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Disaster Management in a Volatile Ecowas Region: Nigeria Perspective

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Abstract

This study examined disaster management in Nigeria with a view to ascertaining how policies and government agencies can be used to achieve effective disaster management in the West African Region. The objectives of the study were; to determine how staff training can be used to impart efficiency and quick response to emergency incidence. To suggest the adequacy of standard equipment required for disaster management and care for accident victims. It was meant to investigate the part of good governance and respect for the rule of law in disaster management in the region. To find out the possibility of putting in place a well run regional mechanism for the evacuation, resettlement and empowerment of stranded ECOWAS citizens within and outside the region. It is to ensure long term solutions to these challenges by advocating for the creation of conditions of peace and security in the countries, and sustainable development of the communities. An exploratory research design was used. The population of the study was characterized by the staff of the National Emergency Management Agency [NEMA. Invariably, a sample size of 351 was determined using the Taro Yamane formula out of which 249 was returned. ECOWAS government and institutions need to review their spending pattern to ensure that the dwindling resources are streamlined for the optimization of the strategic goals of the communities. There should be a well-articulated evacuation plan for compatriots who are stranded. This research advocates for the encouragement and strengthening of both the National

and International Emergency Management Agencies, State Emergency Management Agencies (SEMA) and Local Emergency Management Committee (LEMC'S) for Improved performance.

Keywords: *Disaster Management, Government Agencies, Policies, ECOWAS Governments.*

Introduction

Disaster management is defined as the actions taken by an organization in response to unexpected events that are adversely affecting people or resources and threatening the continued operation of the organization. Disaster management includes the development of disaster recovery plans, minimizing the risk of disasters and the implementation of such plans that hinge on disaster. In the ECOWAS region vis-à-vis Nigeria, there is constant threat of violent terrorist groups, human trafficking, and fire outbreak. Experts estimated the annual fire outbreak in Nigeria to be at about 7,000 with the death of over 1000 persons. Recently, the Federal Executive Council of Nigeria approved the sum of \$1bn for fighting of insurgence in the North-East of Nigeria. Nigeria is confronted with incessant disasters like flooding, road accidents, pipeline explosions epidemics and bomb blasts which are not only an interruption to development but a risk to development. The problem is compounded by recession; a severe drop in real growth rate for ECOWAS countries from 6.1% in 2014 and 3.3% in 2015 to an alarming rate of 0.2% in 2016. Disaster management usually refers to the management of natural catastrophes such as fire, flooding, or earthquakes. Related techniques include crises management, contingency management and risk management. In West Africa we live in constant, threat of violent terrorist groups such as Boko Haram, Aiom and Al-Caida; horror of human trafficking perpetuated by trans border syndicates who lure the youths through irregular migration. This study is among other things to find out possibility of putting in place well run regional mechanism for evaluating, resettlement and empowerment of stranded ECOWAS citizens both within and abroad, to discuss with European partners jointly these challenges which affect all, to ensure long term solutions to these challenges through the creation of conditions of peace and security in the countries and sustainable development of the communities; tilting the part of good governance and respect for the rule of law.

Wake of recent recession and economic challenges faced by ECOWAS member states as communities evidenced by the severe drop in real growth rate for ECOWAS from 6.1% in 2014 and 3.3% in 2015 to an alarming rate of 0.2% in 2016. There is need to review the spending pattern of all the communities and institutions to ensure that the dwindling resources are put into good economic use for the optimization of strategic goals of the communities.

There should probity and accountability in the management of the nation's resources; realizing the importance of good governance and sound financial management and cost reduction as the underlying factors of successful reform.

Disaster management is the coordination and integration of all activities necessary to build, sustain and improve the capability for disaster prevention, mitigation, preparedness, response and recovery (Ibitoye 2012:4).

In line with the above definition, Haddow and Bullock (2003) sees disaster management as a strategic planning and procedure that is employed to protect critical infrastructures (also known as "critical assets") from severe damages when natural or human made calamities and catastrophic ever occur. According to John (2004) Disaster management is a process or strategy that is implemented before, during or after any type of catastrophic event takes place. This

process can be initiated whenever anything threatens to disrupt normal operations or puts people's lives at risks.

