

# ORGANIZATIONAL EFFECTIVENESS IN DISASTER MANAGEMENT: A CRITICAL REVIEW OF DISASTER MANAGEMENT CYCLE

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**Abstract:** Studies and debates on the various phases of disasters go as far back as the 1930s. From these early times, both scholars and practitioners within the field of humanitarian response and disaster management have used categories relating to the various phases on disaster to understand their field of study as well as to improve on their response to disaster events more effectively. The issue of organizational effectiveness in disaster relief situations such as tsunami's, earthquakes, flood among others is often saddled with controversies. There are those who believe that contingencies emerge during natural disaster scenarios and are require to make such organizations put to test the basic assumptions of the contingency approach in relief donations management and especially as we understand disaster management cycle which has been a crucial instrument for the management of disaster events and their effects. This paper utilized qualitative research approach to gain an insight into the nature of the impact of organizational effectiveness in disaster management in Nigeria. Taylor's scientific management theory was adopted as the theoretical anchorage for the paper, while the humanist or anthropogenic view of disasters gave the perspective in the approach to understanding disaster issues. The paper recommends for a comprehensive natural disaster management approach covering risk prevention, risk mitigation, and effective recovery assistance.

**Keywords:** Organizational effectiveness, disaster management.

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## 1. INTRODUCTION

The issue of ensuring effectiveness in relation to set objectives within organization has continued to attract multidisciplinary concern among sociologists, management scholars and those in the field of industrial relations and personnel management among others. The reason being that in modern times, if organizations are not effective in terms of delivering their component activities, the likelihood is that the outcome may contradict their objectives. For instance, the Organization of Economic Cooperation and Development OECD (2016) provide three critical frameworks for understanding how organizations can be effective. These are that 1) organizations must ensure that resources match the objectives, 2) employees share the vision of the organization in terms of the related activity to be implemented and, 3) the activity has shared value for organizations and a section of our society in general.

However, the above OECD framework for understanding organizational effectiveness notwithstanding, it is important to note that the peculiar environment that organizations find themselves has been identified as another critical factor that influences how organizations operate and their effectiveness. Kolawale (2016) in support of the latter position did argue that organizations with all materials and human resources must consistently adjust to its environment for it to be effective in delivering set objectives or achieving its goals.

In the light of the above, it is safe to adduce that Nigeria's peculiar environment has a lot to do with the level of effectiveness in most of the organizations that operate in the country. This is even worse in regions that have been designated as conflict flash points such as the Niger Delta. This notwithstanding, the issue of organizational effectiveness in disaster relief situations such as tsunami's, earthquakes, floods among others is often saddled with controversies. There are those who believe that contingencies emerge during natural disaster scenarios are require to make such organizations put to test the basic assumptions of the contingency approach in relief donations management given the fact that most natural disaster outcomes are not planned (Morris, 2013; Benanke, 2015 and Odulari, 2016).

It is against this backdrop that this paper sets to examine the importance of organizational effectiveness in disaster management in Nigeria taking into consideration the import of disaster management cycle to approaches in disaster management.

## 2. METHODOLOGY

This paper utilized qualitative research approach to gain an insight into the nature of the impact of organizational effectiveness in disaster management in Nigeria. Content review of works reports and documents bothering on organizational effectiveness and disaster management in Nigeria was reviewed to ascertain the level of the management of disaster issues in Nigeria.

## 3. CONCEPTUAL AND THEORETICAL CLARIFICATION

### 3.1 Organizational effectiveness

Organizational effectiveness is the ability of specialized agency such as NEMA to utilize available resources in such a way as to deliver expected results especially during disaster situations. The theoretical perspectives on organizational effectiveness have been very robust. However, a particular trend is easily noticed where scholars focus more on trying to test theoretical assumptions in relation to how well these theories drive effectiveness in particular organizations. Organizational effectiveness is the concept of how effective an organization is in achieving the outcomes the organization intends to produce (Etzioni, 1964). Meanwhile, this definition that view organizational effectiveness as a simple internal achievement related to profit and production have long been discounted with the demise of the stockholder theory of the firm (Gibson & Gibson, 1998).

