

A Look at Nigeria's Bourgeoning Emergency Management System: Challenges, Opportunities, and Recommendations for Improvement

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Introduction

Emergency management in Nigeria, a country once known as the *Giant of Africa*, is in its infancy. Although organized responses to disasters date back to the early 1900s when the Fire Brigade was in charge of putting out fires, protecting properties, and helping communities respond to disasters, a comprehensive approach to emergency management only began in 1999. However, since then, Nigeria's emergency management system has undergone tremendous changes. These include better organizational structure, more funding, curriculum development in emergency management education programs, increased training of emergency personnel, and more collaboration with other countries on emergency management issues. Nevertheless, this burgeoning disaster management system still has a long way to go and faces innumerable challenges, including poverty, lack of funding for emergency management programs, and marginalization, among many others.

This chapter examines the history of Nigeria, including its demography and geography, and takes a look at the factors contributing to vulnerability to disasters and hazards in Nigeria. In addition, this chapter discusses some past disasters as well as the opportunities and the challenges facing Nigeria's emergency management system. This chapter concludes with recommendations for improving Nigeria's emergency management system.

Background

Nigeria has a land area of approximately 356,700 sq miles (923,800 sq km), with varying climate and terrain like coastal swamps, tropical forests, woodlands, grasslands, and semi-desert (National Disaster Management Framework (NDMF) 2010; United States Department of State (USDS) 2011). Nigeria is surrounded by Cameroon to the east, Chad to the north east, Benin Republic to the west, Niger Republic to the North, and the Gulf of Guinea to the south (NDMF 2010) (see Fig. 1).

Nigeria is Africa's most populous country with a population of about 152 million people (USDS 2011). The capital of Nigeria is Abuja and the most populated city is Lagos, with about 11.4 million people (USDS 2011). Although there are over 250 ethnic groups in Nigeria and three major indigenous languages (Hausa, Igbo, and Yoruba), English is the official language (NDMF 2010). There are 36 states and the Federal

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Capital Territory as well as 774 Local Government Areas (LGAs) (NDMF 2010). The two major religions in Nigeria are Islam and Christianity, although some Nigerians belong to other indigenous religions.



Fig.1. Map of Nigeria showing its boundaries (source: USDS)

Before the discovery of oil in 1956 (Onuoha 2009), many Nigerians engaged in agricultural production. As a result, much of Nigeria’s foreign exchange earnings came from the exportation of cash crops like cocoa, groundnuts, and oil palm (Watts 1983). Unfortunately, when oil was discovered in the 1970s, able-bodied men and women already engaged in agriculture left the rural areas for cities in search of white-collar jobs (USDS 2011). This meant that older and less productive individuals were left to cultivate the lands leading to lower production and, subsequently, lower exports (Watts 1983). Since the discovery of oil and natural gas, these two natural resources have been the mainstay of Nigeria’s exports, constituting 37 per cent of Gross Domestic Product in 2006 (USDS 2011). In fact, oil alone has generated over \$500 billion in the past five decades (Onuoha 2009).

Hazards Peculiar to Nigeria

Nigeria is prone to different types of hazards, both natural and man-made. Natural hazards that are prevalent in Nigeria include, but are not limited to, flooding and droughts (Oladipo 1993; Etuonovbe 2011; Ibem 2011). Flooding displaces more people than any other disaster, perhaps because about 20 per cent of the Nigerian population is at risk of flooding (Etuonovbe 2011). Flooding is therefore a perennial problem in Nigeria that consistently causes deaths and displacement of communities. For example, in 2010, about 1,555 people were killed and 258,000 more were displaced by flooding (Babatunde 2011). In addition to causing the loss of lives, property damage and displacement of people (Babatunde 2011; Etuonovbe 2011), flooding can also lead to epidemics like

cholera if people drink contaminated water (Babatunde 2011). Flooding in Nigeria is due to many factors including, but not limited to, the many rivers that traverse the country (e.g. River Niger, River Benue, and Ogun River), huge amounts of rainfall, river overflows, ocean storms, tidal waves, dam breaks and levee failures, and poor or absent drainage systems (Etuonovbe 2011; Ibem 2011). In some areas where there are drainage systems, illicit dumping of garbage has engendered flooding (Tomori n.d.).