According to the International Federation of Red Cross and Crescent Societies (IFRC), disaster management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies in particular preparedness, response and recovery in order to lessen the impact of disasters. Furthermore, disaster management is a planned approach for prevention of disaster; preparedness and response to disaster and recovery following disaster.

Disasters are complex events with multifaceted causes and hence disaster management needs comprehensive, multidisciplinary training to deal with both complexity and change. Major shifts have occurred in the way in which disasters are considered, resulting from an increasing awareness of problems internationally along with an identified need for solutions. A disaster describes the situation where the occurrence of abnormal or infrequent hazard events has impact on the communities; causing substantial damage, disruption and possible casualties and leaving the affected communities performs or unable to function normal without external assistance (Gavidia, 2000). A disaster is therefore, concerned as a severe disruption to the survival and livelihood system of a society resulting from their vulnerability to the impact or a scale which overwhelms the capacity of those affected to cope unaided (Otero and Marti, 1995). Successive Nigerian governments have had policies to establish organization that will touch the lives of its citizens. Such organizations or agencies were established to alleviate the problems of distressed people as a result of disaster like windstorm,

communal clash, fire disaster etc. the aim of government in establishing these agencies are reflected in their broad objectives in relation to economic development which ultimately leads to the maximization of the welfare of the people. Man's major effort at survival and self preservation is directed towards the mastery of his environment. Unfortunately, there are limitations to this effort, when any disruptive or harmful sudden event takes place, an accident is said to have occurred. The condition which creates these accidents are called hazards while their impacts (especially if the scale is large) are called disaster (Coletta, 2014).

Organized disaster management in Nigeria can be dated back to 1906, when the Fire Brigade was established with function that meant beyond fire fighting to the service during emergencies. This approach was however replaced with adhoc arrangements domiciled in the offices of the then Head of State Governors as disaster response was considered a securities issue. This arrangement continued until 1972/1973, when the country experienced a devastating drought. The drought had negative socio-economic consequences and cost the nation the loss of many lives and properties, a development that led to the establishment of the National Emergency Relief Agency (NERA) in 1976. NERA was charged with the responsibility of collecting and distributing relief materials to disaster victims. Considering the limited scope of the agency, the government in 1993 decided to expand its scope to include all areas of disasters. This was backed up with decree 1992 of 1993, which raised the status of the agency to an independent body under the presidency as unit in the secretary of the Government of the Federation's office.

NERA latter become National Emergency Management Agency (NEMA), with a new vision to build a culture of preparedness, prevention, and response and community resilience to disaster in Nigeria. NEMA's mission is basically to coordinate resources towards efficient and effective disaster prevention, preparedness, mitigation and responses in the country. The occurrence of

disaster often calls for the support of both national and international organization especially, as far as the provision of relief materials is concerned. Consequently, disaster relief remains extremely important in disaster management. However, this approach alone does not proactively address the needs to reduce the human and an environment impact of future disaster. This emerging paradigm opines that countries and objectives and the result or outcomes, that when the desired result on the target beneficiaries is not achieved, lack of adequate resources funding and other infrastructures such as working equipments, good communication system of getting approval for relief interventions by the presidency an lack of political will by the ruling party during one civilian era are also some of the problems militating against the implementation of disaster management by the National Emergency Management Agency (Nasiru, 2012).

In fulfilling its mandate, NEMA developed several plans and guidelines some of these are the National Disaster Response Plans, the Search and Rescue/Epidemic Evacuation Plan, The National Nuclear and Radiological Plan, the Early Warning System on Epidemic etc. over the years NEMA has encountered some challenges and learnt lessons in the implementation of the plans. This necessitated the development of the NDMF to correct implementation gaps and increase efficiency and effectiveness of disaster management in Nigeria, hence the need for the study of Disaster Management in a Volatile ECOWAS REGION; Nigeria perspective.

Statement of the Problem

Nigeria has recently witnessed too many devastating disasters which led to death and loss of properties. There have been cases of disaster resulting from Boko Haram menace, flood disaster, dilapidated high way, building collapse, plane crash, road mishaps, unrest and stiff agitation.

The growing trend of disasters in Nigeria has implications for national sustainability. This is because, disaster, irrespective of causal factors are associated with diverse externalities such as mortalities, loss of income, home, farmlands, social networks, livelihoods and infrastructures (Kreimer and Munasingle, 1991).

