

Evaluating The Operations Of Emergencies And Disaster Management Agencies In Ekiti State, Nigeria

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ABSTRACT

The paper evaluates the efficacy of emergency and disaster management in Nigeria with reference to the situation in the Sixteen Local Government Areas of Ekiti State. The data were collected from primary sources; using questionnaire, personal observation and oral interview. A total number of one thousand six hundred (1600) questionnaires were administered in this study. The data collected were analyzed using simple percentages frequency counts and statistical significance “P-Value”. Results from this study showed that; the estimated financial cost of loss is significantly enormous across different age groups and educational background of citizens in the State. The study showed that Ekiti State Emergency Management Agency does not have enough capacity to meet the level of performance responsibility, which could support effective disaster management. The paper therefore suggests that to achieve effective and efficient emergency disaster management in the study area, there is need for collective participation in insurance policy/plan, creation of urban search and rescue capacity, seeking international co-operation and development dedicated research activities, through space applications and information technology among others.

Keywords: Environmental Pollution, Environmental Management and Sustainable Development.

1.1. Introduction

Disaster is a natural or man-made hazard, which usually results in an event of substantial extent causing significant physical damage or destruction, loss of life or drastic change to the environment. Emergency management is concerned with strategic organization management processes used to predict critical assets of an organization from hazard and risks that can cause disasters or catastrophes, and to ensure their continuance with their planned lifetime (Wikipedia, 2011). Across the globe, various disasters like earthquake, landslides, volcanic eruptions, flood and cyclones are some of the natural hazards that kill thousands of people and destroy billions of dollars of habitat and property each year (WHO 2011). It is observed that though, Nigeria is blessed to have a soil layer of the earth crust that makes chances of earthquake very slim; the country is exposed to other natural disasters like oil spillage, drought and most commonly flooding. Ekiti State in particular is prone to various disaster of which rainstorm and flooding are the most devastating.

The spate of occurrence of natural disasters in Nigeria has culminated to institutionalizing agencies for disembarking disaster management in the country dates back to 1906, when the police fire brigade (now Federal Fire Services) was established to function beyond fire fighting role to saving lives, properties and provision of humanitarian services in emergencies (National Emergency Management Agency, 2011). The ever escalating states of natural and anthropogenic disaster prompted this study to ascertain, the efficacy and promptness of action and responses of the relevant agencies saddled with emergency and disaster management. The paper specifically focused on the situation of disaster and emergency management in Ekiti State with a view to assessing the responsibilities of the disaster management agencies in their bid to mitigating and preventing disaster occurrence across the State.

Nigeria has continued to witness series of disasters and emergency situations that are largely anthropogenic from youth militancy, communal clashes, religious conflicts, fire outbreaks, road accidents, kidnapping and robbery activities. Ekiti State is not also spared from disaster and emergency situation. The state is prone to various disaster of which rainstorm and flooding are the most devastating. For instance, the flooding in Ikoro-Ekiti in Ijero Local Government Area on August 13, 2010 wrecked havoc in some farm settlements such as Adebajji, Sakoro, Bolorunduro and Ekinni among others. In the incidence, many houses were damaged, hundreds of people displaced, while farm products and household valuables were completely washed away by heavy downpour. The disaster situation in Ikoro is just a tip of the ice bag, considering the number of disasters ridding the state. The disastrous occurrences therefore call for adequate preparedness in order to meet the emergency situations that may result from disaster in the State. It is against this background,

the paper seek the need for the evaluation of preparedness and management readiness for disasters and emergencies by various Agencies in Nigeria generally and Ekiti State in particular.

Gunner (2008) also relates disaster occurrence to over population, and pollution of different kinds, loss of vegetation, soil degradation, depletion, erosion and human activities have also been seen to be contributing to the irreversible changes in the environment, which are also attributed to having catastrophic effects on human health and development.