Another common natural hazard in Nigeria is drought. Drought in Nigeria typically occurs in the northern part of the country, in a region known as the Sudan-Sahel Zone (Oladipo 1993). For example, between 1972 and 1973, a severe drought, which occurred in northern Nigeria, killed over 300,000 animals (Oladipo 1993). The major reason for drought in the Sudan-Sahel Zone is the inability of “rain-bearing monsoon winds from the Atlantic Ocean to penetrate enough into this region” (Oladipo, 1993, p. 241).

Man-made hazards peculiar to Nigeria include, but are not limited to, terrorism, pipeline explosions, road and air transportation accidents, internal crises, and structural fires (Ogundiya and Amzat 2008; NDMF 2010; Ibem 2011). State terrorism (Madunagu 2005, as cited in Ogundiya and Amzat 2008) occurs in Nigeria. Many examples were present in the 1980s and 1990s, including the killing of Dele Giwa, the founding Chief Executive and Editor-in-Chief of Newswatch magazine by a letter bomb on October 19, 1986; the assassination of Alfred Rewane, a nationalist and democrat on October 6, 1995; the alleged poisoning of Moshood Abiola on July 7, 1998; and the assassination of Kudirat Abiola, Moshood Abiola’s wife on June 4, 1999 (Ogundiya and Amzat 2008). Another form of terrorism is perpetrated by a militant Islamic group, known as *Boko Haram*, which means “to forbid everything Western and Western Education” (Danjibo 2009 p 7). The goal of this terrorist group is to replace Western values with an Islamic State (Danjibo 2009). *Boko Haram*, which is recognized by the USDS as a terrorist group, has carried out a series of attacks since it was formed in 2002 (BBC News 2011). According to BBC News (2011), a U.S. Congressional report noted that “Boko Haram has quickly evolved and poses an emerging threat to U.S. interests and the U.S. homeland” (BBC News 2011).

Pipeline explosions are a common disaster in Nigeria. These occurred due to pipeline vandalization, which is the “illegal or unauthorized act of destroying or puncturing oil pipelines either to disrupt supply or to siphon crude oil (or its refined products) in order to appropriate it for personal use or for sale on the black market or any other outlet” (Onuoha 2009 p 370). Pipeline explosions have claimed the lives of more than 5,000 people since 1998, according to Amanze-Nwachukwu (2007, p. 23 as cited in Onuoha 2009).

Another common disaster in Nigeria is road and air transportation accidents. Road transportation accidents happen frequently, especially in urban centers like Lagos. In fact, in a study of the challenges of vulnerability in Lagos Megacity Area, Ibem (2011) found that respondents (N=135) identify road transportation accidents as the most prevalent man-made disaster in Lagos. There is no gainsaying the fact that Nigeria has experienced a myriad air disasters since the first airplane landed in Ikeja Airport, Lagos, in 1925 (Edeaghe et al. 2006). To put the frequency of air transportation accidents in Nigeria in perspective relative to air transportation accidents on the African Continent, Opara (2007) noted that between 1996 and 2005, Nigeria accounted for 9.3 per cent of all air accidents

that occurred on the African continent (Opara 2007). Opara (2007) further noted that out of a total of 376 air fatalities that occurred in Africa in 2005 alone, Nigeria accounted for 225 of these fatalities. In addition, between October 2005 and November 2006, Nigeria experienced five plane crashes that killed over 300 people (Opara 2007).