The absence of a well articulated disaster management policy and response initiative in the country is a matter of concern and worst at the level of the local council because most of these 774 local government area councils of the country have become dysfunctional because of incapacitation caused by disaster and undemocratic tendencies.

The facts on ground show that the situation of disaster management has nosedived to the precarious level of disaster so much so that the federal Fire Service and the state fire service are so dysfunctional that Nigeria now depends on a private multinational construction company Julius Berger to do the needed disaster rescue operations whenever cases of natural and man-made disaster of deadly consequences occur in any part of Nigeria.

The need for NEMA to plan and design organize and implement effective disaster management agenda and ensure that at every level from the local council to the federal that effective disaster management and rescue infrastructure are available and functional.

Objectives of the Study

The main objective of this study was to determine the extent to which Disaster can be Management in a Volatile Ecowas Region; Nigeria Perspective.

The specific objectives were;

1. To ascertain the extent to which effective planning can be used to engender efficiency in disaster management in Nigeria economy
2. To examine the extent to which disaster preparedness can be used to improve performance and ensure quick response to disaster incidence in Nigeria.
3. To determine if there is adequate control measure to manage disaster in Nigeria.

Research Question

1. To what extent can effective planning be used to engender efficiency in disaster management in the economy?
2. To what extent can disaster preparedness be used to improve performance and ensure quick response to disaster incidence in Nigeria?
3. Is there adequate Disaster control measure to manage disaster in Nigeria?

Research Hypotheses

In respect of this, the following hypotheses have been postulated:

1. Ho. Effective planning to a large extent cannot be used to engender efficiency in disaster management in Nigeria.
2. Ho. Disaster preparedness to a large extent can be used to improve performance and ensure quick response to disaster incidence in Nigeria.
3. Ho. There is no adequate and standard control measure to manage disaster in Nigeria

Theoretical Framework

For the purpose of this research, Emergency Management theory was used as a suitable theoretical base as that conveys information about the activities of National Emergency management since its beginnings in civil defense, when professional expertise was defined in terms of military and emergency experience. The theoretical knowledge that forms the basis of emergency management lies in these technical skills and offers a deeper understanding of the nature of disaster and the reaction of people and organizations to crises”.

The emergency management theory is not something postulated or hypothetical, it includes all of the conceptualized ideas and practices of emergency management, creating a defined set of preferred conditions of action and reaction in terms of preparation endurance and response to extreme events (Mcentire, 144). It is rooted in identification of unacceptable risk, devising of strategies for the reduction of these risks and gaining what are acceptable levels of risks.

It is in line at this Lindel et al (2004) succinctly put it The emergency management theory exists in the assessment and undertaking of all hazards, risk and disaster preparation, response and recovery. It is an ideal state at which all risk assessment and disaster response protocol is built.

Emergency management theory states that there are set of people and protocol to achieve this within a response organization (local, states or federal) and there is an effective way to achieve it based on the resources available. That is to say that disaster response organization builds their process and protocol based on this emergency management theory and from that builds their own standard operating procedures.

However, emergency management theory can be utilized by any organization to build standard operating procedures based on any hazards or risk. Emergency management theory has to be all encompassing and continually expand to develop risk and hazards as well as develop the

responses to their presence, development, and possibility shift into a disaster. Example, the building of a new dam on a river become a risk when there is excessive rain, emergency management theory has to conceptualize the possibilities of this risk in terms of how to deal with it as a risk, a hazard and a disaster.

Finally, disaster management is made up of four parts, these are mitigation, preparedness, response and recovery, however, emergency management theory utilizes these four parts in order to provide and maintain these seven core systems and services in every emergency management theory. They are; direction and control, communications, life safety, property protection, community outreach, recovery and restoration, administration and logistics

Types of Disaster in Nigeria

Natural Disaster

In the minds of many, disasters are divided into those thought of as originating from forces of nature or from the effects of humans. The list of natural disasters include weather phenomena such as tropical storms, extreme heat or extreme cold, winds, floods, earthquake, landslides and volcanic eruptions.