Frederick Taylor's time and motion theory kick-started the knowledge base on the concept of organizational effectiveness even though he did not openly referred to his analytical endeavour as such, his scientific management theory provided the foundational theoretical drive for organizational effectiveness. By laying down the clear parameters for ensuring that people and work tools fit the task at hand, Taylor provided the first theoretical guide to the discussion now clearly referred to as organizational effectiveness in the field of management and industrial relations. Thus for the first time, the application of scientific principles to the issue of management in organization as a way of ensuring effectiveness and efficiency was introduced after several studies called time and motion studies. Recent views in organizational effectiveness have tended to focus on the symbiotic relationship between internal and external domains as a critical model in corporate effectiveness. It is in this regard that Richard, Devinney, Yip and Johnson (2009) points out that organizational effectiveness captures organizational performance plus the myriad of internal performance outcomes normally associated with more efficient or effective operations and other external measures. All of these according to the above scholars, simply relate to considerations that are broader than those which are associated with economic valuation (either by shareholders, managers, or customers), such as corporate social responsibility.

It is important to note by pointing to the fact that Taylor's scientific management theory is recognized as a watershed in the understanding of organizational effectiveness. The theory also came to mean any system of organization that clearly spelled out the functions of individuals and groups. With even less fidelity to the original meaning, it has been used to describe any situation where jobs are subdivided and individuals perform repetitive tasks for the purpose of ensuring efficiency and effectiveness in an organization. The main objective of the scientific management theory is improving economic efficiency, especially labour productivity. It was one of the earliest attempts to apply science to the engineering processes and to management (Galbraith, 2001). Its peak of influence came in the 1920s and was highly influential but had begun an era of competition with opposing or complementary ideas. Although scientific management as a distinct

theory or school of thought was almost obsolete by the 1930s, most of its themes are still important parts of today's management philosophy and most especially to the understanding of organizational effectiveness.

### 3.2. Disaster Management

Disasters whether man-made or natural could be particularly devastating. Evidence of massive hurricanes accompanied with widespread flooding is currently being felt around the world especially in most parts of the United States of America and other relatively small island countries. It is important to point out, that the theoretical line between man-made and natural disasters is becoming really blurred and this is because, most natural disasters have been clearly linked to anthropogenic activities. However, natural disasters present the highest level of risk to man especially when they occur without adequate preparation. Natural disasters are caused by natural hazards, and they negatively impact human activities and the environment (Wisner, Blaikie, Cannon & Davis, 2004). Sadly, human sufferings and economic losses from disasters are unacceptably high around the world.

Today's disasters stem from a complex mixed of factors, including routine climate change, global warming influenced by human behavior, socioeconomic factors causing poorer people to live in risky areas and inadequate disaster preparedness and education on the part of government as well as the general population. So complex and intertwined are the factors behind those disasters that some experts believe the most practical approach to preparedness may be to focus on reducing the risks rather than factors behind the risks. Disasters are also a consequence of development and industrialization. In Europe, experts believe that countries such as France and Germany are more adversely affected by floods today because major rivers, such as the Rhine, have been straightened to ease commercial traffic. Disaster experts say early warning systems and education are essential to prevent and mitigate against the effects of natural disasters. For instance, a simple phone call saved thousands of lives when the giant Tsunami waves hit India in 2002. A fisherman's son named Vijay Kumar Gunasegaram; who lives in Singapore, heard about the Tsunami early on the radio and phoned relatives living on the east coast of India. Following his early warning, all 3,630 residents there were evacuated before the waves arrived (Daniel, 2006).

The United Nation for instance reported that between 2007 and 2013 alone, natural hazards caused USD 180 billion in economic losses (UN, 2013). As a result, several theories have emerged trying to explain the causes, nature and impact of disasters around the world. These army of theories notwithstanding, two polar ideas remain identifiable. These are 1) the naturist views and 2) humanist or anthropogenic view.

Meanwhile, by far the most celebrated or widely accepted of the two perspectives, is the humanist or anthropogenic view of disasters. This view represents a good number of scholarly writings that converge on the assumption that man and his economic activities is responsible for the growing spate of natural disasters around the world. While not downplaying the fact that nature gets angry sometimes as to invoke disasters on man, this theoretical perspective rest on the notion that human activities especially with regard to the need for economic growth are the primary reason why nature gets upset in the first place. For instance, the discussion on climate change and its consequences for the natural environment of man has been ongoing for quite some time now. The change in climatic conditions causing global warming, has been blamed on the activities of man especially with regard to the titanic emission of carbon and other obnoxious gases into the atmosphere. Climate change is predicted to make natural hazards like hurricanes, droughts and floods, more frequent and more intense.

However, the theoretical assumption of the anthropogenic school of thought also acknowledges the fact that natural or man-made hazards need not result automatically in disasters. This is because, simple management measures can be taken before, during and after to strengthen the resilience of communities, to save lives, to secure livelihoods and to prevent the loss of investments and development gains (Makinde, 2015). The argument in this regard, is that man must impact on his environment for economic reasons hence, disasters must occur. However, the concern is to note that before a natural hazard threatens a nation, public facilities and private businesses alike have to protect their assets, their workforce, and their supply and distribution chains in order for society and the economy to keep functioning.

