

Evaluating the Efficiency of Emergency Response System During Disaster Incidents in Niger State, Nigeria

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Abstract: Despite the presence of state emergency management agency in Niger State, there are still challenges in emergency response, which hinders the efficiency and effectiveness of disaster recovery. Without efficient response system, emergency agencies may struggle to make informed decisions, and coordinate response efforts effectively. The effectiveness of disaster recovery efforts during disaster incidents relies on the availability, accessibility, and utilization of accurate and timely response by emergency management agencies. Additionally, inadequate evaluation can lead to delays in disaster recovery, miscommunication among agencies, and ultimately hinder the achievement of disaster management goals. In recent time, disaster related risk have been exacerbated by climate change and this has impacted progress toward sustainable development. Although the Niger state government has worked assiduously to strengthen her disaster risk management strategy by establishing Niger State Emergency Management Agency (NSEMA). It is hitherto regrettable that such idea has not yielded such progress as event continue to threaten the existence, wellbeing and safety of the population. It is disheartening that the State has continually experience humanitarian emergency and catastrophes on an ever-increasing scale and frequency, and it has become so difficult for the affected persons and community to adsorb and recover from the impact created by these disasters. Therefore, it has been observed that disasters signal the failure of a society to adapt successfully to certain features of its natural and socially constructed environment in a sustainable fashion. In view of the foregoing ,the study concludes that there is need for the state to improve its effort at creating sustainable measures that will help protect its citizens from natural and man-made disasters and also have a walkable data base that can be used to assess the damage caused by disaster and proffer avoidable solutions proactively. The study suggested that the state government should as a matter of utmost urgency constitute a body of experts in disaster risk management for the purpose of mitigating the effect of this disasters that has become a recurring decima in the state.

Keywords: Efficiency, Emergency Response System, Disaster Incidents.

INTRODUCTION

Disasters are often described as a result of the combination of the exposure to a hazard, the conditions of vulnerability that are present, and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease and other negative effects on human physical, mental and social well-being, together with damage to property, destruction of assets, loss of services, social and economic disruption, and environmental degradation (UNISDR, 2009).

Disasters do not respect persons and the trail of destruction that they leave behind is a common occurrence. Their effect or impact is also usually felt across all sectors in society, at the

community or individual level, which has led to push for the more multi-sectored approach to prepare and respond to disasters. The impact of a disaster may either be a direct or indirect one, its effect trickling into most homes and families in the community. The more obvious physical impact leads to the socioeconomic and emotional impact felt by the community. While the intensity of the impact of any disaster is dependent on the preparedness level of the community or nation. factors that increase the intensity of the effect of a disaster are noted to be poverty, environmental degradation, population growth, and lack of information and awareness about the disasters that exist in the area, and the potential risk they pose to the community at large (Srinivas, 2005).

Risk Exposure Theory

Disaster risk signifies the possibility of adverse effects in the future. It derives from the interaction of social and environmental processes and from the combination of physical hazards and the vulnerabilities of exposed elements. The hazard event is not the sole driver of risk, and there is *high confidence* that the levels of adverse effects are in good part determined by the vulnerability and exposure of societies and social-ecological systems (Birkmann, 2006; UNISDR, 2009). Disaster risk is associated with differing levels and types of adverse effects. The effects may assume catastrophic levels or levels commensurate with small disasters. Some have limited financial costs but very high human costs in terms of loss of life and numbers of people affected; while others have very high financial costs but relatively limited human costs. Furthermore, there is *high confidence* that the cumulative effects of small disasters can affect capacities of communities, societies, or social ecological systems to deal with future disasters at sub-national or local levels (Birkmann, 2006).

Risk is everywhere and is part of all activities. In general terms, risk is the possibility of loss. Sometimes, we discuss risk in terms of exposure. Risk exposure is a measure of possible future loss (or losses) which may result from an activity or occurrence. The number of natural disasters has been increasing, as has their impact, due to such external changes as the concentration of populations and property in hazardous areas, and rapid urbanization. For instance, an earthquake that occurs on a desert island does not trigger a disaster because there is no existing population or property affected. In addition to a hazard, some “vulnerability” to the natural phenomenon must be present for an event to constitute a natural disaster. In general, “risk” is defined as the expectation value of losses (deaths, injuries, property, etc.) that would be caused by a hazard. Disaster risk can be seen as a function of the hazard, exposure, and vulnerability as follows;

To reduce disaster risk, it is important to reduce the level of vulnerability and to keep exposure as far away from hazards as possible by relocating populations and property. Figure 1 below shows how disaster risk can be reduced and indicates the area of disaster risk. It also establishes how the reduction of vulnerability can be achieved through such measures as mitigation and preparedness.