Man Made Disaster

Though weather and geologically related disaster are considered to have generated the greatest number of deaths and economic loss, disaster generated by humans is increasing in importance. In former Soviet-bloc countries, industrial systems have left the environment heavily polluted with dangerous substances in many places. Globalization is now carrying industrial production to previously agrarian societies. The risk from the unintended release of hazardous materials is becoming ever more widespread. Potential hazardous products are now available in communities governing their use and in fact, may not even be aware of their presence or health risks.

In Nigeria, we can talk about BokoHaram, militant and other looting and massacring in the states, some caused by religious disagreement and land disputes that always led to ethnic war.

Disaster Management in Nigeria

There are no universally agreed definitions of disaster management, this is because different scholars and institutions conceptualized it depending on the ideological inclination or multi-disciplinary perspective.

According to the federal Emergency Management (FEMA), disaster management is defined as “the managerial function charged with creating the framework within which communities reduce vulnerability to hazard and cope with disasters, (“NEMA handbook: 2010).

Components of Disaster Management in Nigeria

The management of the aforementioned disaster entails six interrelated groups of activities. The activities are:

- i. National development planning and disaster management
- ii. Disaster prevention
- iii. Disaster mitigation
- iv. Disaster preparedness

- v. Disaster response, and
- vi. Disaster recovery, (Sani: 2012)

National Development planning and Disaster Management

The federal, states and local governments shall be disaster conscious in their development planning and activities and shall therefore put in place various counters disaster measures and programmes. These measures and programmes shall be designed to ensure that development promotes disasters reduction, does not create new disaster threats and does not worsen existing disaster threats.

These measures and programs include:

- i. Dam construction to reduce river flooding
- ii. Urban master plans, to reduce urban flooding
- iii. Implementation of the Environment Impact Act, to ensure that development projects do not create new or increase existing threats.
- iv. Medical and health plans, to counter threats of disease epidemics and
- v. Promoting ethno-religious harmony amongst its through conflict transformation, resolution and management.

The problem with these measures in that they are often not faithfully implemented or applied. This applies, in particular, to urban master plans and emergency regulations, which partially explains why we continue to have urban flood disaster ad communal clashes in various parts of the country. The three (3) tiers of government are expected to apply the aforementioned measures meticulously.

Disaster Prevention

Disaster prevention measures are designed to impede the occurrence of a disaster event or to prevent such a disaster event fro having a devastating impact on people, infrastructures and the economy. All the natural disasters which occur in Nigeria, with the exception of destructive storms, drought and earth tremors, can be prevented to a greater or lesser degree. For example, disaster preventive measures against flood disasters include;

- i. Aforestation to slow down runoff and promote infiltration of rain water into the soil and reduce the occurrence and magnitude of floods.
- ii. Better land use planning and development control that keep people of areas which are liable to floods.
- iii. Dam construction, to even out stream flow.
- iv. The construction of drainage canals in low-lying areas to take away storm.
- v. Stream channelization and
- vi. The provision and maintenance of drainage ditches or gutters in urban areas.

There is need therefore for the federal, states, local government and other disaster managers to get the civil populace and agencies concerned joke drainage canals, channelized streams and drainage ditches free of solid waste, which often renders them ineffective. There shall also be put in place measures to prevent;

- i. Disease epidemic, e.g adherence to sanitation laws and regulations.

- ii. Civil strife leading to displacement of persons, e.g constitution of security committee at Federal, State and Local Government levels and better intelligence gathering system of the Nigeria Police and other security agencies.
- iii. Fire disasters, i.e adherence of fire codes
- iv. Building collapse, i.e adherence to building codes
- v. Aviation disasters, i.e adherence to civil aviation safety regulations.
- vi. Road accidents, i.e adherence to the High way code.
- vii. Maritime and inland waterways disasters, i.e adherence to safety regulations.
- viii. Explosions, i.e adherence to laws and regulations guiding the handling, use, storage, and transportation of explosives etc.

Thus, whenever any of these types of disaster occur, the chances are that someone or some people have flouted existing laws, regulations, codes and procedures and or somebody or some people have failed to enforce these laws, regulations, codes and procedures, the three tiers of government shall therefore ensure compliance with all laws and regulations that are designed to prevent mitigate and control disasters.