Although natural disasters present high negative impacts globally, this is much higher in low- income countries (World Bank, 2001). It is known that poor countries are generally more vulnerable to disaster damage because of their lack of effective risk-management systems, the prevalence of low construction standards and uncontrolled urbanization, and in some cases, because they have large environmentally degraded zones prone to heavy damage from hurricanes and floods.

In the aftermath of a disaster, relief donations and other related social efforts often focus on rebuilding major economic infrastructure whose destruction will hinder macroeconomic recovery (Prabel, 2012). Giving priority to vital social projects is also justified in terms of the benefits that their rehabilitation eventually brings to the entire population. However, in many cases, disaster management programmes are insufficiently targeted toward those most affected and with the least resources to bounce back. This includes groups such as subsistence farmers, landless labourers, people working in cottage industries and the informal sector, small and micro entrepreneurs, who have in one way or the other contributed immensely to economic growth of the society but have lost their livelihood as a result of a disaster. Reducing the vulnerability of destitute people through schemes that aim to spread risks faces major constraints. The very poor have consumption profiles that are below minimum acceptable thresholds and have virtually no capacity to save. This is why all theoretical positions howbeit naturalist or humanist, agree on the fact that managing disaster situations or recovery, require wide range of collaboration and partnerships between the private sector and government if effective management is to be achieved. Makinde (2015) clearly opines that a comprehensive natural disaster management approach covering risk prevention, risk mitigation, and effective recovery assistance in any society requires all stakeholders' involvement for it to be effectively achieved.

That is perhaps why there is a strong call for private sector organizations especially huge multilateral organizations to take the centre stage in organizing and driving disaster management. For instance, the United Nations (2013) has encouraged social sectors, other than government, to involve themselves in being on the scene at sites of natural disasters. During its International Decade for Natural Disaster Reduction, the United Nations highlighted the role of industrial enterprises in natural disaster management, and it encouraged industrial enterprises to support national governments' work in assisting with relief efforts in natural disaster situations. In major disasters, the national government has primary responsibility in encouraging companies to engage in disaster response and recovery and this is done through the instrumentality of National Emergency Management Agency as the case in Nigeria.

### 3.3. The Disaster Management Cycle

The disaster management cycle has been a crucial instrument for the management of disaster events and their effects from the 1970s (Lewis, 2007). However, scholars and practitioners within the field still debate its origins, leading to much confusion. Part of the problem is that its history has been influenced by disciplines such as Sociology, Geography, Psychology, Public Administration and Development Studies. Consequently, concepts such as the disaster management cycle are almost as complex to comprehend and explain as the disastrous events they are supposed to manage (Cebulla, 2004; Quarantelli, 1997).

Studies and debates on the various phases of disasters go as far back as the 1930s. From these early times, both scholars and practitioners within the field of humanitarian response and disaster management have used categories relating to the various phases on disaster to understand their field of study as well as to improve on their response to disaster events more effectively (Neal, 1997).

This traditional approach only started to change during the 1970s, which saw a dramatic increase in disaster events that caused increased in deaths and greater economic losses than in the previous decades. With the recurrent and ever increasing human and capital costs of disaster came the realization that there must be a more efficient way of utilizing capital than merely providing relief materials. Therefore, pre-disaster planning seemed to be a practical and necessary component to complement the traditional thinking (Lewis, 2007; Wisner, Blaikie, Cannon, 2004).

Accommodating this shifts in traditional thinking within the field of disaster management, 'new mechanisms' were needed to drive the management of disaster situations. One of these was the 'disaster management cycle', which was designed to illustrate the ongoing process by which governments, agencies, businesses, and civil societies plan response for and reduced the impact of disasters; plan response during and immediately following a disaster, and took steps to recover after a disaster had occurred as well as managing donations or relief materials. Meanwhile, this concept has not remained static over the past 40 years. In fact, on perusal of the various permutations of this cycle, it becomes apparent that a bewildering array of variations has emerged over time, leading to much convolution amongst scholars and practitioners alike ([http://www.gdrc.org/uem/disasters/i-dm\\_cycle.html](http://www.gdrc.org/uem/disasters/i-dm_cycle.html)).