Internal crises, especially in the Niger-Delta region, are a common occurrence. The crises in this region include acts like hostage taking, pipeline vandalizing, and armed fighting between law enforcement officers and local armed groups in the region (Ogundiya and Amzat 2008). These internal crises are engendered by the marginalization of those living in the Niger-Delta region (Ogundiya and Amzat 2008). A World Bank report puts the degree of marginalization in perspective by noting that about 80 per cent of Nigeria's oil and gas revenue goes to one per cent of the population (cited in Onuoha 2009 p. 375). Going by the World Bank statement, the extent of marginalization is shocking, to say the least, and may be partly to blame for the armed resistance against the Federal Government, especially in the oil-rich Niger-Delta region.

Another form of internal crisis in Nigeria is sectarian violence between Muslims and Christians. Violence between supporters of these two religions has escalated within the last decade, claiming the lives of over a thousand victims, from both religions from 2009 to 2011 (Walker 2011). Much of the violence has occurred in Plateau State, a crossroad between the Muslims in the north and Christians in the south (Walker 2011). One of the reasons for the continuity of this vicious circle of sectarian violence is because perpetrators of these violent acts are not prosecuted when apprehended (Walker 2011).

Vulnerability in Nigeria

In this chapter, vulnerability is defined as the susceptibility of communities to hazards and disasters. Vulnerability to hazards and disasters is a product of the natural events, and the built and natural environments (Tierney et al. 2001). For instance, a country that is prone to floods (e.g., due to hydrological processes like increased precipitation) and does nothing to reduce the potential impacts of flooding (e.g., build drainage systems) can be said to be vulnerable to flooding. Nigeria is vulnerable to many hazards, including, but not limited to, fires, flooding, transportation and industrial accidents, and political conflicts (Ibem 2011). Nigeria is vulnerable to these and other hazards and disaster impacts because of high population densities in urban areas (50% of Nigerians live in urban areas) (Nwaka 2005), an inability to integrate risk reduction measures into national development plans and programs (Abang 2005), and poverty (NDMF 2010). In addition, scarcity of land, especially in urban centers like Lagos, has led to inordinate construction of structures in hazardous areas (NDMF 2010; Ibem 2011). Furthermore, the low level of disaster education is another reason why Nigeria is vulnerable to hazards (NDMF 2010; Ibem 2011). Finally, poverty and marginalization have been mentioned by some experts as the leading cause of domestic terrorism, especially the type of terrorism manifested in the Niger-Delta area (e.g. Ogundiya and Amzat 2008) as well as pipeline vandalization (Onuoha 2009).

Past Disasters

Nigeria, just like any other country, has experienced myriad disasters-some with rapid onset and others with slow onset. These disasters have killed countless lives and inflicted serious damages to the built and natural environments (NDMF 2010). Examples of past disasters in Nigeria include, but are not limited to, the following list:

- The **Ogunpa flood** occurred in Ogunpa, Oyo State, on August 31, 1980, killing over 300 people and destroying properties, including homes, bridges, and vehicles, worth millions of Naira (Tomori n.d.). The causes of the flooding were incessant rainfall over a period of 12 hours and the blocking of drainage systems by garbage previously thrown into the drainage systems by residents (Tomori n.d.).
- The **Maitatsine riot** of December 18, 1980, is a notable riot in Nigeria in which over 4,000 people were killed (Danjibo 2009). The riot was between the Maitatsines, an anti-Westernization sect based in the Northern part of Nigeria, and law enforcement officers (Danjibo 2009).
- **Bagauda Dam break** occurred in Kano State in August 1988 killing 142 people and destroying over 18,000 homes and 14,000 farms (Etuonovbe 2011). This dam break was engendered by torrential rain-induced flash floods (Etuonovbe 2011).
- **Jesse oil pipeline explosion** occurred on October 17, 1998. This explosion killed at least 1,000 people (mostly women and children) and injured hundreds more in Jesse, Delta State (Environmental Rights Action (ERA) 1998; Onuoha 2009). The explosion may have been caused by a pipeline leakage, which was detected a day before the explosion, although the Federal Government said the explosion was caused by vandals (ERA 1998). This assertion by the Federal Government was the reason why no compensation was awarded to the victims of this disaster (ERA 1998).
- **Oviri Court fire** occurred on July 10, 2000, after a pipeline was vandalized in Oviri Court in Delta State triggering a fire outbreak that killed over 300 people and destroyed properties worth \$500 million (Onuoha 2009). The cause of the fire was a spark from metal containers used to scoop the leaking oil (Oil and Gas Journal 2000).
- **Military Cantonment bomb explosions** happened on January 27, 2002 in Ikeja Military Cantonment, Ikeja, Lagos State (NDMF 2010). During the explosions of about 1,000 bombs, which were caused by a fire that gutted the Ikeja military ammunitions storage unit, some people who were fleeing from the explosions ran into a sewage canal at Oke-Afa, Lagos and drowned (Ana et al. 2007). Over 800 people were killed from the blast impact, drowning, or injuries sustained from the explosions (Akpabio and Alao 2002 as cited in Ana et al. 2007).
- **Bellview Airline Boeing 737 (Flight 210) crash** took place on October 22, 2005, in Lisa Village, Ogun State, killing all 117 people on board (Opara 2007; NDMF 2010). The airline was on its way to Abuja from Murtala Muhammed International Airport, Lagos (Nwaneri 2011). An unfortunate aspect of this incident is that even though the airline was off radar six minutes after take-off, the crash scene was not located until the following day (Nwaneri 2011).

- **Sosoliso Airlines DC-9 (Flight 1145) crash** happened on December 10, 2005, in Port Harcourt, killing all 103 people on board (Opara 2007; NDMF 2010). This airplane left Abuja for Port Harcourt and crash landed 1,200 meters from Port Harcourt Airport runway (Edeaghe et al. 2006). The response to this crash, which was thought to be due to bad weather, was quick but hindered by the lack of water needed to put out the fire that broke out as a result of the crash (Edeaghe et al. 2006).
- **Abule-Egba fire** occurred on December 26, 2006, after a pipeline was vandalized. The ensuing fire gutted buildings and vehicles, and killed at least 700 people in Abule-Egba, Lagos State (Onuoha 2009). Those killed by the fire were mass buried while those who were severely burnt (Fadeyibi et al. 2009) and taken to Lagos State University Teaching Hospital for treatment (Fadeyibi et al. 2009). The medical response was carried out by Lagos State Emergency Management Services (Fadeyibi et al. 2009).
- **Abeokuta flood** occurred in the City of Abeokuta, Ogun State on July 26, 2007 as a result of incessant rainfall, which lasted for over 24 hours (Ibidun 2007; Adelekan 2011). This flood affected over 2,817 people, destroyed over 500 homes and 100 vehicles, and paralyzed social and economic activities for several days (Adelekan 2011). The total infrastructure loss is estimated to be about 3.2 million Naira (Adelekan 2011).
- **Boko Haram riots** occurred between July 25-30, 2009, in Bauchi, Kano, Yobe, and Borno States (Adesoji 2010). Over 700 people, mostly members of Boko Haram, were killed, and many buildings, including police stations and churches were destroyed (Nwankwo and Falola 2009; Oyegbile and Lawal 2009 as cited in Adesoji 2010).
- **United Nations Headquarters bombing** by Boko Haram took place in Abuja, Federal Capital Territory, in August, 2011 (Murray and Nossiter 2011). A vehicle filled with explosives was detonated in the United Nations headquarters killing at least 18 people, including United Nations personnel, and destroying three floors of the seven-story building (NY Times 2011). Boko Haram claimed responsibility for the attack, which represents the first attack by this terrorist group on an international target (NY Times 2011). The use of a vehicle borne improvised explosive device suggests that Boko Haram is using tactics similar to that used by Al Qaeda in the Islamic Maghreb against United Nations headquarters in Algeria in 2007 (NY Times 2011).