Disaster Mitigation

Disaster mitigation measures specifically designed to reduce or minimize the impact of disaster whenever they occur in Nigeria. They include:

- i. Building codes
- ii. Development control measures.
- iii. Safety regulations relating to high rise building and the handling of explosives and other hazardous substances
- iv. Safety codes for land, water and air transportations
- v. Irrigation projects to counter drought and
- vi. The establishment of shelterbelts to mitigate the effects of drought and desertification.

The existing regulations which are meant for disaster mitigation are usually not being strictly enforced. The result is that when disaster occurs, people, infrastructure and the economy feel their full impact. The three tiers of government ought to ensure the enforcement of relevant laws and regulations.

Disaster Preparedness

Disaster preparedness are activities and measures undertaken in advance to make it easier for all levels of communities and individual to respond quickly and effectively to disaster events. There measures include among others;

- i. The three (3) tiers of government shall ensure that First Aid training forms part of the curriculum at all educational levels.
- ii. Disaster management contingency plans
- iii. Disaster relief stocking such as building materials, blankets, buckets, food items etc.
- iv. Early warning system: This means an organized structure for predictions and disseminations of timely and effective information to allow individuals who may be at risk to take action to avoid or reduce their risk and prepare for effective response.
- v. Emergency communication systems
- vi. Public education and awareness, and

vii. Training programs for disaster responders.

The Federal Government through the National Emergency Management Agency (NEMA) has drawn up a National Response Plan (NDRP) which has been approved by the federal executive council. The National Disaster Response Plan (NDRP).

1. States the disaster response and recovery actions and responsibilities of the Federal Government and its agencies.
2. Describes the federal government's response and recovery resources available to support state, local governments and communities to save lives, protect public health and safety, protect property and aid victims in their reconstruction efforts after a disaster.
3. Describes disaster management facilities available in some non-government organizations which may be called upon for assistance in times of emergency.
4. Describes the standard operating procedure or disaster response functions of relevant federal government agencies and some non-government organization.
5. Assigns disaster response functions to various government agencies like; Armed forces, Nigerian Red Cross Society, Nigeria Police Force, Nigeria ports Authority, Nigeria Security and Civil Defence Corps, Fire services, National Airspace Management Agency, non-government organizations and companies with relevant capacities as specified in National Disaster Response Plan, and
6. Provides a coordinating framework for disaster response with NEA as its hub.

Disaster Response

Disaster response are measures to be taken during or immediately after a disaster impact to save lives, care for the victims, protect properties and effect emergency repairs to infrastructures. These include;

- i. Search and rescue
- ii. Survey and assessment of disaster impact and needs created
- iii. Evacuation of victims, and
- iv. Mass care.

Despite the existence of any disaster response outfits in Nigeria, both governmental and non-governmental agencies, a number of things were lacking that made response to certain disaster as well as civil strife incidents that have occurred in various parts of the country, not as timely and effective as they should have been. These inadequate include lack of effective coordination, inadequate training, lack of equipment, lack of relief materials and absence of adequate early warning system. It is hereby proposed by this policy that;

- i. There shall be effective coordination of the efforts of the numerous disaster responders.
- ii. Adequate training of people for search and rescue and relief operations.
- iii. There shall be adequate First Aid training for the Nigerian Police Force, Fire Service, Nigeria Security and Civil Defence Corps, the Armed Forces, Federal Road Safety Commission and all other paramilitary structures for effective emergency response.
- iv. Equipment such as helicopters, fire tenders with capacity to fight in high rise buildings, etc.
- v. Regular simulation of rescue procedure e.g fire drills etc
- vi. Available of relief materials and