Variations of the cycle have been along two lines. The first relates to the divergent composition of different cycles with regard to the number of phases included in the cycle. The earliest example of a disaster management cycle comprised of

six different phases, namely: reconstruction, mitigation and prediction, preparedness for relief, warning, relief and rehabilitation. From here onwards, many adaptations and changes have occurred in the composition of the disaster management cycle, as well as its application (Baird, O'keefe, Westgate, 1975).

Furthermore, other typical examples of the disaster management cycles composed of two over-arching phases and these can be described as the pre-disaster and the post-disaster phases-respectively. Prevention, mitigation and preparedness constitute the pre-disaster phase, while response, recovery and mitigation (development) constitute the post-disaster phase. Other cycles differ from this typical view and divide the cycle into three broad categories, which can be divided into a post-disaster response phase, post-disaster recovery phase and a pre-disaster mitigation and preparedness phase. All of these variations compound the problems of researchers and practitioners in determining the origins and application of the disaster management cycle (Holloway, 2003; Khan & Khan, 2008).

Disaster management cycle aims to reduce, or avoid the potentials losses from hazards, assure prompt and appropriate assistance to victims of disaster and achieve rapid and effective recovery. Appropriate actions at all points in the cycle lead to greater preparedness, better warnings, reduced vulnerability or the prevention of disasters during the next iteration of the cycle. The complete disaster management cycle includes the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property and infrastructure.

As the emergency is brought under control the affected population is capable of undertaking a growing number of activities aimed at restoring their lives and the infrastructure that supports them. There is no distinct point at which immediate relief change into recovery and then into long-term sustainable development. During this time, victims need intensive mental support so as to facilitate their recovery. As the victims recovered from the trauma both physical and mentally, they realize the need to return back to normal routine. That is, to pre-disaster life. At this time, they need resources and facilities so as to enable them return back to their own homes, pursue their occupation, so that they can sustain life on their own, as help from government and other non-government organizations is bound to taper in due course.

Recovery activities continue until all systems return to normal or better. For instance, recovery measures, both short and long term, include returning vital life-support systems to minimum operating standards; temporary housing; public information; health and safety education; reconstruction; counseling programmes; and economic impact studies. Information resources and services include data collection related to rebuilding and documentation of lessons learned (<http://www.gdrc.org/uem/disasters/1-dmcycle.html>).

Plans need to integrate forces in terms of providing connections between geographical, organizational, functional and hierarchical divisions. Effectively, this pulls the planner in four different directions. The success of the plan depends on creating the right balance between division and integrative linkages in each of the dimensions. Emergency planning is essentially an integrative approach or process which is about addressing disastrous events by way of finding, establishing and developing connections. In a disaster or catastrophe, scores of different agencies may participate and they need to have clearly defined roles, competencies and means of communication. Although an emergency plan should be administered, preferably by a person who is qualified in this discipline, from a single place, which probably be an emergency operations centre. A good example is the London Emergency Services Liaison Panel, which meets regularly and is composed of representatives of the emergency services, local governments and other pertinent services and both produce and oversee the development of plans and procedural manuals (LESLP, 2007).

As with the collaborative work, strong leadership and a good division of roles and also competencies are the keys to success. It is also clear that the value of an emergency plan is critically dependent on the command structures that will implement it when a crisis arises. Command systems will depend on the available infrastructure (communications facilities and operations centers), the legislative framework (which organizations are enabled to do what), and relations between organizations. There is a spectrum of possible mode of organization that extends from a full command-and control model based on strategic, tactical and operational commands, to a fully distributed collaborative model base on common support functions (telecommunications, logistics, shelter and so on). Generally, information technology has tended to flatten the chain of command and facilitate collaboration at the expense of control, largely through sharing of information and instructions. One of such function of emergency plan is to articulate the command structure and ensure that it matches the needs generated by the emergency (Alejandro, Maureen, Ben, Han, 2014).

Schneider (1995) opined that being a public problem, natural disasters have become one of critical policy issue in modern government and that two important phase or systems exist in disaster management cycle. These are the 'bureaucratic norms' and 'emergent norms'. The former promotes the mobilization of public organizations while providing disaster relief and organizes and implements performance. The latter are contingent through the collective action of the people influenced by the disaster. Successful disaster relief depends on the gap between these two elements.

Moe, and Pathranarakul, (2006) asserted that disaster management cycle includes five generic phases: prediction, warning, emergency relief, rehabilitation and reconstruction. They went further to say that rehabilitation and reconstruction are two separate phases. The emergency relief phase includes the provision of assistance or intervention during or immediately after a disaster had occurred to meet the life preservation and basic needs of the affected people. It can be of immediate, short-term or protracted duration. The later has proved to be problematic and subject to harsh criticism, in particular, underlying risks of dependency.

