieved on October 2, 2014. <http://www.medwelljournals.com/fulltext/%3>

WHO, (2014). Environmental Health, Emergencies Retrieved on October 2, 2014. <http://www.who.int/environmentalhealthinemergenciesanddisaster/en/>