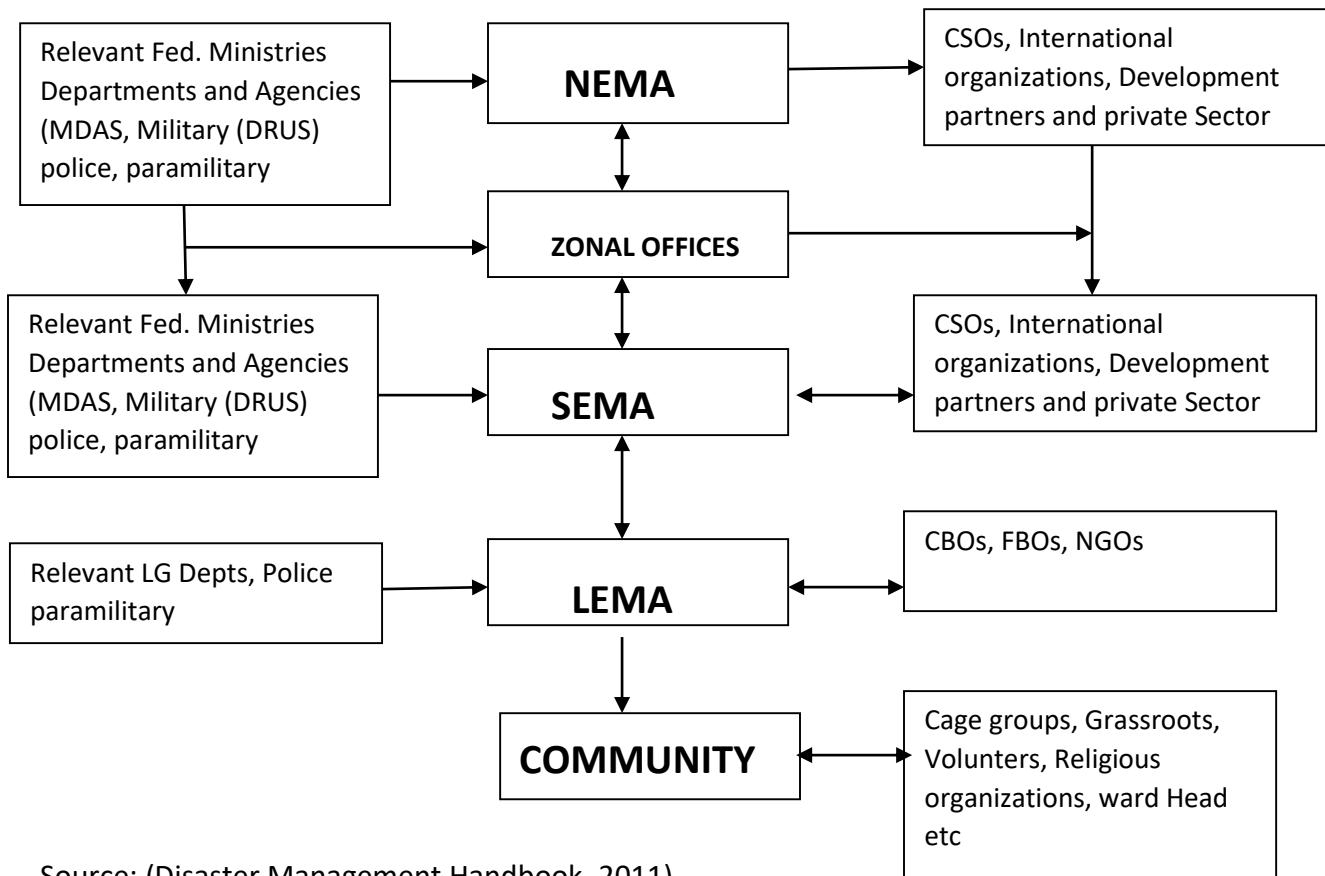
vii. Adequate early warning system mechanisms.

Disaster Recovery

Recovering from a disaster is the process by which a disaster stricken area returns to its pre disaster state. The three tiers of government shall rapidly ensures;

- i. The restoration of properties, essential services and infrastructure damaged by the disaster, and
- ii. Rehabilitation of stricken people or displaced persons so that their trauma is put behind them and they settle down to their pie-disaster lives and livelihoods.

Horizontal and Vertical Coordination in Disaster Management in Nigeria



Source: (Disaster Management Handbook, 2011)

Institutional Framework for Disaster Management in Nigeria

According to Otero and Marti (1995), some intrinsic elements of the nation, society, or economy affected have in general implications for the efforts needed to face the emergency, undertaken reconstruction, and finally, surmount the consequences of disaster, relative size of the economy affected, the magnitude and depth of the event, and the economic and socio-political conditions of the country as at time are some of these elements.