A Bourgeoning Emergency Management System

Disaster management in Nigeria is defined as the “coordination and integration of all activities necessary to build, sustain, and improve the capability to prepare for, protect against, respond to and recover from threatening or actual natural or human-induced disasters (NDMF 2010 p 1).” The history of organized disaster management in Nigeria dates back to 1906 when the Fire Brigade was charged with the responsibility of battling fires, saving lives, protecting properties, and responding to disasters (NDMF 2010). In the 1960s and 1970s, the disaster management function was ad hoc and housed in the offices of the Head of State and State Governors (NDMF 2010). In 1976, the Federal

Government created the National Emergency Relief Agency (NERA) in response to a devastating drought that occurred between 1972 and 1973 (NDMF 2010). In 1990, in line with the United Nation International Decade for Natural Disaster Reduction, the Federal Government set up an inter-ministerial body to develop ways to reduce natural disaster risks (NDMF 2010). Three years later, the Federal Government expanded the scope of risk reduction to encompass all types of disaster by passing Decree 119 and subsequently making NERA an independent body under the Office of the President (NDMF 2010). In March 1999, by Act 12 and amended by Act 50 of 1999, the Federal Government created the National Emergency Management Agency (NEMA) and charged it with the responsibility of managing all types of disasters (NDMF 2010; Fagbemi 2011).

The Civil Aviation Act was passed on November 2006 (Opara 2007). This act gives power to the Nigerian Civil Aviation Authority to enforce aviation safety guidelines, improve security, punish violators of aviation laws, and develop modalities to compensate victims of air disasters, among other responsibilities (Opara 2007). Although the intent of the Civil Aviation Act was to improve airline safety, it may have been enacted a little late (Opara 2007), especially in the light of the series of airline disasters that occurred between 2005 and 2006.

In 2010, the NDMF was developed to offer a holistic approach to managing disasters, with participation from a wide array of players, including the Federal, State, and Local Governments, as well as Civil Society Organizations (CSOs), and private sector organizations (NDFM 2010). The NDMF provides a regulatory mechanism that ensures efficient and effective disaster management for government officials, community leaders, private organizations, CSOs, and practitioners (NDMF 2010). In addition, the NDMF defines the roles and responsibilities of disaster management stakeholders (NDMF 2010). The NDMF is a clear indication of a paradigm shift from response and recovery to other phases of disaster management (NDMF 2010).

Organization of Emergency Management

At the federal level, NEMA is the lead agency for managing disasters through its six zonal offices spread across the country (Fagbemi 2011). At the state level, the Federal Government mandated the establishment of State Emergency Management Agencies (SEMAs) and at the local level, mandated the creation of Local Emergency Management Agencies (LEMAs) (NDMF 2010; Fagbemi 2011). All three emergency management agencies are charged with the responsibility of developing capabilities to prepare, prevent, respond to, and recover from disasters (NDMF 2010). Other players in Nigeria's emergency management system include, but are not limited to, the military, police, paramilitary, and CSOs (NDMF 2010). In addition, Disaster Response Units (DRUs), which can be summoned from military formation across the country, are also important players in Nigeria's emergency management system (NDMF 2010).

When a disaster occurs in any community, the first responders are community institutions like Community Based Organizations (CBOs), Faith Based Organizations (FBOs), and Non-Federal Governmental Organizations (NGOs) (NDMF 2010). The effort of this community emergency management structure is complemented by Emergency Management Volunteers (EMV) and if more resources are needed, SEMA and NEMA can bring in additional resources (NDMF 2010).