The economic and environmental lost to disaster and emergency necessitated the establishment of the National Emergency Management Agency, which was established by the act of the National Assembly in 1999 (NEMA, 2010). However, since inception, the country has been plagued of which adequate response was either lacking or not available. In line with the necessity to track disaster and emergency situation. The need to strengthen, the local capacity to be able to condemn disease outbreaks and epidemics and also to build global partnership must be properly addressed.

The Nigerian Red Cross Society (2001) report compiled by Orebiyi (2002) indicated that almost 280,000 Nigerians were affected by various types of disasters in the year 2001. Many of them resulting in serious fatalities, which qualify Nigeria to be described as a disaster-prone region. According to George (2011) families claimed that government had failed to live up to its responsibilities in respect to caring for victims of disaster and emergency situations. This ineptitude on the part of the government is seen as a reflection of the inadequacies on the part of the Agencies responsible for disaster and emergency management. The challenges therefore are to understand what the problems are as regards preparedness and prompt response to disaster cases.

The National Emergency Management Agency (NEMA) agreed that its activities are facing a lot of challenges, which has hampered its effectiveness. The most serious challenges militating against efficient and effective disaster management in Nigeria is stakeholder apathy and the lack of comprehensive vulnerability capacity analysis study of the States. There should therefore be a plan aimed at achieving a holistic, effective and efficient approach to disaster response in the country. In view of this situation, it is believed that any emergency management should be a continuous process involving all individuals, groups and communities to manage hazards in an effort to avoid or ameliorate the impact of disasters resulting from such hazards. Effective emergency management relies on thorough integration of emergency plans at all levels of government and non-government involvement, and accordingly activities at each level (individual, group, community) affect the other levels (Wikipedia, 2011).

Meaning and Classification of Disaster

For operational purposes, the World Health Organization defines a disaster as a sudden ecological phenomenon of sufficient magnitude to require external assistance. A disaster can also be operationally defined as any event that causes destruction and distress resulting in demands that exceed the response capacity of the affected community. Disasters usually have an unforeseen, serious and immediate effect on health. Often the number of victims is considerable and responses to the demand for immediate assistance require efficient planning and organization of emergency response team.

The National Emergency Management Agency (NEMA) Act (1999) defines natural or man-made disasters as including any conditions arising from crisis, epidemic drought, flood, earthquake, storm, train, aircraft, oil spillage or other accident and mass deportation or repatriation of Nigerians from other country.

Disaster can be categorized into classes depending on their nature. These include:

- Natural disaster and
- Anthropogenic disaster

Natural disaster can be divided into:

- Tectonic: Earthquake, tsunamis and volcanic eruptions
- Meteorological: Hurricanes, droughts and floods
- Topographical: Avalanches and landslide
- Health and disease: Epidemic, Acquired Immune Deficiency Syndrome, Malaria, Famine etc
- Space: Solar line, Impact event etc

Composition and Function of Emergency Response Team.

The team includes;

- a) Health Team; Medical Doctors, Nurses, Drug Dispenser, Health Educationist, Nutritionist, Medical Records Officer and Environmental Health Officer.

- b) Environmental Management; Environmental Health Officer, Civil and Other Engineers, Social Welfare Team, Information Team, Fire Control/Services Team, Representatives of Organization and Security Team (Civil Defense Corps/Police).

Functions of Emergency Management Team.

The various functions of emergency management team includes:

- assessment of disaster
- evacuation of victims to temporary settlement
- health service to the needy
- provision of relief materials such as foods, water, clothing and drugs to victims
- promotion of environmental and general sanitation
- to refer services of health cases to hospitals

Anthropogenic Disaster: The anthropogenic disasters can be divided into; Chemical contamination, Mass intoxication, Fire, Mass accidents, Victims of Social Violence and Explosions.

Management Strategies and the State of Emergency in Disaster Management.