In response to the upsurge in disaster, the federal government of Nigeria through Decree No 12 of 1999 established the National Emergency Management Agency (NEMA) as the apex public sector agency for emergency management. This legal instrument was fashioned after the

USENMA law, but its operation has been handicapped by several factors among which are inadequate funding and equipment, weak executive capacity and lack of decentralization. The enabling legislation contains concepts like co-ordinate, liaise, monitor and collect, etc which presupposes that NEMA is a coordinating agency, yet, the Director-General of the agency in his welcome address to the recent conference on emergency management noted that the management of any agency no matter how small is the agency's responsibility (Makarli, 2004). It is instructive in thus regard to note that current global climate models indicate that the sea level will rise irrespective of any interventions we make, which means tat the coastal areas of Nigeria where virtually all the oil and gas installations are sited, including cities such as Lagos, Port Harcourt and Warri, industrial plants and millions of poor people. For Nigeria, this situation is exacerbated by tropical storm surges, coastal erosion and flooding especially during the rainy season.

Methodology

Population of Study

In this research, the population of the study was seven hundred and fifty (750).

Sample Size

The sample size (n) of this study was determined from the total number of the population of the study using Taro Yamane formula.

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{750}{1+750(0.05)^2}$$

$$\begin{aligned} n &= \frac{750}{1+750(0.0025)} \\ &= \frac{750}{1+1.875} \\ &= \frac{750}{2.875} \\ n &= 261 \end{aligned}$$

Questionnaire Distributed And Returns

Two hundred and sixty one (261) questionnaires were distributed and two hundred and forty nine (249) representing ninety five percent (95%) were return while twelve (12) representing five percent (5%) were not return.

survey study 2017

Test of Hypotheses

Research Hypothesis 1

To what extent can effective planning be used to engender efficiency in disaster management in the economy?

Research Question 1

whether effective planning can be used to engender efficiency in disaster management in Nigeria.

Data Obtained from Table 5

Opinion	Frequency	%
Strongly Agree	100	40.1
Agree	60	24.1
Strongly Disagree	50	20.0
Disagree	39	15.6
Total	249	100

Source: Field Survey 2017.

$$Fe = \frac{249}{4} = 62.25$$

Chi-square calculate as thus

O	E	O-E	(O-E) ²	(O-E) ² /E
100	62.25	34.75	1425.0625	22.8926
60	62.25	-2.25	5.0625	0.0813
50	62.25	-12.25	150.0625	2.4106
39	62.25	-23.25	540.5625	8.6837
Total				34.0682

Calculated $X^2=34.1$

$$\begin{aligned} \text{Degree of freedom} &= (r-1)(c-1) \\ &= 4-1 \\ &= 3 \end{aligned}$$

The critical value is obtained by checking the degree of freedom at 3 under 0.05 which is 7.81.

Decision

Since the X^2 calculated is 34.07 and is greater than the critical value of 7.81, we accept the alternative hypothesis which states that Effective planning can be used to engender efficiency in disaster management in Nigeria. Therefore we accept the alternative hypothesis and the null hypothesis rejected.

HYPOTHESIS 2

Disaster preparedness to a large extent can be used to improve performance and ensure quick response to disaster incidence in Nigeria.

Question 2

whether disaster preparedness can be used to improve performance and ensure quick response to disaster incidence in Nigeria?

Data obtained from table 9

Opinion	Frequency	%
Strongly Agree	91	36.5
Agree	73	29.3
Strongly Disagree	48	19.2
Disagree	48	19.2
Total	249	100

Source: Field Survey 2017.

$$Fe = \frac{249}{4}$$

$$= 62.25$$

Chi-square calculated

O	E	O-E	(O-E) ²	(O-E) ² /E
91	62.25	28.75	825.5625	13.2781
73	62.25	10.75	115.5625	1.8564
48	62.25	-14.25	3.0625	3.2620
48	62.25	-14.25	637.5625	10.2419
Total				28.6384

Calculated $X^2 = 28.7$

$$\text{Degree of freedom} = (r-1)$$

$$= 4-1$$

$$= 3$$

The critical value obtained by checking the degree of freedom at 3 under 0.05 is 7.81.

Decision

Since the X^2 calculated is 28.63 and is greater than the critical value of 7.81, we accept the alternative hypothesis which says that Disaster preparedness to a large extent can be used to improve performance and ensure quick response to disaster incidence in Nigeria. and the null hypothesis rejected.

Hypothesis 3

There is adequate and standard control measure to manage disaster in Nigeria.