Rehabilitation phase Consists of decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community while encouraging and facilitating the necessary adjustments to reduce disaster risk. Reconstruction on the other hand, refers to the rebuilding of damaged living conditions of the stricken community with the aim of long-term economic, environmental and social sustainability (Moe & Pathranarakul, 2007).

United Nations agencies have more recently begun to promote an additional concept tagged 'transition recovery' to disaster management cycle for the period during which relief activities have ended, but recovery is yet to begin. One example is in Aceh where, one year after the Indian Ocean tsunami of 2004, large-scale housing reconstruction had yet to begin and 67,000 people remained in temporary barracks or rotting tents. While people waited for permanent housing, a programme instituted in the first months of 2006 focused on ensuring that all internally displaced persons (IDPs) had suitable transitional building.

In fact, all of these phases seem artificially in concrete terms. For instance, a World Bank (2004) case studies collection concluded that recovery operations converge with the development process and that many communities live in a permanent state of recovery because 'temporary relief' has become a permanent coping strategy. In many countries, 'temporary housing' often becomes permanent housing for the poor and due to poor timing and reconstruction standards, the cycle of vulnerability continues (Wilford, 2008; Arnold, 2006).

Recovery projects themselves in the disaster management cycle are often too short to address the projected length of recovery. Real time recovery from a significant disaster can take five years or more. However, donors often have their own timetable which commonly ranges from one to three years. For example, US relief for Honduras following Hurricane Mitch towards the end of 1998 had to be spent by December 2001. Six years later, field assessment revealed that hundreds of people are still remaining in temporary shelters (Arnold, 2006).

With the coming of globalization, modern disaster management becomes more flexible and complicated. Rosenthal and Kouzmin (1997) opined that the role and authority of government in disaster management is no longer unchallenged today. In other words, contemporary disaster management rely on diverse relationship and participants such as government, inter-governmental relations, non-governmental organizations, philanthropists and civil societies. Birkland (2006) asserted that in disaster management, the critical factor in a successful disaster management is not merely having enough resources, but resource mobilization and coordination. In short, how the resources are been utilized by the different actors is the major factor in a successful disaster management.

Disaster management cycles is important to this study because as captured by Schneider (1995), the promotions, mobilization and providing of disaster relief donations and proper organizational structure leads to better performance. The collective action of the people and the governmental agencies responsible for managing the relief is crucial where logistical readiness mechanisms are in place to make success. Moe, and Pathranarakul, (2006), analysis the emergency relief phase to include the provision of assistance or relief donations/intervention during or immediately after a disaster to meet the basic life needs of those affected. Accordingly, emergency response phase is to provide immediate assistance to maintain life, improve health and support the morale of the affected people. Such assistance may range from providing specific but limited aid, such as assisting the people with transport, temporary shelter and food, to establishing semi-

permanent settlement like camps and other location. The focus in the response phase is on meeting the basic needs of the people until more permanent and sustainable solutions can be found.

Humanitarian organizations and government agencies responsible for this are often very strongly present in this phase, where ambulances, medical personnel's, temporary medical camps where drugs are administered and distribution of relief materials are properly handled( Alejandro, Maureen, Ben & Han 2014).

#### 4. CONCLUSION

Today's disasters stem from a complex mixed of factors, including routine climate change, global warming influenced by human behavior, socioeconomic factors causing poorer people to live in risky areas and inadequate disaster preparedness and education on the part of government as well as the general population. There are two perspectives on the view of disaster. The most celebrated or widely accepted of the two perspectives, is the humanist or anthropogenic view of disasters. This view represents a good number of scholarly writings that converge on the assumption that man and his economic activities is responsible for the growing spate of natural disasters around the world. While not downplaying the fact that nature gets angry sometimes as to invoke disasters on man, this theoretical perspective rest on the notion that human activities especially with regard to the need for economic growth are the primary reason why nature gets upset in the first place.

It is with the belief of this paper that a comprehensive natural disaster management approach covering risk prevention, risk mitigation, and effective recovery assistance in any society requires all stakeholders' involvement for it to be effectively achieved. It is imperative here to note that if organizations especially those responsible for disaster management are not effective in terms of delivering their component activities, the likelihood is that the outcome may contradict their objectives. Since natural disasters are contingent and none pronounced in nature and when they will occur, the set objective for every organization managing disaster with all materials and human resources must consistently adjust to its environment for it to be effective in delivering set objectives or achieving its goals.

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