Challenges and Opportunities facing the Nigeria Emergency Management System

There are many challenges facing Nigeria's burgeoning emergency management systems, including but not limited to, inadequate funding, differences in emergency management structures at the state level, inadequate disaster education, lack of collaboration among different levels of government, and corruption. First, NEMA is inadequately funded. According to Fagbemi (2011), the Assistant Director for Risk Reduction, the amount allocated to risk reduction is insufficient to meet the demand of disaster risk reduction. Insufficient funding has negative impacts on NEMA's ability to implement risk reducing strategies. For example, inadequate funding is one of the reasons why NEMA has implemented vulnerability and capability analysis (VCA) in only 21 out of a total 774 Local Government Areas and why many disaster risk reduction publications that were produced by emergency management agencies have not been translated into local languages (Fagbemi 2011). These publications contain valuable disaster-related information that would allow locals that do not speak English to understand their roles and responsibilities, as well as measures they can adopt to reduce disaster risks in their localities. One reason for insufficient funding may be because the Federal Government does not see disaster risk reduction as a priority (Fagbemi 2011).

Second, although the Federal Government expects each of the 36 states to have a SEMA, only 22 states have emergency management agencies backed by law (Fagbemi 2011). Other states are still clinging to the old emergency management system- Emergency Relief Agency-or ad hoc emergency management system (Fagbemi 2011). When state agencies have different emergency management structures, it is more difficult to standardize procedures, collaborate, and coordinate resources when disasters occur.

Third, a lack of independent courses in disaster risk reduction is a big challenge (Fagbemi 2011) for a burgeoning emergency management system even though there are plans in place to infuse disaster risk reduction as part of six existing subjects in primary and secondary levels of education (Fagbemi 2011).

Fourth, insufficient collaboration and cooperation among different levels of government and, in particular, from lower levels of government (Fagbemi 2011) is another challenge facing Nigeria's emergency management system. This problem is more significant because there is insufficient capability to reduce risks and develop disaster plans at the local and community levels (Fagbemi 2011). To make matters worse, these levels are where disaster impacts can be directly felt.

Finally, poverty is another problem confronting Nigeria (more than 70 per cent of Nigerians live below the poverty line) (Onuoha 2009). According to a World Bank database, the 2010 Gross National Income per capita for Nigeria is \$1,800 (World Bank 2011). Poverty is one of the root causes of terrorism (Ogundiya and Amzat 2008; McEntire 2009) and may be the reason for increased terrorist activities in Nigeria.

In spite of many problems, there are at least three opportunities available to Nigeria to improve its emergency management system. First, the Federal Government should broaden the scope of emergency management courses in higher education

curricula. Currently, only six Nigerian universities have developed curricula in disaster risk reduction and will award Masters Degrees in disaster risk management (Fagbemi 2011). NEMA is responsible for providing a three-year funding for this program (Fagbemi 2011). Efforts should be made by NEMA to expand this program to other universities in Nigeria.

Second, the Federal Government can leverage resources of the Grassroots Emergency Management Volunteers Corps (GEVC) to prepare, protect, respond to, and recover from disasters. Since its formation in 2008, GEVC has been a reliable tool in disaster risk reduction and has spread to about 23 states with approximately 6,408 members (Fagbemi 2011). By providing resources to GEVC for expansion to more states, this volunteer corps can become a more important player in helping to reduce disaster risks and respond to disasters. In the same light, unemployed graduates, especially those with disaster risk expertise acquired through the National Youth Service Corps program (a compulsory one year service for university and polytechnic graduates) can be used as paid volunteers to participate in disaster risk reduction strategies. For instance, they can help to educate the public on the importance of reducing disaster risks or help to respond to disasters when they occur. NEMA can work with the National Directorate for Employment to ascertain the feasibility of this proposed strategy.