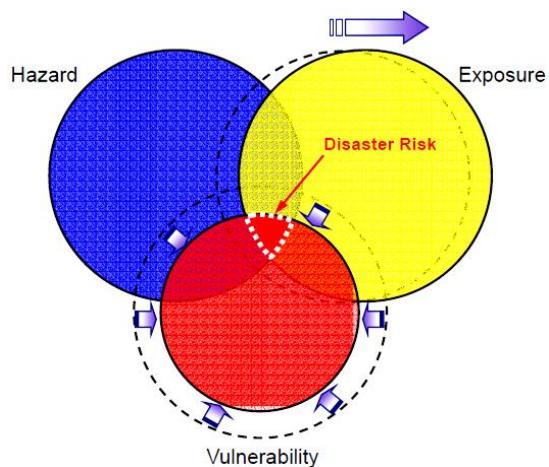


Figure 1: Mechanism for Risk Reduction
Source: Birkmann (2006)

Emergency management in Nigeria: History and current situation

Organised disaster management in Nigeria dates back to 1906 when the responsibility to put out fire, save lives, protect properties, and respond to disasters was the sole mandate of the Fire Brigade (Fatile & Adejuwon, 2018). In the 1960s and 1970s, under the direction of the offices of the Head of State and State Governors, disaster management functions were somewhat ad hoc. It was carried out base on directives from the Head of State and State Governors respectively. Between 1972 and 1973, there was a devastating drought that befell the country that remarkably affected lives, properties and the economy. Thus, more effort was required to curb the difficulties imposed by this event. In 1976, in the wake of the devastating drought, the federal government created NERA, the National Emergency Relief Agency and charge it with the responsibility to address the problem. Over time, NERA's scope became limited as the numbers of both natural and human-induce disasters occurring in the country increased. Consequently, In 1990, an Inter-ministerial body was set up in line with the United Nations International Decade for Natural Disaster Reduction, with the mandate to develop ways of reducing natural disasters risk and address the limited scope of NERA as an emergency responder (Adefisoye, 2015).Therefore, Decree no. 119 was passed by the federal government in 1993, which expanded the scope of NERA to make it an independent body under the Office of the President, and increased its function from risk reduction to include all kinds of natural disasters (Adefisoye, 2015). In March 1999, according to Act no. 12 as amended by Act no. 50 of the 1999 constitution of the Federal Republic of Nigeria, the federal government created National Emergency Management Agency (NEMA) and charged it with the responsibility of coordinating and managing all types of disasters (Adefisoye, 2015).

Although, organised emergency response in Nigeria dates back to the early 1900s, a comprehensive approach to disaster management only began in 1999 when NEMA was established (Adefisoye, 2015). The Nigerian EMS since then has undergone remarkable changes, including better organisational structure, more funding, curriculum development for emergency management education programmes, increased training for emergency personnel, and more collaboration with other countries and development partners on emergency management, among other issues (UNISDR 2004).

In 2010, NEMA developed the NDMF, which serves as the existing framework for disaster management in Nigeria and offers a holistic approach to managing disasters, with participation from several stakeholders, including the federal, state and local governments, as well as civil society organisations (CSOs) and private sector organisations (Owolabi 2014), with each entity being assigned specific role. The framework was established in line with the mandate of NEMA to coordinate emergency management activities in Nigeria and it provides a regulatory mechanism that ensures efficient and effective disaster management by government officials, community leaders, private organisations, CSOs, and practitioners. It further defines the roles and responsibilities of disaster management stakeholders in the country (Adefisoye 2015). However, despite the achievements so far, disaster management in Nigeria still faces numerous challenges, including poor coordination, poverty, insufficient funding and inadequate training, which indicate that the system still has a long way to go in its development in reducing disaster impacts even though different organisations are contributing towards emergency response in the country with the NDMF as a guide to improve emergency management.