The strategies include:

- i) The Evacuation Stage: This is the stage at which the disaster site is inspected, to determine the extent of damage and rescue victims to a safe place, where necessary attention can be given to those alive and proper arrangement made for the dead.
- ii) The Settlement Stage: This is the stage of resettling victims to an ideal make shift settlement for possible rehabilitation.
- iii) The Treatment Stage: At this stage specific medical attention are given to the victims
- iv) The Clean-up Stage: This stage involves the cleaning up of the disaster, another potential source of danger and ensuring proper disposal of the dead.
- v) The Provision of Supplies Stage: At this stage various relief operations are being coordinated. Adequate supply is being ensured and effective distribution is made to the victims at their various relocations.

Distinguishing Between an Emergency and a Disaster Situation

An emergency and a disaster are two different situations:

An **emergency** is a situation in which the community is capable of coping. It is a situation generated by the real or imminent occurrence of an event that requires immediate attention and that requires immediate attention of emergency resources.

A **disaster** is a situation in which the community is incapable of coping. It is a natural or human-caused event which causes intense negative impacts on people, goods, services and/or the environment, exceeding the affected community's capability to respond; therefore the community seeks the assistance of government and international agencies (Commonwealth, 2013).

Definition of Key Terms Used in the Study:

Disaster: "Is a natural or human-caused event which causes intensive negative impacts on people, goods, services and/or the environment, exceeding the affected community's capability to respond".

Emergency: "Is a situation generated by the real or imminent occurrence of an event that require immediate attention" (key words)Paying immediate attention to an event or situation as described above is important as the event/situation can generate negative consequences and escalate into an emergency. The purpose of planning is to minimize those consequences.

Hazard: "Is the potential for a natural or human-caused event to occur with negative consequences" (key words)A hazard can become an emergency; when the emergency moves beyond the control of the population, it becomes a disaster.

Risk: "Is the probability that loss will occur as the result of an adverse event, given the hazard and the vulnerability". Risk (R) can be determined as a product of hazard (H) and vulnerability (V). i.e. $R = H \times V$

Vulnerability: "Is the extent to which a community's structure, services or environment is likely to be damaged or disrupted by the impact of a hazard".

1.2. General and Specific Objectives of the Study.

The general objective of this study is to examine the activities of the National Emergency Management Agency and State Emergency Management Agency in Ekiti State.

The specific objectives of the study are to:

- i. assess the level of preparedness of the National Emergency Management Agency vis a vis State Emergency Management Agency in combating disaster in Ekiti State.
- ii. determine the efficacy in the methods of disaster management in Nigeria with particular reference to Ekiti State.
- iii. recommend measures for effective disaster management in Ekiti State in particular and Nigeria in general.

1.3. The Study Area

Ekiti State is located within Latitudes $7^{\circ}15'$ and $8^{\circ}5'$ North of the Equator and within Longitudes $4^{\circ}45'$ and $5^{\circ}45'$ East of the Greenwich Meridian. The State lies South of Kwara and Kogi States as well as East of Osun State. It is bounded in the East and South by Ondo State.

The State was carved out of the old Ondo State on October 1st 1996. It comprises sixteen (16) Local Government Areas, which are Ado, Ikere, Ikole, Ilejemeje, Irepodun/Ifelodun, Moba, Ekiti East, Ekiti West, Ikole, Ido-Osi, Efon Alaaye, and Oye Local Government Areas.

By the 1991 census, Ekiti State had a population of 1,647,822 and in 2006 the population was 2,384,212 with a total land area of 5,306,6km², the state has an average population density of persons/km² using the 2006 population figure.

The State is mainly an upland Zone rising over 2 to 5 meters above sea level. The area is underlain by metamorphic rocks and the relief is generally undulating. The State enjoys tropical climate two distinct seasons of the wet (April-October) and dry (November-March) season. Temperature ranges between 210 and 280C with high humidity. Because of the favourable climatic conditions, the land enjoys savannah vegetation.

1.4. Literature Review and Conceptual Framework

Adebimpe (2011) opined that the disasters which often result into environmental emergencies in Nigeria are often worsened by the degradation of the country's environment and natural resources. The conclusion drawn by Adebimpe (2011) showed that the growing trend of disaster in Nigeria has implications for national sustainability; there is therefore, the need to focus on reducing vulnerability, achieving equitable growth and improving the governance and institutional context in which people live.