Finally, terrorist attacks carried out by Boko Haram, such as the one on the United Nations Headquarters in Abuja in 2011 and the failed 2009 Christmas day bombing by Al Qaeda in Arabia Peninsula, have indubitably placed Nigeria on the international radar vis-a-vis terrorism and, in particular, on the U.S. radar. These events provide opportunity for the Federal Government to work with the U.S. government in fighting terrorism. The benefit for the U.S. government would be the protection of its interests (e.g., oil importation from Nigeria (Ogundiya and Amzat 2008)), among other benefits. In fact, since the 9/11 terrorist attacks, Nigerian and U.S. authorities have been collaborating together to fight terrorism. For example, both countries have been working together to track and freeze terrorist assets and exchange intelligence information (Ogundiya and Amzat 2008). There is a need for the Federal Government to continue to partner with the U.S. and other countries with the goal of not only fighting terrorism but mitigating, preparing for, responding to, and recovering from all types of disasters.

Conclusion

Emergency management in Nigeria is a relatively new concept. However, since the establishment of NEMA in 1999, commendable steps have been taken to improve Nigeria's emergency management system such as the inclusion of risk reduction in University curricula and the collaboration with the U.S. government to fight terrorism. Unfortunately, continuous improvements have been met with commensurate challenges in the form of poverty, lack of collaboration among levels of government, and lack of funding, among many others. Some of these challenges, especially the lack of funding, may be because disaster risk reduction is not a priority in Nigeria (Fagbemi 2011).

With these points in mind, the author offers some recommendation to help improve Nigeria's emergency management. First, one strategy that can be adopted to make disaster risk reduction a priority in Nigeria is to couple disaster risk reduction with

other more salient issues like environmental protection or poverty reduction. The Green Wall Project in Nigeria is a good example of a project that reduces the risk of drought and desertification as well as environmental protection (Fagbemi 2011). NEMA officials should, therefore, be strategic when developing disaster risk reduction programs by making sure that such programs not only reduce disaster risks, but also address other problems like environmental degradation, climate change, or poverty. By addressing more than one problem, a disaster risk reduction strategy stands a better chance of attracting federal, regional, or international funding.

Second, it is vital for NEMA to continue to collaborate with other important and relevant stakeholders and strengthen existing ties. Registration of NGOs, CSOs, FBOs, and CBOs interested in disaster risk reduction (Fagbemi 2011) is a step in the right direction. The next step should be to leverage the resources-personnel, finance, time, expertise, etc-of these organizations to reduce disaster risks.

Third, implementation of poverty alleviation programs (Ogundiya and Amzat 2008) and educational programs can help to address some of the root causes of terrorism. In addition, training of special anti-terrorism squads drafted from the Army, Air Force, Navy, and Police (Ogundiya and Amzat 2008) by the special forces of developed countries like the U.S., would be instrumental in intelligence gathering and responding to terrorist attacks.

Fourth, in order for the Federal Government to reduce vulnerability to hazards, steps must be taken not only to integrate risk reducing measures into national plans, but also to educate the public about the importance of risk reduction. Without adequate disaster education, citizens would be oblivious of what constitute hazards and what type of avoidance strategies to adopt in order to reduce their vulnerabilities. In addition, avoidance strategies like zoning ordinances that limit or prevent development in hazardous and environmentally sensitive areas must be embraced.

Finally, there should be increased collaboration between the Federal Government and the governments of countries like the U.S., Japan, Britain, and Israel. Such collaboration can focus on training Nigeria's law enforcement agencies and first responders about the relevant skills needed to prepare, prevent, mitigate, respond to, and recover from disasters. For example, training on the Incident Command System given to NEMA officials by the U.S. Environmental Protection Agency on March 26, 2009 (USDS 2009) and the Pandemic Disaster Response Exercise hosted by the Federal Government and organized by U.S. Africa Command with support from Disaster and Humanitarian Assistance Medicine and funded by the United States Agency for International Development on October 24, 2011 (Lapierre 2011) are a great start. More of these training and exercises are still needed in the future.

If these recommendations are implemented, the author is confident that Nigeria can once again be the *Giant of Africa* in the purview of emergency management and its emergency management system can be a model worth emulating by other African countries and beyond.

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