Emergency Response Organisations in Nigeria

NEMA is designated as the leading agency that coordinates emergency management in Nigeria. However, there are other similar organisations that are also involved in carrying out emergency management functions in the country which are established by Law. The Act that established NEMA mandated the agency to "formulate policy on all activities related to disaster management in the country and co-ordinate plans and programmes for efficient and effective response during disasters especially at national level" (NEMA Act 1999: No 12; Adefisoye, 2015). Nevertheless, the rising severity of disasters has necessitated the participation of many

other agencies with various experts in emergency management and disaster response in the country. Such agencies that perform similar functions in terms of disaster management existing in Nigeria are established under certain specific laws that grant them powers to be engage in disaster management and carry out emergency response functions (Ojeh & Victor-Orivoh, 2014). For instance, the Acts that established many of these agencies also confer with the agencies respected powers to manage disasters of various categories within their capacity and jurisdiction. However, NEMA is meant to oversee all activities of these other agencies in terms of disaster management operations (NEMA Act 1999; Ojeh & Victor-Orivoh, 2014).

Significantly, some primary and secondary agencies established by these Acts who are stakeholders in disaster management in Nigeria include the Federal Road Safety Corps (FRSC), Nigerian Army, Nigerian Navy, Nigerian Air force, Federal/State Ministry of Health (F/SMOH), Nigerian Armed Forces, Nigeria Police Force (NPF), Federal Road Maintenance Agency (FERMA), the Nigeria Fire Service (NFS), the National Security and Civil Defence Corps (NSCDC), the Red Cross, United Nations High Commission for Refugees (UNHCR) and National Hospital (NH) as well as some private individuals and groups (Njoku, Efiong, & Ayara, 2020). Thus, NEMA collaborates with these other agencies when the need to respond to any emergency or disaster arise in the country to ensure effective response during disasters. The standard operating procedure mandates NEMA to take responsibility in coordinating and alerting all other agencies in any emergency or disaster situation, mainly because the 112-call centre is not yet fully operational across all the agencies throughout the nation to link up automatically in an emergency situation.

However, the extent to which the various activities of these stakeholders are harmonised, coordinated and synchronised during national emergencies and disasters has remained a major concern in Nigeria. NEMA need to monitor the state of preparedness of all agencies that may contribute to disaster management within the country. Furthermore, in terms of budget and funding, the country allocates 1% of its national budget to the ecological fund, of which 20% of the fund is allocated to NEMA, while the remaining 80% is given to other ministries, departments and agencies that contribute to emergency management and disaster risk reduction in the country, as well as states and local governments (Adefisoye, 2015). Notably, if more funds are needed following the degree of any given disaster, based on assessment by NEMA, the office of the Vice President can approve additional fund from the Environment Funds while the national planning commission, facilitates resource mobilisation with international partners when the need arises (Adefisoye, 2015). NEMA is saddled with the responsibility to collect data from all stakeholders which is used to enhance planning, forecasting and field operations in improving disaster management in the country, while also coordinating the activities of voluntary organisations engaged in emergency relief operations in any part of the nation and remain accountable for overall disaster management in the country.

Correlation between emergency management stakeholders in Nigeria

Effective disaster management cannot be accomplished without incorporation of the cooperative actions of different stakeholders (Ostinsvig 2016). One suitable way of accomplishing such cooperation is to mandate one particular entity to where necessary and compel different stakeholders to take certain actions that will ensure disasters are effectively managed with a better response. (Gallopin 2006). In Nigeria, such powers have been delegated to NEMA (CFRN1999; NEMA Act 1999). However, even though NEMA is given such responsibility, and is also liable for providing resources and funding to support both state and local-level disaster management operations, other agencies also partake in response activities at different levels of government which needs to be properly integrated and well-organised to harmonise and use resources effectively. Proper coordination of the activities and resources of different stakeholders is largely dependent on the way the agencies interact among themselves and how they share certain vital information (Pelling 2003). Accordingly, NEMA needs to improve its accountability

and ensure adequate collaboration, integration and cooperation with other stakeholders by sufficiently sharing useful information to bridge this gap.