Question 3s

whether there is adequate Disaster control measure to manage disaster in Nigeria?

Data obtained from table 10

Opinion	Frequency	%
Strongly Agree	83	33.3
Agree	79	31.7
Strongly Disagree	49	19.7
Disagree	41	16.4
Total	249	100

Source: Field Survey 2017.

$$Fe = \frac{249}{4}$$

$$= 62.25$$

Chi-square calculated as thus

O	E	O-E	(O-E) ²	(O-E) ² /E
83	62.25	20.75	430.5625	6.9167
79	62.25	16.75	280.5625	4.0703
49	62.25	-16.25	264.0625	4.2419
41	62.25	-21.25	451.5625	7.2540
Total				22.4829

Calculated $X^2 = 22.4829$

Degree of freedom = (r-1)
 = 4-1
 = 3

The critical value obtained by checking the degree of freedom at 3 under 0.05 is 7.81

Decision

Since the X^2 of 22.48 is greater than the critical value of 7.81, the alternative hypothesis accepted which states that, there is no adequate and standard control measure to manage disaster in Nigeria and the null hypothesis is rejected.

Discussion of Findings

Effective planning is strongly needed to engender efficiency in disaster management in Nigeria. This is evidenced in the data collected where a greater number of the respondents (160 or 64.2%) agreed to the statement that effective planning can be used to engender efficiency in disaster management in Nigeria and (89 or 35.6%) disagreed. In support of this, Sani, 2012 opines that disaster preparedness is needed to improve performance and ensure quick response to disaster incidence.

The response on whether disaster preparedness can be used to improve performance and ensure quick response to disaster incidence in Nigeria shows that (164 or 65.8%) of the respondents agreed to the statement while (96 or 38.4%) disagreed. This shows that disaster preparedness can be used to improve performance and ensure quick response to disaster incidence in Nigeria. Therefore, the National Emergency Management Agency (NEMA) has resolve to avert both human and natural disaster and save thousands of lives and property through the use of modern equipment globally known as "Space Technology". While preventive strategies are antidotes to avoid occurrence, timely response to disaster occurrence sites needed improvement, this can be achieved by training more staff and volunteers and also provision of relief and rehabilitation materials and services for the victims, Disaster Management Handbook, (2011).

On whether there is adequate Disaster control measure to manage disaster in Nigeria. 162 or 65% of the respondents agreed to the statement while 90 or 36.1% disagreed. This shows that there is adequate Disaster control measure to manage disaster in Nigeria. According to NEMA handbook, (2010), NEMA was established by an act of the National Assembly in 1999, it was initially poorly funded, poorly equipped and only few Nigerians experienced its impacts. But the

increasing cases of phenomenal disaster from 2005 necessitated a holistic restructuring and capacity building through enhanced budgets hence resulting to adequate disaster control measure in Nigeria.

Conclusion

There is need for the government, non-governmental organization, international organizations, cooperate bodies, private individuals and the entire Nigeria to work tersely towards the achievement of effective and efficient disaster management at both local and national level.

The challenges of disaster management in Nigeria is everybody's challenge, most especially the media who can use their platforms to alert the public on looming dangers of epidemics, natural and man-made disasters that are easily increased nowadays through advance technology. While the media has the right to give priority attentions to big news on disaster happenings, they should also be fair enough informing and educating the public on disaster management which is quite cost effective to save lives and property of our people.

Recommendations

Suggestively, for the efficient and effective disaster management in Nigeria

1. Since disaster in Nigeria are largely man-made effort should be able to strengthen legislation and step up regulations, monitoring and enforcement to minimize the rate of avoidable disaster,
2. Effort should be made by government at all levels to key into the programme disaster management in Nigeria.
3. Inappropriate property development along the flood plain and indiscriminate dumping of refuse along water channels should be criminalized and control through enforcement of existing laws.
4. Enough sensitization and public education should b made to ensure that people heed to early warning signals and alerts especially among those living in coastal and disaster prone areas.
5. Since NEMA is merely a coordination agency with limited control over other response agencies, there is a need to make a few law that ensures mandatory compliance of stakeholders whenever they are called out for disaster issues.
6. Finally, communities should be proactively involved in the management of risks that could threaten their lives.

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