Wisher (2004) stated that all disasters are as a result of human failure to introduce appropriate disaster management measures. Louis (2008) opined that natural disaster is a consequence, when a natural hazard (e.g volcanic eruption or earthquake) affects human and/ or the built up environment. Emergency is a situation which requires prompt and responsive action in order to deal with hazardous situations (Afolabi, 2011).

The Concept of Sustainable Development is applied to this study. The Concept of Sustainable Development was propounded by the World Commission on Environment and Development (WCED in 1987). This concept noted that Sustainable Development is a development that meets the needs of the present generation without compromising the ability of future generation to meet their own needs.

Planning for sustainability, or sustainable development, is a concept originally associated with environmental policy. It has been broadened to include all community planning including planning for economic development. It links concerns for social, economic, and environmental well being in a coordinated process aimed at meeting present needs while preserving the ability of future generations to meet their needs. Emergency management has been increasingly linked to this broader task of sustainable development (Beatley, 1995; Geis and Kutzmark, 1995) and hazard mitigation has been a primary vehicle for that linkage (Mileti, 1999; Schneider, 2002). The emphasis is on reducing the vulnerability of communities to natural and man-made disasters in the context of all other community goals such as reducing poverty, providing jobs, promoting a strong economy, and generally improving people's living conditions (FEMA, 2000).

The achievement of sustainable development, as a public value, requires responsible choices for determining where and how development should proceed. It requires, from the emergency management perspective, an evaluation by each locality of its environmental resources and hazard risk potential with the result being the making of a series of choices that will impact the economic, social, and physical well being of the community. These choices include the identification of future losses that a community can or is willing to bear. But all public choices relating to these matters must adhere to the value of sustainability as defined in the context of the broader community planning and development process.

All emergency managers know that communities must address the interdependent causes of natural and man-made disasters and come to some decision about which potential risks and losses are acceptable, which are unacceptable, and what specific actions are necessary to maintain the social, economic, and political stability necessary for the community to flourish. But they seldom perceive this in the context of a broader role for emergency management in community planning. But consider the connection between the two. For example, if a community is seeking to promote sustainability in the face of serious earthquake risks, structural mitigation

alone is insufficient. Much more is required than building codes and the like. Sustainability also requires a linkage of policies on building codes to policies on housing density, to policies on urban transit, to policies on social equality, to policies on environmental quality, to policies on economic development, etc. In other words, all policies are linked together by the concept of sustainability. This includes emergency management policy and brings the emergency management function to the table as a participant in community planning.

The goal of building sustainable communities involves, and as a critical component, the emergency management functions. The logic of hazard mitigation, a key focus, suggests that a part of ensuring the economic, political, and social development of a community is a full awareness of hazard risks and a plan to mitigate them. Community planning and development must include anticipation of and solutions to identifiable risks associated with potential hazards. But, to the extent that emergency management is unprepared as a profession to assert its relevance to the broader life of the community, to the extent that it remains disaster driven, narrow, and technical in its orientation, the effectiveness and relevance of the new emergency management will be restricted even if there is a greater and growing awareness of its connection to broader issues and concerns. The new and wider context of emergency management requires new and more broadly engaged emergency management professionals.

1.5. Methodology

The data collected were from primary sources, through the use of questionnaire and personal observation. A total number of one thousand and six hundred (1600) copies of structured questionnaire were administered randomly to respondents in the sixteen Local Government Areas of Ekiti State. One hundred (100) copies of the questionnaire were administered to each of the (sixteen) Local Government Areas, making it a total of one thousand six hundred questionnaires administered in the study. The procedure for questionnaire administration involved people in homes, market places, offices, and schools. Data obtained through the secondary sources include those from Government official gazettes, news papers, journals and bulletins.

The presentation of the various data were carried-out using frequency distribution tables and measures of central tendencies, such as the mean and the range frequency distribution in the tabular arrangement of data into classes, with the corresponding classification of frequencies of each variable.