Based on the foregoing, in Nigeria, the main source of funding for emergency management and NEMA as provided in the NEMA Act, is allocation by the federal government through its ecological fund. Although NEMA is granted the permission to accept gifts and donations from both local and outside supporters (Adefisoye, 2015). However, considering the fact that most disasters occur at the local level, and affect mostly local population, the bulk of the agency's resources are therefore channelled towards relief and rehabilitation, especially at local level, even though state and local levels contribute nothing towards funding the agency. Therefore, it is important for all levels of government and other organisations involved in emergency response to interact well with the federal-level agency and coordinate among themselves in making sure that available limited resources are utilised effectively and are channelled towards promoting effective disaster management in the country. Adefisoye, (2015) contended that the impact of the 2012 flood disaster that cut across most of the 36 states of the country and caused damage worth millions of dollars could have been effectively mitigated if there had been effective interaction, cooperation and coordination between various stakeholders such as government, private organisations, community-based organisations, nongovernmental organisations, charity workers and individual groups, among others.

The aforementioned would have persuaded judicious use of donations according to the need created by the event and the capacity of various stakeholders involved. As such, this reiterates that the difficulty of implementing activities and utilising resources in emergencies depends on the interaction between NEMA and other levels of government as well as other agencies involved (Owolabi, 2014). Therefore, to curb this challenge in Nigeria, laws have been established and embedded in the 1999 constitution under the NEMA Act that serve as legal policies for disaster management and provide guidance on the way NEMA should interact with other agencies in emergencies within the country (NEMA Act 1999). Adopting this policy will therefore influence the way resources are allocated and response is coordinated. Hence, the pattern of interaction between various emergency management stakeholders in Nigeria remains highly imperative in understanding the effects of, and developing measures to reduce disasters considering the numbers of disasters that have affected the country lately even though the system of managing them has not been very effective. Studies have shown that lack of interaction between stakeholders during emergencies has often placed too much burden on NEMA and has created difficulties for the agency in identifying the extent of the problem and the kind of relief materials that may be needed by victims. This advocates for an all-inclusive, profound and intensive approach that will promote suitable interaction, and embrace and accommodate all stakeholders in dealing with emergent issues involved in disaster management. Unfortunately, this approach has over time become very difficult to achieve in Nigeria, thereby creating several discrepancies in its EMS.

However, while the Act that established NEMA was structured in a way that includes important sections addressing different issues in disaster management, and also gave powers to the Governing Council of NEMA to provide policy direction on how the agency should go about managing disasters in the country and interacting with other organisations that partake in emergency response, the Act clearly failed to define whether the Council can make bye-laws or issue guidelines on certain operational activities related to managing disasters and or, can oblige different stakeholders to adopt Disaster risk reduction policies and action programmes within the country. Interestingly, the major function of the agency has been specified in the Act and can be regarded as fairly comprehensive in terms of disaster management because they encompass a wide range of issues including preparedness, response, search and rescue, relief, rehabilitation and refugee management. Unfortunately, there is no clear definition on how NEMA should go about stirring the support and cooperation of other stakeholders in managing such complex issues, while the structures for early warning systems at all levels of government are weak and require programmes to reduce disaster risk factors. Studies have shown that due to absence of

provision in the NEMA Act that support specific activities and programmes that enhance disaster preparedness that would have hitherto helped to improve effective response, there will continue to be haphazard misappropriation of resources, duplication of efforts and inefficiency in managing disasters in Nigeria.

Government and law-making structure for disaster management in Nigeria

The major body that regulates issues of importance in Nigeria is the 1999 Constitution of the Federal Republic. The constitution stipulates that Nigeria is a federal republic and as such comprises three levels of government: federal, state and local. Three arms of government are included in the 1999 constitution: legislative, Executive and Judicial. The legislative arm takes charge of making laws, the executive arm is responsible for executing the laws made by the legislative arm, while the judicial arm interprets and implements the law in case of conflict and any other issues that may affect society. Overall, Nigeria practices a system of separation of powers, which allows the three arms of government to serve as a check upon each other (Adefisoye, 2015). While there is no formal law regarding disaster risk reduction (with the exception of that which established NEMA in 1999), the 1999 constitution, section 305 (3) (e) provides that the President shall have the power to proclaim a state of emergency if there is imminent danger or if a natural disaster or calamity has affected the community or a section of the community in the federation.

Nigeria is a member of various regional organisations that issue guidelines to member states, which could affect the management or risk reduction of disasters. These organisations include the United Nations Organisation for Disaster Risk Reduction Africa Office, the UN Development Programme Regional Office, the Nigerian Red Cross Society and the Economic Community of West African States (ECOWAS) (Yab, 2011). Although there is as yet no formal policy on disaster management in Nigeria, the NDMF is the nearest instrument to a disaster management policy. However, in recent years, NEMA has made several attempts to fulfil its mandate and has formulated plans, policies and guidelines to manage disasters. These policies include the National Disaster Response Plan (NDRP), the search and rescue and epidemics plan, the national nuclear and radiological plan and the early warning system on epidemics. However, due to gaps encountered in the implementation of these plans over the years, the NDMF is now working to increase the efficiency and effectiveness of disaster management in the country.

Responsibilities of Federal, State and local government and community in disaster management in Nigeria

The responsibility for disaster management in Nigeria is shared by the federal, state and local government as well as usually the community in which the disaster strikes (Yacov, 2012). Each level of government works with relevant MDAs, the military, police, paramilitary and CSOs, including international NGOs and private partners to improve the implementation of programmes and activities for efficient response and overall disaster management in the country. Legislation to enable disaster management (the 1999 decree) mandates the establishment of NEMA at the federal level with its zonal offices in all the geopolitical zones across the country as well as a fully operational SEMA at the state level, and LEMA at the local government level. The aim is to strengthen the country's capacity for disaster management in order to reduce the likelihood and severity of disasters when they occur. Nevertheless, because Nigeria's disaster management is centered on the principle of shared responsibility, it is important to integrate and coordinate properly among relevant stakeholders to improve response.

Thus, in line with the enabling legislation that led to establishment of NEMA at the federal level, NEMA is required to coordinate emergency management activities, liaise with other stakeholders, monitor events in order to collect information about disasters in the country. NEMA is further responsible for mobilising financial and technical support from private sector organisations; collects emergency relief materials from local, international and non-governmental agencies for distribution to people affected by disasters; and work closely with

SEMAS and LEMAs to assess and monitor distribution of relief materials, assist in rehabilitation of survivors and facilitate establishment of enabling legislations in disaster management, among which the NDMF is one. Furthermore, when the need arises, SEMA also coordinate and facilitate the provision of resources for search and rescue operations within the state, while LEMA coordinate emergency management activities at the local government level, monitor the activities and provide feedback to SEMAs. However, accomplishing this requires effective communication and sharing of information that would lead to identification of the kind of support that may be needed at each level of government to revive the affected communities. (Chen, Sharman, Rao & Upadhyaya, 2013)

CONCLUSION

The impact of disaster is usually felt across all sectors in the society, and the more obvious physical impact has the potential of leading to socio-economic and emotional impacts. However, evaluating the efficiency of emergency response system during disaster incidents is germane if the government is willing to mitigate the disastrous effects of disasters on the government and people of Niger State. Therefore, it is incumbent on the government to create an enabling environment that would guarantee the sharing of information by emergency response agencies for the purpose of mitigating disaster incidents in the state.

SUGGESTIONS

Based on the foregoing, the following suggestions are hereby made;

1. More engagements with international partners and non-governmental organisations would be handy in supporting the state government to respond efficiently during disaster events.
2. Training and re-training of management and staff of Niger State emergency management agency (NSEMA) would help position the organisation for effective monitoring of disaster risk events.
3. Information sharing is key to managing disaster risk. Therefore, the government should ensure effective collaboration with other agencies for pro-active response before, during and after disaster occurrence.
4. The state government should appropriate more funds for the purpose of mitigating disaster risk. Such funds must however be properly utilized for the purpose of which it was appropriated.
5. The government needs to do more in monitoring the state of preparedness of NSEMA and partner agencies, so as to be able to achieve effective results during disaster incidents in the state.

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