1.6. Results and Discussions

Results from this study showed that emergency plans and disaster management strategies in the State include financial assistance, construction of bridges, loan facilities and supply of farm inputs to farmers. Table 1 shows the types of disaster/emergencies witnessed in the study area.

Table 1: Areas of Disaster/Emergency Witnessed in Ekiti State.

	Frequency	Percentage
Destruction of Farmland	784	49.00
Destruction of Houses	65	4.06
Disasters from vehicles and automobiles.	131	8.19
Flooding and Erosion	320	20.00
Wind and Rain Storm	300	18.75
Total	1600	100.0

Source: Fieldwork Report, 2012.

Table 1 revealed that 49.00% of disaster witnessed in the area is the destruction of farmland, 4.06% is the destruction of housing units, 8.19% from vehicles and automobiles, 20.00% flooding and erosion, while 18.75% results from wind and rain storm in the area. The response confirmed a high percentage of disaster to farmland destruction and 20.00% to flooding and erosion problems. This shows that, there is high incidence of disaster on farmland, as well as flooding and erosion problems within the study area. Thus, the need for high response to positively influence efficiency or emergency and disaster management on the affected areas and the affected people within the study area.

Table 2: Rating of State Emergency Management Agency (SEMA) Promptness to Emergencies.

Responses	Frequency	Percentage
Good	261	16.32
Very Good	200	12.50
Fair	649	40.56
Poor	490	30.62
Total	1600	100.0

Source: Fieldwork Report, 2012.

In table 2, 16.32% of the respondents stated that the rating of the State Emergency Management Agency promptness to emergencies is good, 12.50% stated very good, 40.56% said it is fair, while 30.62% noted poor rating of the agency's promptness to emergency. The responses to the rating of State Emergency Management Agencies by respondents in the area revealed that the performance/response of the agency is comparatively poor and as such, there is need for appreciable improvement in the operations of the Agency, if significant progress is to be made.

Although many people in some of the Local Government Areas agreed to be aware of the activities of the State Emergency Management Agency (SEMA). The result of the analysis shows that information reached-out to people in the State through media houses and friends, and also through response activities carried-out in various areas as a result of emergency operations.

Thus, Government at all levels has a lot to do in ensuring that information about the State Emergency Management Agency (SEMA) programmes cut across the state. Majority of the respondents did not think the level of publicity given to SEMA is adequate to ensure significant rescue mission and success in the Agency.

The study also shows that SEMA activities to emergency and/or disaster have indicated that the organization should employ reformed measures that could improve performance towards disaster management in the state.

1.7. Recommendations

The following recommendations are germane in order to build a virile response framework for emergency and disaster management in the State:

- (i) The Local agencies are required to respond to disasters within the capacity of the State and request the Federal Assistance in overwhelming circumstances.
- (ii) Build the capacities of stakeholders in disaster management through sensitization, training and simulations exercise to improve their level of readiness.
- (iii) Encourage people to participate in a National/State insurance policies and plans that guaranteed immediate, adequate and satisfactory compensation to victims of disaster.
- (iv) Setting up of a modern, permanent national command centre or operations room, with communications and data links to all State capitals.
- (v) Creation of urban search and rescue capacity at all levels by establishing a fully equipped Search and Rescue Unit.
- (vi) There is need to build global partnership and advocate for improving international co-operation to deal with pandemics and emerging threats of disaster and emergency.
- (vii) Developing dedicated research activities to disasters, space applications and information technology.

1.8. Summary and Conclusion

The research evaluates the operations of Environmental Management Agencies response to emergency and disaster management in Nigeria with respect to the situation in Ekiti State. The study showed that financial involvement in the event of disaster incidences was quite considerable judging from the view of the victims of various disaster victims in the state. Thus in view of the results of the study. Ekiti State is seen to be widely prone to disasters, while management of such disaster has remained comparatively poor. The various measures adopted so far by SEMA seemed not to have the capacity to meet the level of performance responsibility, which could be effective in managing disaster in the State. Thus, the management of emergency in the State remains undoubtedly unsatisfactory.

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